COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

REPORT OF THE COMMITTEE OF EXPERTS ON ITS TWENTIETH SESSION
(7-16 December 1998)

CONTENTS

ORGANIZATION OF THE SESSION ........................................ 1-11
Attendance ............................................................................. 3-7
Distribution of documentation ............................................... 8-11
ADOPTION OF THE AGENDA .................................................. 12
WORK OF THE SUB-COMMITTEE OF EXPERTS ON THE TRANSPORT
OF DANGEROUS GOODS ....................................................... 13-107
Multimodal portable tank transport ........................................ 13-19
Packing instructions ............................................................. 20-67
Draft amendments to the Recommendations on the Transport of Dangerous Goods,
Model Regulations ................................................................ 68-105
Draft amendments to the Manual of Tests and Criteria .................. 106
New proposals ........................................................................ 107

GE.99-
ACTIVITIES RELATED TO THE IMPLEMENTATION OF AGENDA 21 .................................................. 108-131

Global harmonization of systems of classification and labelling of chemicals

General ............................................................. 108-115
Health hazards and hazards to the environment ......................... 116-120
Physical hazards .................................................... 121-124
Labelling and hazard communication systems .......................... 125-128

Hazardous wastes .................................................... 129-131

IMPLEMENTATION OF RESOLUTION 1997/3 OF THE ECONOMIC AND SOCIAL COUNCIL ........................................ 132-136

(a) Resolution 1997/3 of the Economic and Social Council ............. 132
(b) Publication of the tenth revised edition of the Recommendations on the Transport of Dangerous Goods (Model Regulations) and the 2nd revised edition of the Manual of Tests and Criteria .................. 133 and 134
(c) Activities of international organizations concerned with regulations or recommendations on the transport of dangerous goods at an international level .................................................. 135 and 136

PROGRAMME OF WORK ........................................... 137-150

(a) Periodicity of amendments to the Recommendations on the Transport of Dangerous Goods ............................................. 137-140
(b) Programme of work for the 1999/2000 biennium and related proposals .... 141-149
(c) Calendar of meetings for the 1999/2000 biennium ...................... 150

DRAFT RESOLUTIONS OF THE ECONOMIC AND SOCIAL COUNCIL .. 151

ELECTION OF OFFICERS FOR THE 1999/2000 BIENNIIUM .......... 152

ANY OTHER BUSINESS ............................................... 153-157

ADOPTION OF THE REPORT ........................................... 158

* * * *

CONTENTS (continued)
ANNEXES:


Annex 2: Guidelines for assigning portable tank requirements to substances of Classes 3 to 9 .................... ST/SG/AC.10/25/Add.2

Annex 3: Consolidated version of the amended Chapter 3.2 of the Model Regulations on the Transport of Dangerous Goods (Dangerous Goods List) ........ ST/SG/AC.10/25/Add.3

Annex 4: Revised Chapter 4.1 of the Model Regulations on the Transport of Dangerous Goods ............. ST/SG/AC.10/25/Add.4

Annex 5: Reservations expressed by the experts from Belgium, Germany and the Netherlands on decisions of the Committee concerning packing instructions ........ ST/SG/AC.10/25, page 34


* * * * *
ORGANIZATION OF THE SESSION

1. The Committee of Experts on the Transport of Dangerous Goods held its twentieth session from 7 to 16 December 1998 with Mr. S. Benassai (Italy) as Chairman and Mr. F. Wybenga (United States of America) as Vice-Chairman.

2. The Director of the Transport Division of the Economic Commission for Europe, Mr. J. Capel Ferrer, welcomed participants.

Attendance

3. The session was attended by experts from the following countries: Australia; Belgium; Brazil; Canada; China; France; Germany; Italy; Japan; Mexico; Morocco; Netherlands; Norway; Poland, Russian Federation; South Africa; Spain; Sweden; United Kingdom; United States of America.

4. Observers from the following countries were also present under rule 72 of the rules of procedure of the Economic and Social Council: Austria; Czech Republic; Finland; Portugal; Republic of Korea; Switzerland; Tunisia.

5. Representatives of the United Nations Environment Programme (UNEP) and of the following specialized agencies were also present: International Labour Office (ILO); International Civil Aviation Organization (ICAO); International Maritime Organization (IMO). Representatives of the International Atomic Energy Agency (IAEA) also attended.

6. The following intergovernmental organizations were also represented: Commission of the European Communities (CEC); Intergovernmental Organization for International Carriage by Rail (OTIF); Organization for Economic Co-operation and Development (OECD) and Organization for the Prohibition of Chemical Weapons (OPCW).

7. Representatives of the following non-governmental organizations took part in the discussion of items of concern to their organizations: European Chemical Industry Council (CEFIC); European Committee of Paint, Printing Ink Artists Colours Manufacturer’s Associations (CEPE); International Technical Committee for the Prevention and Extinction of Fire (CTIF); European Industrial Gas Association (EIGA); Federation of European Aerosol Associations (FEA); International Federation of Freight Forwarders Association (FIATA); Hazardous Materials Advisory Council (HMAC); International Air Transport Association (IATA) International Council of Intermediate Bulk Container Associations (ICIBCA); International Confederation of Plastics Packaging Manufacturers (ICPP); International Electrotechnical Commission (IEC); International Road Transport Union (IRU); International Organization for Standardization (ISO); International Tank Container Organization/Tank Container Association (ITCO/TCA); International Union of Railways (UIC).
Distribution of documentation

8. Several delegations complained that of the approximately 60 documents on the agenda, all transmitted to the secretariat within the deadline of the 10 weeks preceding the session, they had officially received only some 10. The problem of distribution emerged as being general, since some delegations had not officially received any documents. The Committee pointed out that the documentation must be available sufficiently in advance to be brought to the attention of the competent experts and to enable delegations to take decisions during the session.

9. Several experts noted that, although the documentation had not been distributed officially, it had nevertheless been possible to consult it well in advance, including the informal documents, on the Transport Division's Internet site. In view of the importance of the decisions to be taken at the current session with regard to the drafting of the Model Regulations and their implementation by the organizations in charge of the modal aspects of the international transport of dangerous goods and by Governments at the national level, the Committee considered that decisions could be taken on the basis of the documentation obtained on Internet.

10. The expert from Germany said that he had been unable to download six documents. He considered that the fact that the Transport Division had made the documents available on Internet should not be an excuse for the Conference Services Division to evade its obligations.

11. The Committee requested the Director of the Transport Division to draw the attention of the Conference Services Division to the problem and asked him to find a solution. The Chairman asked the experts to reflect on the matter during the session and to consider whether the problem should be brought to the attention of the Council, given that it had already been brought up at the three previous sessions of the Sub-Committee and that the situation was still continuing to deteriorate (see paras. 155-157).

ADOPTION OF THE AGENDA

12. The Committee adopted the provisional agenda prepared by the secretariat (ST/SG/AC.10/24 and Add.1) after amending it to include late submissions (informal documents INF.1 and INF.2).
WORK OF THE SUB-COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Reports of the Sub-Committee on its thirteenth, fourteenth and fifteenth sessions:
ST/SG/AC.10/C.3/26 and -/Add.1-3
ST/SG/AC.10/C.3/28 and -/Add.1-3
ST/SG/AC.10/C.3/30 and -/Add.1-3

Multimodal portable tank transport

Reference documents:
ST/SG/AC.10/C.3/28, annex 1 (Report of the Sub-Committee on its fourteenth session)
ST/SG/AC.10/C.3/30, annex 3 (Report of the Sub-Committee on its fifteenth session)

New documents:
ST/SG/AC.10/1998/53 (United States of America)
ST/SG/AC.10/1998/57 (Secretariat)

Informal documents:
INF.6 (IMO)
INF.25 (United Kingdom)
INF.31 (United States of America/secretariat)

13. The Committee adopted the proposal contained in document ST/SG/AC.10/1998/53, subject to the following points:

(a) The question of toxic by inhalation substances required to be considered over the next two-year period;

(b) The amendments proposed in document INF.25 were adopted;

(c) Some corrections were required for UN Nos. 3257, 3230 and 3240.

14. A working group was established to prepare the list of necessary amendments and the adopted texts are reproduced in annex 1 (for amendments to Chapter 4.2), annex 2 (for guidelines for assigning portable tank requirements to substances of Classes 3 to 9) and annex 3 (for the assignment of T codes to specific substances).

