UNITED NATIONS



Secretariat

Distr. GENERAL

ST/SG/AC.10/C.3/42 2 August 2002

ORIGINAL: ENGLISH

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS AND ON THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

Sub-Committee of Experts on the Transport of Dangerous Goods

REPORT OF THE SUB-COMMITTEE OF EXPERTS ON ITS TWENTY-FIRST SESSION

(Geneva, 1-10 July 2002)

CONTENTS

	<u>Paragraphs</u>
ATTENDANCE	1-6
ADOPTION OF THE AGENDA	7 and 8
ADDITIONAL PROVISIONS FOR THE TRANSPORT OF GASES	9-13
EXPLOSIVES, SELF-REACTIVE SUBSTANCES AND ORGANIC PEROXIDES	14-29
Classification criteria for fireworks	22-26
TRANSPORT OF SOLID SUBSTANCES IN BULK IN CONTAINERS	30-35
TANKS	36-43
PACKAGINGS (INCLUDING IBCS AND LARGE PACKAGINGS)	44-76
Performance testing	
TRANSPORT OF INFECTIOUS SUBSTANCES	77-95

$CONTENTS \ (\underline{cont'd})$

		<u>Paragraphs</u>
LISTING	AND CLASSIFICATION	96-108
Mi	rrect assignment of UN numbers with respect to physical state (liquid or solid) scellaneous amendment proposals	96 97-107
	cking group III, for steel and aluminium	108
AGENCY	NIZATION WITH THE INTERNATIONAL ATOMIC ENERGY (IAEA) REGULATIONS FOR THE TRANSPORT OACTIVE MATERIAL	109-112
	ANEOUS PROPOSALS OF AMENDMENTS TO THE MODEL TIONS	113-132
	HARMONIZATION OF SYSTEMS OF CLASSIFICATION SELLING OF CHEMICALS	133-141
	assification of substances hazardous for the aquatic environment operation with the Sub-Committee of Experts on the Globally	133-137
	rmonized System of Classification and Labelling of Chemicals	138-141
OTHER B	SUSINESS	142-150
ADOPTIO	ON OF THE REPORT	151
	<u>Annexes</u>	
Annex 1:	Report of the Working Group on Additional Provisions for the Transport of Gases	C.3/42/Add.1
Annex 2:	Report of the Working Group on the Classification of Fireworks	C.3/42/Add.2
Annex 3:	Statement by the expert from the Netherlands concerning the discussion on the classification of fireworks page 25 of this	report
Annex 4:	Draft amendments to the Model Regulations annexed to the Recommendations on the Transport of Dangerous Goods ST/SG/AC.10/C	C.3/42/Add.3
Annex 5:	Draft amendments to the Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria ST/SG/AC.10/O	C.3/42/Add.3

REPORT

ATTENDANCE

- 1. The Sub-Committee of Experts on the Transport of Dangerous Goods held its twenty-first session from 1 to 10 July 2002 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; Australia; Belgium; Brazil; Canada; China; Finland; France; Germany; Italy; Japan; Mexico; Netherlands; Norway; Poland; 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: Bahamas; Bulgaria; Namibia; Portugal; Switzerland.
- 4. Representatives from the United Nations Environment Programme (UNEP) and from the following specialized agencies were present: International Civil Aviation Organization (ICAO); International Maritime Organization (IMO); International Atomic Energy Agency (IAEA), Universal Postal Union (UPU) and World Health Organization (WHO).
- 5. The following intergovernmental organizations were also represented: European Commission and Intergovernmental Organization for International Carriage by Rail (OTIF).
- Representatives of the following non-governmental organizations took part in the discussion of items of concern to their organizations: American Biological Safety Association (ABSA); European Liquefied Petroleum Gas Association (AEGPL); International Air Transport Association (IATA); Dangerous Goods Advisory Council (DGAC); European Industrial Gases Association (EIGA); European Chemical Industry Council (CEFIC); European Secretariat of Manufacturers of Light Metal Packagings (SEFEL); International Association of the Soap, Detergent and Maintenance Products Industry (AISE); Compressed Gas Association (CGA); Standing Committee of European Doctors (CP); European Confederation of Paint, Printing Ink and Artists' Colours Manufacturers' Associations (CEPE); Federation of European Aerosol Associations (FEA); International Council of Chemical Associations (ICCA); International Council of Intermediate Bulk Container Associations (ICIBCA); International Confederation of Container Reconditioners (ICCR); International Confederation of Drum Manufacturers (ICDM); International Confederation of Plastic Packaging Manufacturers (ICPP); International Federation of Freight Forwarders Associations (FIATA); International Road Transport Union (IRU); International Organization for Standardization (ISO); International Union of Railways (UIC) and World Nuclear Transport Institute (WNTI).