15. The Committee noted that some contradictions were likely in the list of dangerous goods due to the fact that some of the substances listed should be classified as solids but that the provisions for carriage in tanks applied to substances carried as liquids, either in the molten state or as solutions. This situation occurred in Classes 6.1 and 8 in particular, or in some UN numbers which might also include liquid or solid isomers or hydrated forms of solids.
16. The Committee agreed that the question of transport of solids in tanks should be considered during the following biennium. Certain of the cases mentioned in document INF.31 might be resolved at the current session, but others would have to be considered separately (hydrates in solid form, isomers, substances in a molten state). It was pointed out that a question of classification was involved for solutions, as substances transported in a physical state different from that of the substances designated by a UN number should normally be carried under an n.o.s. entry. In practice, however, the IMDG code and United Nations Model Regulations contained provisions for the transport in tanks of solids in solution under the same UN number as the entry assigned to the solid.

17. The expert from Belgium mentioned that the IMDG Code, according to the next amendment scheduled for 1 January 2001, would take up the Model Regulations requirements relating to the construction of tanks, but IMO type tanks could continue to be built up to 2003. The use of tanks constructed according to the Model Regulations would be allowed on the basis of the rationalized approach. IMO type tanks could be used until 2010 in conformity with existing requirements for use. After that time, they could still be used but in conformity with the provisions applicable to tanks built according to the Model Regulations. The dates should be confirmed by the IMO Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC) in February 1999.

18. The Committee agreed that, in future, dates should be set for the entry into force of the new requirements and that transitional measures should be provided for, if necessary, in the Model Regulations.


19. The Committee adopted the draft amendments to Chapters 4.2 and 6.6 (new Chapter 6.7) prepared by the Sub-Committee. The document’s conformity with the text of document ST/SG/AC.10/1998/53 should be verified.

**Packing instructions**

**Reference documents:**

<table>
<thead>
<tr>
<th>Document</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST/SG/AC.10/C.3/1998/19</td>
<td>United States of America, United Kingdom</td>
</tr>
<tr>
<td>ST/SG/AC.10/C.3/1998/21</td>
<td>United States of America, United Kingdom</td>
</tr>
<tr>
<td>ST/SG/AC.10/C.3/1998/22</td>
<td>United States of America, United Kingdom</td>
</tr>
<tr>
<td>ST/SG/AC.10/C.3/1998/49</td>
<td>Germany</td>
</tr>
<tr>
<td>ST/SG/AC.10/C.3/1998/50</td>
<td>Germany</td>
</tr>
</tbody>
</table>

**General discussion**


<table>
<thead>
<tr>
<th>Document</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST/SG/AC.10/C.3/1998/41</td>
<td>Belgium</td>
</tr>
<tr>
<td>ST/SG/AC.10/1998/57</td>
<td>Secretariat</td>
</tr>
</tbody>
</table>

**Informal documents:** INF.3 (Belgium)
20. The expert from Belgium said that, according to paragraph 5 of the Recommendations, provisions less strict than those contained in the Model Regulations might be applied to a particular mode of transport, but that it should not be possible to draw up more stringent provisions except for air transport. In his view that paragraph should remain unchanged and the packing instructions should reflect the most stringent provisions applicable to a particular mode of transport.

21. It was pointed out that the provisions currently applicable to a particular mode of transport could vary from country to country, in particular for domestic transport, and that it would be difficult to choose a regulation for reference. The objective of the work in question, as defined by the Committee, was to develop packing instructions that would be acceptable for both sea and land transport and it was for the Committee, whose experts represented all modes of transport, to find a compromise solution in close cooperation with the modal organizations concerned.

22. The Committee agreed not to amend paragraph 5 and to take up consideration of the report of the informal Working Group on Packing Instructions which had met at Frankfurt from 7 to 11 September 1998 at the invitation of the Government of Germany. The items which had not been resolved by the Working Group would be discussed on a case-by-case basis.

Packagings

Documents: ST/SG/AC.10/1998/16/Add.1 (United Kingdom)
ST/SG/AC.10/1998/16/Add.2 (United States of America)
ST/SG/AC.10/1998/18 (Germany)
ST/SG/AC.10/1998/21 (Germany)

Informal documents: INF.5 (IMO)
INF.13 (United Kingdom)
INF.24 (CEFIC)
INF.26 (United Kingdom)
INF.31 (United States of America/Secretariat)
INF.51 (Norway, Sweden)

Use of removable head drums for viscous PG I liquids (ST/SG/AC.10/1998/21)

23. The expert from Germany had made a proposal to the effect that, in the case of viscous liquids of packing group I, such drums could be used only when the viscosity of the liquids was higher than 2,680 mm²/s, rather than 200 mm²/s as the Sub-Committee had specified (ST/SG/AC.10/C.3/30, para. 52). He expressed the view that such drums had not sufficiently shown to withstand all normal conditions of transport, e.g. vibration.

24. In the opinion of the expert from France, in fixing a viscosity requirement the Sub-Committee had recognized the need to provide restrictions on the use of such drums for liquids in packing group I. The task at hand was to determine the viscosity level at which removable heads could be permitted for practical reasons, i.e. filling the drums. The observer from Switzerland suggested to avoid the use of drums with too large openings by defining a relation
between the diameter of the drum and that of the opening.

25. Other delegations were of the opposite view, and felt that there was no reason to prohibit the use of removable heads for liquids in packing group I, as their use was already permitted for liquids in groups II and III and did not raise any particular safety problems. Although their use was not permitted in Europe for packing group I, it was permitted in other regions of the world, such as North America and Australia. The expert from the United States said that all incidents or accidents involving dangerous goods in his country were entered in a database, and that those statistics indicated that there was no reason to doubt the effectiveness and safety of such packagings.

26. The Committee confirmed the Sub-Committee’s decision to set a viscosity limit of 200 mm²/s.

27. The expert from Germany requested that the use of removable head drums for PG I should be limited to substances of Classes 3, 6.1 and 8 with no subsidiary risks or which did not require stabilization measures.

28. The proposal was put to a vote but was not adopted.

Solids which may liquefy during transport (ST/SG/AC.10/1998/18, Germany)

29. Several experts supported in principle the proposal that P002 should be applied to solids liable to liquefy during transport, which would imply not only that packagings intended for P002 should be used instead of those intended for P001, but that they should also be tested for the transport of liquids. Nevertheless, reservations were expressed about the second part of the German proposal (conditions of viscosity, interpretation of the term “hermetically sealed liner”, relationship to salvage packagings, list of substances concerned).

30. It was also pointed out that paragraph 4.1.3.5 as proposed by the Working Group (see ST/SG/AC.10/1998/16/Add.3) dealt with the same question and contained a list of packagings that should not be used if the substance concerned was liable to liquefy during transport (without however stipulating that the packagings must be tested for the carriage of liquids).

31. The expert from Germany requested that the Committee should take a decision on the principle contained in the first sentence of paragraph 4.1.3 as proposed in his document. The Committee took a decision not to accept that principle.

Details concerning packing instructions

32. A working group was asked to study informal documents INF.5, INF.13, INF.26, INF.31 and INF.51; the amendments adopted are reflected in the final text of Chapter 4.1 reproduced in annex 4.
33. The Committee adopted the proposals contained in informal document INF.31 with the following reservations:

- separation of entries which might take either a liquid or solid form, as proposed in paragraph 2 (a), should apply only to the entries mentioned in document ST/SG/AC.10/1998/16/Add.2;

- packing instructions should all display a requirement referring to the general packing instructions and to the provisions specific to the class or division, if necessary, as in existing instructions for explosive substances and articles.

34. Regarding the proposals by the expert from Germany (INF.34) and CEFIC (INF.24) concerning packing instructions P601, P602 and P804, the Committee decided by vote that the instructions proposed by the Working Group represented a compromise which was preferable to a reference to the competent authority or to the alternative proposed by Germany.

35. The Committee considered the packing instructions proposed in document ST/SG/AC.10/1998/Add.1 on an individual basis. The packing instructions adopted are reproduced in annex 4.

36. The Committee confirmed the decision of the Sub-Committee to deviate from certain limits agreed by the IMO Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC) at its third session for P001 and P002, for example for certain packing group I limits (see also ST/SG/AC.10/C.3/30, para. 35).

37. The Committee decided that it would not be necessary to reproduce a list of the special packing provisions in the Model Regulations. The special packing provisions would be cross-referenced in the table in Chapter 3.2, column (9), and would appear directly under the packing instructions with their reference number as they appeared in document ST/SG/AC.10/1998/16/Add.1. The same principle would apply to the instructions relating to Class 1 and to IBCs.

38. The Committee agreed that instruction P200 would be introduced on a temporary basis, as the instructions for gas cylinders were to be prepared during the following biennium.

39. Concerning instruction P501, the Committee felt that the general provision in paragraph 4.1.1.2 (for compatibility of the packing material with the substance carried) was sufficient and that it was not necessary either to underline or refer to that general provision in the instruction itself, as it would then be necessary to do so in all the instructions, which would be inconsistent with the approach taken. The Committee decided to indicate in the instruction that the packagings should be equipped with vents, as the instruction applied to only one substance (UN 2015 - Hydrogen peroxide, with more than 60 per cent hydrogen peroxide).
40. In the case of instruction P504, the Committee decided not to require a vent for UN 2014 (Hydrogen peroxide, with between 20 and 60 per cent hydrogen peroxide) because it was not certain that a vent was always needed for low-concentration solutions. Furthermore, indicating such a requirement in a particular case might give the impression that a vent was not necessary in the cases not listed. The Committee therefore felt that the decision to install a vent was for the industry to take in accordance with general provision 4.1.1.8.

41. The expert from Belgium indicated that in 4.1.1.8 there is no obligation for the use of a vent.

42. In the case of instruction P801 the Committee decided that there was no need to require that rigid outer packagings should meet the performance level of packing group III since storage batteries could be carried without packaging on pallets or in other types of packagings which did not meet the requirements of Chapter 6.1. The inclusion of a requirement of a tilting test at an angle of 45° was similarly judged unnecessary.

43. The Committee adopted amendments to instruction P408 and special provision 133 on the basis of a proposal by the expert from France (INF.52) (see annex 4).

44. The Committee adopted the proposed amendments contained in the annex to document ST/SG/AC.10/1998/16/Add.1 (see annex 4).

**IBCs**

**Documents**: ST/SG/AC.10/1998/16/Add.2
ST/SG/AC.10/1998/16/Add.5

45. The Committee adopted the proposals of the Working Group concerning IBCs with some amendments (see annex 4).

**Informal document**: INF.23 (Norway and Sweden)

46. The expert from Norway proposed that a special provision B10 should be added for the carriage of ammonia solution (UN 2672, instruction IBC 03) with a concentration of less than 30 per cent in rigid or composite plastics IBCs, as was currently permitted in Norway and Sweden.

47. At the request of the representatives of ICPP and ICIBCA, which was accepted by the expert from Norway, the Committee decided to deal with the question over the next biennium.
Venting devices

Documents: ST/SG/AC.10/1998/4 (Germany)
            ST/SG/AC.10/1998/58 (Germany)

48. The expert from Germany proposed that venting devices should be prescribed for packagings intended for the carriage of certain substances such as solutions of hydrogen peroxide and hypochlorites (ST/SG/AC.10/1998/58) and that special provisions should also be envisaged for IBCs.

49. Several experts considered that the proposed special provision P30 was difficult to understand. Others pointed out that paragraph 4.1.1.8 allowed for venting devices and that the consignor was responsible for deciding whether a packaging should have them. Paragraphs 6.5.3.3.6 and 6.5.3.4.10 required relief devices for occasions on which internal pressure in IBCs might develop dangerously. They did not therefore see the need to add new requirements for individual cases.

50. The Committee decided not to consider the list of relevant substances submitted by Germany.

Introduction to packing instructions

Document: ST/SG/AC.10/1998/16/Add.3 (United Kingdom)

51. The text resulting from the work of the informal working group was adopted with some amendments and in particular the deletion of paragraph 4.1.3.4 (which was not in accordance with the principles of classification of solutions) and the addition of some packagings and IBCs to the list of packagings which should not be used for the carriage of substances liable to become liquid during transport (see annex 4).

52. For paragraph 4.1.3.9 (b) it was specified that all the relevant requirements of Part 6, including those concerning the testing, approval and marking of packagings or IBCs, would apply to alternative packagings.

Compatibility requirements for packagings for the transport of fluoro compounds

Document: ST/SG/AC.10/1998/17 (Germany)

53. The expert from Germany withdrew his proposal as the adopted paragraph 4.1.3.1 responded to the problem.
**Definition for combination packagings**


54. Although this document had been designed to take account of the case of articles carried in outer packagings so that the package could be regarded as a combination packaging, several experts considered that the repercussions of this proposal required study in detail. The question could be considered in the course of the forthcoming biennium.

**Large packagings**

*Document:* ST/SG/AC.10/1998/16/Add.4 (Germany)

*Informal documents:* INF.9 (United Kingdom)
INF.41 (Germany)

55. Several experts considered that the proposals had come too late and that the proposed packing instructions should be the subject of a detailed review in the course of the next biennium. Some experts did not see the need to include instructions in such detail in the Model Regulations, particularly as the use of large packagings was relatively infrequent.

56. Other experts expressed the hope that these instructions would be included in the next edition of the Model Regulations since their countries' industries wished to use them for international transport. The Committee decided to consider the proposal contained in document INF.9; the texts adopted are reproduced in annex 4.

57. The Committee agreed that the assignment of instructions LP 01 and LP 02 would be according to the list contained in document INF.9. Instruction LP 099 was included for future use but for the time being was not assigned to any entry. Instruction LP 101, as amended, was assigned to the same entries as present instruction 130, and instruction LP 102 to the same entries as present instruction 134.

58. The proposed instruction LP 801 was not adopted, since the carriage of storage batteries in slatter crates was permitted and there was no need to prescribe special conditions for large packagings.

59. The proposed instruction LP 901 was not adopted since the majority of the Committee considered that there was no need for additional restrictions on the carriage of airbags etc. according to special provision 235.

**Report of the ad hoc working group on packing instructions**

60. The Committee adopted the amendments to ST/SG/AC.10/1998/16/Add.1 and -/Add.3 and other consequential amendments agreed by the ad hoc Working Group on packing instructions with a few modifications (see annex 4).
61. The expert from Germany considered that, in view of the positive decision taken by the Committee with respect to document ST/SG/AC.10/1998/20 for type N packagings, the transport of dangerous goods in type N IBCs should not be allowed in the proposed IBC packing instructions.

62. The Committee considered that the decision taken with respect to document ST/SG/AC.10/1998/20 was related to type N packagings only and the Committee did not endorse the proposal by Germany at the end of that document in which that type N IBCs should not be included either in Chapter 6.5 of the Model Regulations or in the packing instructions.

63. The Committee decided that type N IBCs should be included in Chapter 6.5 and referred to in the IBC packing instructions.

64. After final adoption of the conclusions of the Working Group on packing instructions, the experts from Belgium, Germany and the Netherlands expressed reservations on the outcome of this work and requested that their statements be annexed to the report (see annex 5).

65. The Committee took note of these reservations and it was recalled that decisions in this forum are made in accordance with the ECOSOC Rules of Procedures, and not on a consensus basis.

66. The expert from the United States of America regretted that three experts felt it necessary to express such reservations. He recalled that, as an expert of the United States of America, he expressed a coordinated position of his Government with respect to all modes of transport and he considered that the packing instructions adopted at this session resulted from a good spirit of compromise and would ensure a good level of safety for all modes of transport.

67. The Chairman stated that there was an agreement of the Committee on how to deal with the questions underlined in document ST/SG/AC.10/C.3/1998/41 and that the majority of the Committee felt that the decision in terms of packing instructions, resulting from a lengthy discussion in several meetings of the Sub-Committee and working groups, would not impair the level of safety.

**Draft amendments to the Recommendations on the Transport of Dangerous Goods, Model Regulations**

*Document:* ST/SG/AC.10/1998/15 (Secretariat)

68. The Committee considered the draft amendments to the Model Regulations on the Transport of Dangerous Goods prepared by the Sub-Committee during the biennium, as consolidated by the secretariat, and proposals relating to them. The adopted amendments are reproduced in annex 1.
Draft amendments concerning Class 7

Documents: ST/SG/AC.10/C.3/30/Add.3 (Report of the Sub-Committee)
ST/SG/AC.10/1998/22 (Secretariat)

Informal document: INF.39 (IAEA)

69. The Committee considered the secretariat’s proposals concerning the provisions relating to radioactive material with subsidiary risks and IAEA’s comments on the proposals.

70. The Committee felt that the subsidiary risks in the case of Class 7 should be reflected in the documentation. It also agreed to reintroduce special provision 172 in an amended form.