ADOPTION OF THE AGENDA

Documents: ST/SG/AC.10/C.3/41 and -/Add.1

Informal documents: INF.1, INF.2 and INF.27

- 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.72).
- 8. The expert from South Africa withdrew document ST/SG/AC.10/C.3/2002/42 from agenda item 8 (c).

ADDITIONAL PROVISIONS FOR THE TRANSPORT OF GASES

<u>Documents</u>: ST/SG/AC.10/C.3/40 and Addendum 1: Report of the twentieth session

ST/SG/AC.10/C.3/2002/9 (AEGPL) ST/SG/AC.10/C.3/2002/36 (USA) ST/SG/AC.10/C.3/2002/37 (Canada) ST/SG/AC.10/C.3/2002/53 (EIGA)

Informal documents: INF.36 (CGA)

INF.38 (ISO) INF.46 (EIGA) INF.49 (Secretariat)

9. A working group on the transport of gases met in parallel with the session, from 1 to 3 July 2002, to consider the questions raised in the above documents.

Report of the working group

Informal document: INF.65

- 10. The Sub-Committee took note of the report of the working group introduced by the Chairman, Mr. M. Puype (EIGA), and welcomed the progress achieved. The texts adopted will be annexed to this report (see annex 1) for a final reading by the working group at the next session.
- 11. The expert from the United States of America welcomed the fact that the work of the Sub-Committee permitted the international carriage of UN gas receptacles and reiterated his Government's willingness to accept receptacles approved in other countries. He nevertheless expressed concern regarding the European Union's mutual recognition of approval bodies insofar as the European transportable pressure equipment or "TPED" Directive made the filling, use and periodic inspection of UN certified receptacles subject to the authority of recognized European bodies. He therefore hoped that a political solution could be found as rapidly as possible so as to eliminate these technical and administrative barriers to international trade.
- 12. Several delegations said that they opposed the suppression of special provision 274 for n.o.s. entries concerning compressed gases (para. 23 of the report of the working group) since they considered that the inclusion of the technical name in addition to the proper shipping name was indispensable from the safety point of view. The representative of EIGA said that the group had not adopted the suppression but that it would be the subject of a proposal with appropriate justification.

Definition of flammable gases

<u>Document</u>: ST/SG/AC.10/C.3/2002/53 (EIGA)

13. This proposal to amend the criteria for flammable gases was not adopted.

EXPLOSIVES, SELF-REACTIVE SUBSTANCES AND ORGANIC PEROXIDES

Classification criteria for fireworks

Documents: ST/SG/AC.10/C.3/2002/1 (Netherlands)

(Report of the informal working group, The Hague, 16-28 October 2001)

ST/SG/AC.10/C.3/2002/20 (United States of America)

ST/SG/AC.10/C.3/2002/38 (Japan)

Informal documents: INF.3 (Netherlands)

INF.21 (United Kingdom)

INF.44 (Italy) INF.52 (Germany)

- 14. Consideration of these documents was entrusted to a working group which met concurrently with the session from 1 to 3 July 2002 with Mr. P. Huurdeman (Netherlands) as Chairman.
- 15. The Sub-Committee decided that the working group should concentrate its efforts on developing a system of classification by default for fireworks. The administrative requirements suggested by Germany (INF.52) (approval by the competent authority, transport documentation) should be discussed only if the working group had time once the development of the system of classification was completed.