71. In contrast to the opinion of the IAEA representative, the Committee felt that radioactive material in excepted packages (UN Nos. 2908, 2909, 2910 and 2911) having other dangerous properties should as a matter of priority be classified in the class corresponding to the dangerous properties, as the danger of radioactivity would then become a subsidiary danger. However, the radioactive nature of the substances should be reflected in the name, and the requirements applicable to the IAEA regulations should also be respected. A special provision was assigned to such material for that purpose.

72. For packing provisions, the Committee decided that it should be clearly indicated that the requirements of Part 6 were applicable to packagings, IBCs and tank-containers containing radioactive material with subsidiary risks.

73. The amendments to document ST/SG/AC.10/C.3/30/Add.3 can be found in annex 1.

74. The expert from the United Kingdom proposed that section 6.4.1 (reserved) should be deleted and that all the paragraphs in Chapter 6.4 should be renumbered accordingly. One member of the secretariat pointed out that document ST/SG/AC.10/C.3/30/Add.3 had already been translated into the six official United Nations languages and that renumbering the paragraphs of such a large chapter and checking all their cross-references would be a long and costly job not only for the United Nations translation services but for those of the other organizations concerned (ICAO and IMO) which had received document ST/SG/AC.10/C.3/30/Add.3 but would not receive the final text until much later.

75. The Committee decided to keep the existing numbering. It was also advisable for all the modal regulations to keep the same numbering, including the reserved section.

Naturally occurring radioactive substances


76. The representative of CEFIC said that the new IAEA regulations applied to numerous natural sources such as ores or wastes containing radionuclides which had not previously been covered, and that implementation would entail major difficulties.

77. The representative of IAEA said that this was the result of the implementation of new
standards of radiation protection which were far more stringent than previous standards but could be applied generally and not only to transport. He considered that any questioning of these standards and the difficulties of implementing them should be brought to the attention of IAEA in accordance with standard procedures and that it was not for the Committee to deal with the matter.

78. The Committee shared the opinion of the representative of IAEA; the problem should be submitted to IAEA by any member State which deemed it necessary.

**Lithium batteries**

| Informal documents: INF.16 (Canada) | INF.17 (Canada) |
| INF.40 (IEC) |

79. The Committee, noting that the current requirements for lithium batteries did not specify whether they were metallic lithium or lithium-ion batteries, and aware that a great many lithium-ion batteries were less dangerous than metallic lithium batteries and were widely marketed internationally, amended the current requirements to include the idea of providing exemptions for lithium-ion batteries (see annex 1) on the basis of a proposal made by IEC.

80. The question should, however, be considered overall on the basis of the document transmitted by Canada which would be reviewed and studied in the course of the forthcoming biennium. The Committee agreed in principal that the proposal submitted by Japan would also be considered in the next biennium.

| Informal document: INF.50 (France) |

81. The proposal by France to resolve some difficulties concerning the methods of carrying out tests on large lithium cells (paragraph 38.3.4.4.3 proposed in document ST/SG/AC.10/1998/14) was adopted with an amendment establishing a minimum test force of 10 kN (see annex 1).

**Paragraph 2.0.1.3**

82. The Committee decided that the concept of packing group, in terms of classification, did not apply to articles even if they required to be packed, as appropriate, in packagings meeting a performance level established for substances of a given packing group as indicated in the packing instructions. The indication of the packing group in column (5) should therefore be deleted in the case of articles where design type tested packaging is not required.
Chapter 2.5

Informal document: INF.22 (CEFIC)

83. The proposal by CEFIC concerning a substance in the list in paragraph 2.5.3.2.4 was adopted (see annex 1).

Chapter 3.1


84. The proposed amendments to paragraphs 3.1.2.1 and 3.1.3.2 were adopted (see annex 1).

Chapter 3.2

Document: ST/SG/AC.10/1998/74 (Secretariat)

85. The proposal by the secretariat, on behalf of the RID/ADR Joint Meeting, to replace the subsidiary risk column by a column indicating the labelling code to be used, and accordingly to reverse the order of this column and the packing group column, in accordance with the present layout of the table appearing in the regulations of the United States of America (49 CFR) and the Joint Meeting’s decisions for RID and ADR, received only limited support and was not adopted; the other proposals contained in the document similarly received no support.

86. A member of the secretariat reminded the Committee that it was intended that the corresponding tables of RID, ADR and the IMDG Code should be brought into line with the table in Chapter 3.2 in the course of the next two years; in view of the considerable work of preparing these tables for each of the organizations concerned, he hoped that the Committee would not go back on its decision at a forthcoming session.

Use of the term "stabilized"

Documents: ST/SG/AC.10/1998/1 (United States of America)
ST/SG/AC.10/1998/10 (United States of America)

87. The proposals concerning the use of the term "stabilized" in English instead of "inhibited" were adopted in principle (see annex 1).

Refrigerating machines


88. The Committee decided to add a new entry for refrigerating machines containing flammable, non-toxic liquefied gases (see annex 1).
89. The present entry was reclassified from packing group III to packing group II and the limited quantity provisions and tank codes in Chapter 3.2 were amended accordingly (see annex 1).

Copper sulphate

90. The Committee considered that the data provided by the expert from Germany did not justify the classification of copper sulphate in Class 6.1, either on the basis of current criteria or on that of human experience.

91. The Committee also decided against classifying this substance in Class 9 on the grounds that it constituted a hazard for the environment and also because the introduction of criteria for aquatic environment hazard would be part of the future work programme.

UN 3270

92. The square brackets were removed round special provision 286 in document ST/SG/AC.10/1998/15 (Chapters 3.2 and 3.3).

Oxygen concentration in gas mixtures

93. The Committee agreed to make provision for a limit of 23.5 per cent (instead of 21 per cent) for the oxygen concentration in mixtures carried under entry 1002 Compressed air, without requiring a 5.1 subsidiary risk label. The proposed concentration of 25 per cent had seemed too high. This limit was not accepted for rare gases and oxygen mixtures (UN 1980).

94. The expert from Germany felt that this decision was not in line with the classification requirements for oxidizing gases in the Model Regulations and the proposals for globally harmonized criteria. He regretted that this type of limit had been accepted solely because of industrial practices in filling cylinders.
Hydrazinium nitroformate

            ST/SG/AC.10/1998/38 (Netherlands)

95. Some experts considered that it would be premature to include an entry in Division 1.1.D since a very specific phlegmatizer had to be used and it was not clearly understood why the classical phlegmatizers were not effective. For the time being the substance can be transported under an N.O.S. entry. The expert from the Netherlands withdrew his proposal.

Chapter 4.1

Testing and shipping of intermediate bulk containers (IBCs)

Document: ST/SG/AC.10/1998/5 (India)

96. Since the expert from India was not present, consideration of the document was postponed until the next biennium.

Type F organic peroxides in IBCs and tanks

Documents: ST/SG/AC.10/C.3/1998/56 (Finland)
            ST/SG/AC.10/1998/56 (Finland)

97. The observer from Finland proposed that peroxyacetic acid, stabilized, with a concentration equal to or less than 38 per cent, classified as type F according to the Model Regulations, could be carried in tanks (instruction T34) and in IBCs. At the present time, only concentrations equal to or less than 17 per cent were permitted in IBCs.

98. The representative of CEFIC confirmed that this product was carried in tanks and IBCs under special licence and that it would therefore be desirable to introduce provisions to permit its carriage. Several experts considered, however, that thought should be given to the conditions of carriage, particularly in view of the corrosive nature of the product. These documents would be discussed further over the coming biennium.

Paragraph 4.1.1.1

Informal document: INF.8 (United Kingdom)

99. The proposed amendment to paragraph 4.1.1.1 was adopted (see annex 4).
Chapter 5.2 - Subsidiary risk labels

           ST/SG/AC.10/1998/49 (CTIF)
           ST/SG/AC.10/1998/57 (Secretariat)

Informal document: INF.38 (Germany)

100. The Committee adopted proposals contained in the document submitted by Australia and Canada, to remove the distinction between primary and subsidiary risk labels (see annex 1).

101. The representatives of ICAO and IATA said that this proposal had not been studied by the ICAO experts and was likely to have major implications for current stowage practices in the loading compartments of cargo planes. These compartments were labelled only according to the principal risk marked on the packages and cargo-handlers would not be in a position to make the distinction. The compartments should therefore carry all the required labels, which would make conditions of stowage much more stringent.

102. The Committee agreed that the French term “risk” was not always used advisedly in the Model Regulations, and that it would sometimes be preferable to use the term “hazard” or “danger”. However, this question could not be considered in depth until the next biennium.

Chapter 6.1

Specifications for 1N1 and 1N2 drums

Document: ST/SG/AC.10/1998/20 (Germany)

103. The proposal by Germany was adopted (see annex 1).

Chapter 7.1

Mixed transport of goods of Class 1 with other dangerous goods


104. Several experts supported the proposal by Norway, but in view of the number of detailed comments, the expert from Norway withdrew it.
Segregation requirements of explosive articles of compatibility groups C, D, E and G


105. The expert from the United States of America said that his proposal was intended to bring segregation requirements into line with those of the IMDG Code, RID and ADR. On the proposal of the expert from the United Kingdom, he amended it so that combinations of articles of compatibility groups C, D, E and G would be treated as belonging to group G rather than group E. The proposal was not, however, adopted.

Draft amendments to the Manual of Tests and Criteria


106. The Committee approved the draft amendments adopted by the Sub-Committee with a few changes (see annex 1).

New proposals

107. All new proposals listed under agenda sub-item 2 (d) were deferred to the next biennium for consideration by the Sub-Committee.

ACTIVITIES RELATED TO THE IMPLEMENTATION OF AGENDA 21

Global harmonization of systems of classification and labelling of chemicals

General

Documents: ST/SG/AC.10/1998/51 (Secretariat)
ST/SG/AC.10/1998/52 (United States of America)
ST/SG/AC.10/1998/43 (Austria)
ST/SG/AC.10/1998/41 (Argentina)

Informal document: INF.43 (United Kingdom)

108. It was recalled that the Sub-Committee had already discussed a proposal developed by the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) Coordinating Group for the Harmonization of Chemical Classification Systems (CG/HCCS) aiming at reconfiguring the Committee into a Committee on the Transport of Dangerous Goods and the Globally Harmonized System (ST/SG/AC.10/1998/51) in the context of the follow-up to Agenda 21, chapter 19, Programme Area B and the implementation of the globally harmonized system of classification and labelling of chemicals (see also ST/SG/AC.10/C.3/30, paras. 182-200).
109. The expert from the United Kingdom explained that document ST/SG/AC.10/1998/52 contained other possible options for the reconfiguration, developed by the Government of the United States of America after the session of the IOMC Coordinating Group, but these options had not been formally discussed or agreed by the coordinating group.

110. The experts from Canada and the United States of America did not agree that there needed to be wide participation in the new Committee. They noted that the current Committee of Experts had operated successfully for many years with oversight provided directly by ECOSOC. They anticipated that under the new structure, the work of the current UN Committee of Experts would be undertaken by the new Transport Sub-Committee. They considered that, in view of the UN Committee of Experts’ recommendations that the new Committee should not in any way disrupt the successful operation of the Transport Sub-Committee, there would be little substantive work for the new Committee. They were concerned that if the new Committee had wide participation it would draw valuable resources from the two Sub-Committees and that it would also be difficult to maintain a balance between the interests of transport and global harmonization. Therefore, they recommended that participation in the new Committee should be limited to two representatives from each Sub-Committee. In this manner, decision-making would be on the basis of consensus and only one day in every two year period would be necessary.

111. Several experts considered that such an option would not be appropriate because if, on the one hand, this Committee was to take important decisions it should be open to at least all members of each Sub-Committee, and if, on the other hand, it had no real decision role, there would be no reason to reconfigure the existing Committee as it would then be enough to create a new committee on GHS and to find some kind of coordination mechanism. It was recalled, however, that the reconfiguration was intended to strengthen cooperation and to ensure global harmonization.

112. Most experts were in favour of the option proposed by the IOMC Coordinating Group in document ST/SG/AC.10/1998/51.

113. It was noted that this option had been also considered and agreed in principle by the third meeting of the Intersessional Group (ISG 3) of the Intergovernmental Forum on Chemical Safety (IFCS) held in Yokohama, Japan (1-4 December 1998). ISG 3 had requested the IOMC Coordinating Group, in close co-operation with the Committee of Experts on the Transport of Dangerous Goods, to draft terms of reference for the proposal to be submitted to the Council, and to address the issue of resources (see informal document INF.43). ISG 3 recommended also that the issue be introduced to the Council for discussion and decision at its 1999 substantive session.

114. Noting that the IOMC Coordinating Group would meet in January 1999, the Committee decided to prepare a draft resolution on the reconfiguration of the Committee for adoption by the Council at its 1999 session. The IOMC Coordinating Group, when developing the terms of reference, and the Council, when discussing the draft resolution, should be informed that the Committee considers that:
(1) the reconfiguration should not affect the present terms of reference and rules of procedure of the existing Sub-Committee of Experts on the Transport of Dangerous (in accordance with ST/SG/AC.10/1998/51, para. 12);

(2) the role of the reconfigured Committee should be strictly limited to that described in ST/SG/AC.10/1998/51, para. 10;

(3) the rules of procedures of the Economic and Social Council should apply to the proceedings of the reconfigured Committee and the GHS Sub-Committee, in accordance with Rule 27, except that they should endeavour to work on a consensus basis;

(4) the reconfigured Committee and the Sub-Committee of experts on GHS should have as wide a participation and membership as practically possible;

(5) the total number of meeting days allocated to the reconfigured Committee and the two sub-committees should remain the same as that presently allocated to the Committee and its Sub-Committee (38), and the existing schedule of meetings should remain globally unchanged, i.e. sessions of the various bodies should be held back to back every six months; the total number of meeting days allocated to the reconfigured Committee session should not exceed three days per biennium while the number of meeting days that can be allocated to the new GHS Sub-Committee would have to be agreed by the Committee of Experts on the Transport of Dangerous Goods at its twenty-first session, i.e. in December 2000, and should normally be a total of 8 to 10 days for the four sessions (i.e. 2 to 3 days per session);

(6) the reconfigured Committee with its two Sub-Committees should start working in the biennium 2001-2002.

(7) the secretariat should be invited to evaluate additional staff resources needed and budgetary implications.

115. The Committee agreed that the detailed terms of reference to be finalized by the IOMC Coordinating Group could be included in the report of the Secretary-General to the Council on the work of the Committee of Experts on the Transport of Dangerous Goods with comments by the secretariat as to their conformity with the above principles. The secretariat was invited to ensure that these terms of reference be drafted in conformity with UN normal practice.
Health hazards and hazards to the environment

Documents:
- ST/SG/AC.10/C.3/26 (para. 122)
- ST/SG/AC.10/C.3/28 (paras. 160-170)
- ST/SG/AC.10/C.3/30 (paras. 201-215)
- ST/SG/AC.10/R.473 (Germany)
- ST/SG/AC.10/C.3/R.635 (United Kingdom)
- ST/SG/AC.10/C.3/R.661 (Argentina)
- ST/SG/AC.10/C.3/R.664 (United Kingdom)
- ST/SG/AC.10/C.3/R.707 (Argentina)
- ST/SG/AC.10/C.3/R.708 (United Kingdom)

Informal documents:
- INF.10 (United Kingdom)
- INF.10/Corr.1
- INF.20 (OECD)

116. The Committee expressed its deep satisfaction for the success of the work of the OECD in proposed criteria for the Global Harmonization of Systems of Classification of substances presenting hazards to health or hazards to the environment.

117. The Committee welcomed the proposal of the United Kingdom (INF.10) to develop a text for the UN Model Regulations taking account of the proposed criteria for hazard to the environment in the next biennium.

118. The Committee agreed also that the Sub-Committee should consider adapting the existing criteria for toxic substances to those proposed by OECD in the next biennium.

119. The expert from Germany said that the proposed criteria should be implemented through the UN Model Regulations only when a complete package would be available, i.e. criteria concerning pure substances and mixtures as mixtures are those dangerous goods which are most commonly carried. He also stressed that implementation of these criteria through the UN Model Regulations would make sense only if there was a clear commitment, at IFCS III level in 2000, from all Governments to implement the globally harmonized system for all regulatory systems.

120. It was also mentioned that the use of the word “class” for the various toxicity ranges could be misleading in the context of transport regulations, and that OECD should be invited to use alternative names, such as “category”. 
Physical hazards

Documents: ST/SG/AC.10/C.3/28/Add.3
ST/SG/AC.10/C.3/1997/27 (Chairman of the Working Group)
ST/SG/AC.10/C.3/R.764 (United Kingdom)
ST/SG/AC.10/C.3/1997/37 (United Kingdom)
ST/SG/AC.10/C.3/1997/43 (European Commission)
ST/SG/AC.10/C.3/1997/80 (Norway)
ST/SG/AC.10/C.3/1997/91 (FEA)
ST/SG/AC.10/R.509 (Germany)
ST/SG/AC.10/1998/54 (Germany)

Informal documents: INF.32 (FEA)
INF.27 (Germany)

121. The Committee approved the proposals prepared by the UN/ILO working group on physical hazards as reflected in ST/SG/AC.10/C.3/28/Add.3, and considered in general, with regard to ST/SG/AC.10/1998/54, that, as drafted, these proposals of the Sub-Committee were clear enough for implementation by concerned governmental or intergovernmental bodies.

122. The Committee noted that FEA intended to prepare proposals regarding flammability of aerosols in cooperation with non-European industrial associations concerned with aerosols (INF.32). The Committee agreed that the ILO/UN Working Group should meet again for one day in December 1999 to consider such proposals and finalize the criteria for the flammability of aerosols. The proposal should address all regulatory sectors.

123. The expert from the United States of America said that he envisaged to review the criterion of boiling point used for the classification of flammable liquids.

124. As regards the criteria mentioned by Germany in INF.27 for substances which in contact with water evolve toxic gases, it was noted that OECD had already started work in that field. OECD was invited to consider also the corrosive properties of gases evolved, and the physical process entailing production of gases.

Labelling and hazard communication systems


125. The Committee took note of the draft terms of reference of the ILO Working Group for the Harmonization of Chemical Hazard Communication.
Several experts stressed the importance of hazard communication tools for emergency response, and of indicating through such tools not necessarily intrinsic hazards of the dangerous goods, but rather the actual risk presented in case of transport accidents so that emergency services could take appropriate action on the scene.

The representative of ILO confirmed that the Committee would be kept informed and would be appropriately consulted for the development of the Globally Harmonized Labelling and Hazard Communications System.

The representative of UIC mentioned the proposal in ST/SG/AC.10/1998/35 for future work on the harmonization of emergency response codes on transport placards and he said that it would be useful to establish cooperation between the UN Committee of Experts on the Transport of Dangerous Goods and the ILO Working Group.

Hazardous wastes


The representative of UNEP informed the Committee of the programme of work of the Basel Convention Technical Working Group on lists of wastes and applicable procedure for their review and adjustment, in particular with respect to classification criteria for categories H6.2, H10, H11, H12 and H13.

The Committee invited the UNEP Secretariat of the Basel Convention to draw the attention of the Conference of Paris to the Basel Convention on the work on global harmonization of systems of classification and labelling of chemicals carried out in the context of the follow-up to Agenda 21, Chapter 19, and recommended that the globally harmonized systems should be applied as well in the context of the Basel Convention.

For H6.2, the Committee recalled that criteria for clinical wastes are included in Chapter 2.6 of the Model Regulations and that proposals for further work in the new biennium have been made by WHO (see informal document INF.14).

IMPLEMENTATION OF RESOLUTION 1997/3 OF THE ECONOMIC AND SOCIAL COUNCIL

(a) Resolution 1997/3 of the Economic and Social Council

The Committee noted that the Economic and Social Council had adopted the draft resolution prepared during the last session (ST/SG/AC.10/23, annex 7), which was issued as Council resolution 1997/3.
(b) **Publications of the tenth revised edition of the Recommendations on the Transport of Dangerous Goods (Model Regulations) and the 2nd revised edition of the Manual of Tests and Criteria**

133. The Committee noted that the tenth revised edition of the Recommendations had been issued in all United Nations official languages, except the Spanish version the printing of which had been delayed because the Government of Spain had kindly offered to check carefully the translation of the Model Regulations. This version was being printed.

134. The Committee noted with satisfaction that the 2nd revised edition of the Manual of Tests and Criteria was now available in the six official languages.

(c) **Activities of international organizations concerned with regulations or recommendations on the transport of dangerous goods at an international level**

135. The Committee noted that IMO, ICAO, UN/ECE and OCTI had prepared amendments to their respective instruments (IMDG Code, Technical Instructions for the Safe Transport of Dangerous Goods by Air, ADR and RID) on the basis of the provisions of the 10th revised edition of the Recommendations and that these amendments will enter simultaneously into force on 1 January 1999. Some amendments which were not deemed of an urgent nature, such as the revision of packing instructions for Class 1 had, however, not been implemented through RID and ADR. Work is also now being carried out to align the format of RID, ADR and the IMDG Code to that of the Model Regulations.

**Work of ISO on gas cylinders**

**Informal document** : INF.30

136. The Committee took note of a progress report on the work carried out by the Technical Committee ISO/TC58 "gas cylinders", and of the list of new standards published or in preparation in that area. The Chairman of ISO TC58 mentioned that ISO would be prepared to consider revisions of standards concerning toxicity and oxidizing properties of gases in the light of the global harmonization, and that inputs from interested parties would be welcome.
PROGRAMME OF WORK

(a) Periodicity of amendments to the Recommendations on the Transport of Dangerous Goods

Documents: ST/SG/AC.10/R.501 (Germany)
ST/SG/AC.10/R.502 (Argentina)
ST/SG/AC.10/R.523 (Secretariat)
ST/SG/AC.10/R.533 (HMAC)
ST/SG/AC.10/R.534 (United States of America)
ST/SG/AC.10/R.539 (IATA)

137. It was recalled that the Council had invited the Committee to reconsider the question of periodicity of amendments to the Recommendations raised by IMO at the 1996 substantive session of the Council.

138. The Committee considered that no firm decision could yet be taken as regards a possible four-year periodicity of amendments during the period of alignment of the various international instruments dealing with the transport of dangerous goods on the UN Model Regulations on the Transport of Dangerous Goods, and pending decisions regarding the implementation of the globally harmonized system of classification and labelling of chemicals in accordance with Agenda 21 objectives.

139. It was suggested that IMO and ICAO, which have conflicting views on this question, should discuss their respective positions together.

140. The Committee agreed that the work of the next biennium (1999/2000) should lead to a new revised (12th) edition of the Recommendations (Model Regulations), but that this question of future periodicity of amendments should be included in the programme of work of that biennium for consideration with matters related to the evolution of the Model Regulations.

(b) Programme of work for the 1999/2000 biennium and related proposals

Documents: ST/SG/AC.10/C.3/30, paras. 15, 18, 130, 138, 143, 150, 154, 156, 166, 176 and 217
ST/SG/AC.10/1998/3 (Argentina)
ST/SG/AC.10/1998/23 (AEGPL)
ST/SG/AC.10/1998/24 (Japan)
ST/SG/AC.10/1998/32 (Canada)
ST/SG/AC.10/1998/36 (FIATA)
ST/SG/AC.10/1998/37 (Japan/Netherlands)
ST/SG/AC.10/1998/55 (Germany)
ST/SG/AC.10/C.3/1997/89 (United States of America)
141. The Committee agreed that the work programme for the biennium should include the following subjects:

(a) Development of provisions for the transport of gases in gas cylinders and multiple element gas containers;

(b) Review of provisions concerning transport of dangerous goods documentation;

(c) Follow-up to Agenda 21, Chapter 19, Programme Area B (Global harmonization of systems of classification and labelling of chemicals, including development of criteria for the classification of flammable aerosols in cooperation with the International Labour Office, and implementation of already agreed criteria through the Model Regulations on the Transport of Dangerous Goods);

(d) Miscellaneous amendments to the Model Regulations on the Transport of Dangerous goods (Listing and classification, explosives, lithium batteries, limited quantities, packaging issues, portable tank issues, consignment procedures, segregation) and to the Manual of Tests and Criteria;

(e) Development of new provisions for the transport of solid substances in bulk in tanks and freight containers;


142. The following documents were carried forward:

ST/SG/AC.10/C.3/28/Add.3
ST/SG/AC.10/C.3/30/Add.1
ST/SG/AC.10/C.3/1997/27, -/37, -/43, -/80, -/89, -/91
ST/SG/AC.10/R.473, -/R.509
ST/SG/AC.10/1998/5, -/6, -/7, -/12, -/13, -/27, -/33, -/42, -/45, -/47, -/48, -/56
Informal documents: CETDG/20/INF.4, INF.7, INF.10 and Corr.1, INF.15, INF.19, INF.33, INF.37, INF.44, INF.45, INF.46, INF.47, INF.48 and INF.49

Living modified organisms

Documents: ST/SG/AC.10/1998/29 and -/Add.1 (Germany)

143. The Committee requested the secretariat to send a letter to the secretariat of the Convention on Biological Diversity to draw the attention of the open-ended ad hoc Working Group on Biosafety, when preparing the draft Protocol on Biosafety, to the fact that the UN Model Regulations on the Transport of Dangerous Goods and related legal instruments contain appropriate requirements for the transport of certain LMOs. The Committee considered that, if the draft Article 17 was to be maintained, these Model Regulations and relevant international transport regulations should be referred to in that Article. Furthermore, cooperation could be established with the Conference of Parties for further development of such requirements within the UN Model Regulations if deemed appropriate and necessary by the Conference of Parties and the Committee, in the same way as cooperation was established with WHO with regard to pesticides and infectious substances.

Harmonization of emergency codes


144. Several experts felt that the work item proposed would involve considerable work for several years and were reluctant to overload the Sub-Committee programme; some noted that harmonization of hazard communication tools would also be discussed by ILO.

145. Nevertheless, the Committee agreed that IRU, CTIF, UIC and CEFIC could present, as a first step, an analysis of the existing systems of information codes for the identification of hazards and of emergency measures for the transport of dangerous goods to be discussed in the framework of hazard communication.

Publication of the UN Recommendations on the Transport of Dangerous Goods

Informal document: INF.29 (Secretariat)

146. Several experts considered that the Recommendations on the Transport of Dangerous Goods should continue to be published in a book form, and did not support publication in a loose-leaf format.

147. A member of the secretariat recalled that the Recommendations had to be published in the most cost-effective manner, and that the loose-leaf format, at least for the Spanish, Russian, Chinese and Arabic versions, which are not sold in significant quantities, could be a solution for speeding up the publication of future versions at lower cost.
148. The Committee agreed that this matter should be discussed between the various secretariat services concerned and decided internally.

149. The Committee agreed that, with the growing use of computers, the secretariat should be encouraged to envisage the publication of the Recommendations on CD-ROM possibly as a navigable version. If this could not be done by the secretariat itself, this could be done in partnership with outside contractors under the control of the secretariat for the contents.

(c) Calendar of meetings for the 1999/2000 biennium

150. The dates for the Committee and the Sub-Committee sessions in the biennium are

- 5-16 July 1999 Sub-Committee of Experts on the Transport of Dangerous Goods (sixteenth session)
- 6-17 December 1999 Sub-Committee of Experts on the Transport of Dangerous Goods (seventeenth session)
- 3-14 July 2000 Sub-Committee of Experts on the Transport of Dangerous Goods (eighteenth session)
- 4-13 December 2000 Committee of Experts on the Transport of Dangerous Goods (twenty-first session)

DRAFT RESOLUTIONS OF THE ECONOMIC AND SOCIAL COUNCIL

151. The Committee prepared two draft resolutions for consideration by the Economic and Social Council on its 1999 substantive session (see annex 6).

ELECTION OF OFFICERS FOR THE 1999/2000 BIENNUIUM

152. Mr. S. Benassai (Italy) and Mr. F. Wybenga (United States of America) were elected respectively Chairman and Vice-Chairman of the Committee and the Sub-Committee for the next biennium.

ANY OTHER BUSINESS

Request by EUROPIA for consultative status


153. The Committee did not agree to grant consultative status to EUROPIA. Despite the fact that the membership of EUROPIA was opened to all petroleum companies operating in Europe, and included most of the biggest companies of the world, its aims were more specifically related to European concerns.
154. The Committee agreed that the petroleum industry could contribute to its work, and it invited EUROPIA to associate themselves with other associations to form a group more representative of the global interests of that industry at the world-wide level.

**Documentation**

155. With regard to the problems of distribution of documentation raised at the beginning of the session, it was suggested that, as required by the Sub-Committee, an exception to the general rule of simultaneous distribution should be applied to documents of the Sub-Committee and the Committee because of their technical nature and the amount of documentation submitted.

156. The Committee was informed by the secretariat that it would not be appropriate to seek an exception from the Council as regards the general rules decided by the General Assembly (resolutions 36/117B, 49/221B, 50/206C and 51/211 and 50/11).

157. However, the secretariat was committed to resolving this problem of distribution and assurance had been given by the Conference Services Division that special attention would be paid to ensure timely translation and distribution of the Sub-Committee and Committee documentation when submitted in accordance with the rules.

**ADOPTION OF THE REPORT**

158. The Committee adopted the report on its twentieth session and its annexes.

* * * * *
Annex 1


Annex 2

Guidelines for assigning portable tank requirements to substances of Classes 3 to 9 (ST/SG/AC.10/25/Add.2)

Annex 3

Consolidated version of the amended Chapter 3.2 of the Model Regulations on the Transport of Dangerous Goods (Dangerous Goods List) (ST/SG/AC.10/25/Add.3)

Annex 4

Revised Chapter 4.1 of the Model Regulations on the Transport of Dangerous Goods (ST/SG/AC.10/25/Add.4)

----------
Annex 5

Reservations expressed by the experts from Belgium, Germany and the Netherlands on decisions of the Committee concerning packing instructions

(a) Reservation by the expert from Belgium:

“The expert from Belgium reserves its position concerning the approval of the packing instructions. The expert from Belgium is of the opinion that the packing instructions cannot be formally adopted for three reasons:

(i) as there was no formal decision on document ST/SG/AC.10/C.3/1998/41 from Belgium, it is not clear which packing instructions should appear in the Model Regulations;

(ii) the decisions taken by this Committee will, in several cases lead to a decrease in safety for some modes or regulations;

(iii) there is no final proposal presented to the Committee for approval and the Committee had to work as a Sub-Committee or even as a working group (e.g. discussions on late received papers and on a completely new information document, no time to study a report of the working group).

Notwithstanding its reservation, the expert from Belgium expresses its appreciation for the amount of work already done.”

(b) Reservation by the expert from Germany:

“In view of the decisions of the Committee concerning

- the use of removable head drums for packing group I liquids (ST/SG/AC.10/1998/21);
- the packing provisions for solids which may liquefy during transport (ST/SG/AC.10/1998/18);
- the deletion of the special packing provision against UN 1131 in P001 (ST/SG/AC.10/1998/16/Add.1);
- the packing provisions for substances evolving gases during transport as listed in ST/SG/AC.10/1998/58 not requiring mandatory venting devices on packagings (including large packagings and IBCs) (ST/SG/AC.10/1998/16/Add.1);
- the packing provisions for the transport of batteries in P801 (ST/SG/A.10/1998/16/Add.1);
- the inclusion of N-type IBC in the packing instructions for IBCs (ST/SG/AC.10/1998/16/Add.5 and report of the working group);
the permission of IBCs of types other than wooden, fibreboard, flexible and composite IBCs with flexible inner receptacle for packing group I solids which may liquefy during transport (ST/SG/AC.10/1998/16/Add.5 and report of the working group),

the expert from Germany considers that the level of safety of the new elaborated packing instructions in these areas is insufficient and expresses concern at this situation. Therefore, he expresses a reservation on these decisions.”

(c) Reservation by the expert from the Netherlands:

“With respect to the packing instructions, including the IBC and large packagings instructions, the expert from the Netherlands would like to express a general reservation on the decisions taken by the Committee. The expert from the Netherlands feels that the time pressure in developing these instructions was too high and the organizations concerned with specific modes of transport did not have the time to react properly on the proposals.

The experience of such organizations with the packing of dangerous goods has not been taken into account properly. The results of the instructions set up by the Committee will be considered by such organizations, and on that basis the Committee should review the packing instructions in order to develop instructions which can be used in multimodal transport.”

---------
Annex 6

DRAFT RESOLUTIONS OF THE ECONOMIC AND SOCIAL COUNCIL

1999/XXX Work of the Committee of Experts on the Transport of Dangerous Goods

The Economic and Social Council,

Recalling its resolutions 1995/6 of 19 July 1995 and 1997/3 of 18 July 1997,

Bearing in mind the increasing volume of dangerous goods in world-wide commerce and the rapid expansion of technology and innovation,

Bearing also in mind the continuing need to meet the growing concern for the protection of life, property and the environment through the safe transport of dangerous goods while facilitating trade,

Aware that, in order to achieve internationally harmonized laws, the Economic Commission for Europe, the International Maritime Organization, the International Civil Aviation Organization and other specialized agencies and international organizations involved in activities related to the transport of dangerous goods and interested Member States have responded positively to the Council's various resolutions adopted since 15 April 1953, and that, being committed to taking the recommendations of the Committee of Experts on the Transport of Dangerous Goods as a basis for the formulation of their requirements and regulations, including those concerning labelling and classification, those organizations therefore rely on the work of the Committee,

A. Work of the Committee of Experts during the biennium 1997-1998

1. Takes note of the report of the Secretary-General on the work of the Committee of Experts on the Transport of Dangerous Goods during the biennium 1997-1998 1/ in particular regarding:

   (a) The adoption of new and amended provisions 2/ for inclusion in the Recommendations on the Transport of Dangerous Goods 2/;

   (b) The completion of the second step of the reformatting of the existing Recommendations into Model Regulations annexed to a basic recommendation 2/, in particular:

1/ E/1999/...

2/ ST/SG/AC.10/25/Add. 1 to 4.
(i) the revision of provisions for the transport of dangerous goods in multimodal portable tanks;

(ii) the inclusion of detailed packing instructions for transport in packagings, including intermediate bulk containers and large packagings; and

(iii) the inclusion, in cooperation with the International Atomic Energy Agency (IAEA), of detailed provisions for the transport of radioactive material;

(c) The completion, pursuant to resolution 1995/6, of proposals for criteria for the classification of flammable, explosive and reactive materials, globally harmonized for various regulatory purposes, in cooperation with ILO in the context of the implementation of Agenda 21, Chapter 19, Programme Area B 3/, except for flammable aerosols;

2. Commends the Secretary-General for the publication of the tenth revised edition of the Recommendations on the Transport of Dangerous Goods 4/, Model Regulations, in all the official languages of the United Nations and for the publication of the second revised edition of the Manual of Tests and Criteria in Arabic and Chinese 5/;

3. Requests the Secretary-General:

(a) To circulate the new and amended recommendations to the Governments of Member States, the specialized agencies, the International Atomic Energy Agency and other international organizations concerned;

(b) To publish an eleventh revised version 6/ of the Recommendations on the Transport of Dangerous Goods (Model Regulations), as amended, and a third revised edition of the Manual of Tests and Criteria 7/ in all the official languages of the United Nations, in the most cost-effective manner, not later than the end of 1999;

(c) To envisage means of publishing the Recommendations on the Transport of Dangerous Goods on CD-ROM if possible as a navigable version, e.g. by commercial arrangement with external contractors.

4/ ST/SG/AC.10/1/Rev.10 (United Nations publication Sales No. E.97.VIII.1).
6/ ST/SG/AC.10/1/Rev.11.
7/ ST/SG/AC.10/11/Rev.3.
4. **Invites** all Governments, the specialized agencies, the International Atomic Energy Agency and the other international organizations concerned to transmit to the Secretary-General their views on the Committee's work, together with any comments that they may wish to make on the amended recommendations;

5. **Invites** all interested Governments, regional commissions and specialized agencies and the international organizations concerned, when developing or updating appropriate codes and regulations, to take full account of the recommendations of the Committee, particularly those referred to in paragraph 1 (b) above, including as regards the structure and format of such codes and regulations;

**B. Programme of work for the biennium 1999-2000**

6. **Approves** the programme of work 8/ of the Committee of Experts on the Transport of Dangerous Goods and its Sub-Committee for the biennium 1999-2000, as follows:

(a) Development of provisions for the transport of gases in gas cylinders and multiple element gas containers;

(b) Review of provisions concerning transport of dangerous goods documentation;

(c) Follow-up to Agenda 21, Chapter 19, Programme Area B (Global harmonization of systems of classification and labelling of chemicals, including development of criteria for the classification of flammable aerosols in cooperation with the International Labour Office, and implementation of already agreed criteria through the Model Regulations on the Transport of Dangerous Goods);

(d) Miscellaneous amendments to the Model Regulations on the Transport of Dangerous goods (Listing and classification, explosives, lithium batteries, limited quantities, packaging issues, portable tank issues, consignment procedures, segregation) and to the Manual of Tests and Criteria;

(e) Development of new provisions for the transport of solid substances in bulk in tanks and freight containers;


---

8/ ST/SG/AC.10/25, paras. 141-145.
C. Periodicity of amendments to the Recommendations

7. Takes note of the advice of the Committee that

   (a) No firm decision as regards a possible future four-year periodicity of amendments should be taken during the period of alignment of the format of the various legal instruments concerning modal aspects on the transport of dangerous goods on that of the Model Regulations, and pending decisions regarding the implementation of the globally harmonized system of classification and labelling of chemicals in accordance with Agenda 21 objectives;

   (b) A new revised version of the Recommendations on the Transport of Dangerous Goods (Model Regulations) should be published in 2001 after the 2000 session of the Committee.

8. Notes with satisfaction that this issue has been included in the work programme of the Committee for the next biennium for discussion together with the question of the evolution of the Model Regulations on the Transport of Dangerous Goods in the long term.

D. Report to the Council

9. Requests the Secretary-General to submit a report to the Council in 2001 on the implementation of the present resolution.
1999/YYY Reconfiguration of the Committee of Experts on the Transport of Dangerous Goods into a Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

The Economic and Social Council,

Recalling its resolution 1995/6 of 19 July 1995 on the Role of the Committee of Experts on the Transport of Dangerous Goods in the development of a harmonized system of classification and labelling of chemicals for implementing the recommendations of the United Nations Conference on Environment and Development (UNCED) in Chapter 19 of Agenda 21, Programme Area B,

Recalling also its resolution 1997/3 B of 18 July 1997 whereby global harmonization of systems of classification and labelling of chemicals was given priority in the work programme of the Committee for the 1997-1998 biennium,

Noting with satisfaction that the Committee, in cooperation with the International Labour Office (ILO), has completed the elaboration of proposals for classification criteria concerning physical hazards 1/, except for the flammability of aerosols on which work would continue in the next biennium,

Aware that the Organization for Economic Cooperation and Development (OECD), as focal point for health hazards and hazards to the environment, has also completed most of its tasks with respect to these classification criteria and has established a working group for criteria on mixtures, and that ILO has established a working group for harmonization of chemical hazard communication systems,

Aware also that the Committee, ILO and OECD as focal points designated by the Inter-Organization Programme for Sound Management of Chemicals (IOMC) Coordinating Group for the harmonization of chemical classification systems are expected to make available, through their cooperative efforts, by the year 2000, a globally harmonized hazard classification and compatible labelling system (GHS), including material safety data sheets and easily understandable symbols, in accordance with the objectives of paras. 19-27 of Chapter 19 of Agenda 21,

Noting that the IOMC Coordinating Group has prepared proposals for the implementation of the GHS 2/ consisting in reconfiguring the present Committee of Experts on the Transport of Dangerous Goods and extending its mandate to cover not only transport of dangerous goods but also implementation and updating of the GHS,

---

1/ ST/SG/AC.10/C.3/28/Add.3.

Noting also that these proposals have been endorsed by the third meeting of the Intersessional Group (ISG 3) of the Inter-Governmental Forum of Chemical Safety (IFCS) held in Yokohama, Japan (1-4 December 1998), which requested the IOMC Coordinating Group to develop draft terms of reference in cooperation with the Committee,

Noting further that the Committee agreed to the proposals of the IOMC Coordinating Group subject to certain conditions 3/ which have later been taken into account in the draft terms of reference developed by the IOMC Coordinating Group, as annexed to the resolution,

Recognizing that reconfiguring the Committee in accordance with these proposals would be the most cost-effective and efficient option 4/ for the implementation of the GHS, ensuring at the same time cooperation between various authorities and organizations concerned with the sound management of chemicals, harmonization between various regulatory systems and facilitation of trade,

Decides to reconfigure, as from 2001, the Committee of Experts on the Transport of Dangerous Goods and its Sub-Committee into a “Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)” with a Sub-Committee of Experts on the Transport of Dangerous Goods and a Sub-Committee of Experts on the GHS, with terms of reference and arrangements as described in the annex hereto 5/, and provided that the total meeting time does not exceed that presently allocated to the work of the Committee in a biennium,

Invites the reconfigured Committee and the Sub-Committee on GHS to endeavour, whenever possible, to work on a consensus basis,

Invites also Member States interested in participating in the Sub-Committee on GHS to apply for membership at the latest by the end of 2000 so that the composition of that Sub-Committee and of the reconfigured Committee may be decided at the 2001 organization session of the Council,

Requests the Secretary-General to provide, not later than 1 January 2001, adequate resources to the ECE Transport Division, and plan sessions of the Sub-Committees and the reconfigured Committee for 2001 and 2002, as appropriate, in accordance with the annexed arrangements.


5/ To be elaborated by the IOMC Coordinating Group, see ST/SG/AC.10/25, para. 115.