Report of the working group

Informal document: INF.68 (Chairman of the working group)

- 16. The Chairman of the working group informed the Sub-Committee of the results of the group's session (see annex 2 to this report). The Sub-Committee noted that the working group had not reached complete consensus on the default classification for fireworks. Some delegations stated that, in their opinion, it was essential that the default system deal with fireworks comprehensively, including classification for 1.4G. Although the expert from the United Kingdom intended to submit test results by the next session for "mine" type fireworks, thus enabling borderline criteria to be defined between 1.3G and 1.4G classifications, the working group was further unable to agree on 1.3G/1.4G borderline criteria for rockets and Roman candles, nor was there any provision for further test results to be available by the next session for these two types.
- 17. The expert from the Netherlands said that it was possible for the time being to make provision for a default classification for rockets and Roman candles in Division 1.3G on the understanding that it was always possible to carry out series 6 tests if necessary to justify their classification in 1.4G, in accordance with the classification system currently applied.
- 18. Several delegations stated that they were not in favour of a solution of that nature since they already applied a default system in their countries which they would not agree to review in order to bring it into line with the United Nations system unless the latter was a complete and reliable system. They considered that since that was not the case more consultations with manufacturers and test results were necessary in order to arrive at definitive conclusions.
- 19. In view of the fact that it would not be possible to discuss these matters in detail at the next session, the Chairman said that the Sub-Committee should either postpone the work on default classification until the next biennial period or take an immediate decision on the default classification of rockets and Roman candles.

- 20. This alternative was put to the vote; in a first round of voting, the Sub-Committee pronounced itself in favour of concluding the work during the current period. However, following the Chairman's request for an immediate decision on the default classification of rockets and Roman candles, the expert from the United States of America, supported by another two experts, asked that another vote should be taken, in which it was decided to defer the question of elaborating a system of default classification until the next biennium on the basis of the results obtained so far (see annex 2).
- 21. Following this conclusion, the expert from the Netherlands made a statement which he requested to be included in the report (see annex 3).

Classification of ammonium nitrate emulsions

<u>Documents</u>: ST/SG/AC.10/C.3/2002/22 (Japan)

Informal documents: INF.23 (Japan)

INF.13 (Norway and Sweden) INF.16 (Norway and Sweden)

INF.18 (South Africa) INF.20 (Norway) INF.22 (Canada) INF.60 (Australia)

- 22. Consideration of these documents was entrusted to a working group which met concurrently with the session from 4 to 5 July 2002 with Mr. A. Johansen (Norway) as Chairman.
- 23. At the request of the DGAC, the working group was requested to consider informal document INF.10 concerning the carriage of 1.5D explosives in tanks, provided that it had completed its work on ammonium nitrate emulsions and bearing in mind the comments of various delegations to the effect that the principles applicable to the classification of ammonium nitrate emulsions and their carriage in tanks were not necessarily applicable to 1.5D explosives.

Report of the working group

Informal document: INF.69

- 24. The Sub-Committee adopted the proposed amendments to the Model Regulations concerning the transport of UN No. 3375 in tanks and the text proposed for test series 8(d) in the Manual of Tests and Criteria with some changes (see annexes 4 and 5).
- 25. Some experts said that it was premature to generalize the application of these tests and conditions of carriage for the transport of 1.5D explosives (UN Nos. 0331 and 0332) in tanks, on the one hand, because 1.5D explosives came under Class 1 and a priori presented more risks than ANEs which came under Division 5.1 and, on the other hand, because the working group's recommendation was based on a proposal by DGAC in an informal document (INF.10) which had not been adequately studied.
- 26. The application of these conditions of carriage in tanks to UN Nos. 0331 and 0332 was put to the vote and adopted.

Miscellaneous proposals

Amendments to packing instruction P520

Document: ST/SG/AC.10/C.3/2002/26 (ICCA)

27. The proposal was adopted with some amendments (see annex 4).

Rationalized list of currently assigned organic peroxides

Document: ST/SG/AC.10/C.3/2002/27 (ICCA)

28. The proposal to amend the table in 2.5.3.2.4 was adopted (see annex 4).

Transport of dicumyl peroxide in IBCs

Document: ST/SG/AC.10/C.3/2002/18 (United States of America)

29. The proposed amendment to packing instruction IBC 520 was adopted (see annex 4).

TRANSPORT OF SOLID SUBSTANCES IN BULK IN CONTAINERS

<u>Document</u>: ST/SG/AC.10/C.3/2002/29 (United Kingdom and Germany)

30. Consideration of this document was entrusted to a working group meeting during the lunchbreaks.

Informal document: INF.66 (Report of the working group)

- 31. The texts proposed by the working group were adopted with some amendments (see annex 4).
- 32. The representative of UIC wondered whether the requirements for the approval of containers for carriage in bulk (6.8.4) were not too stringent, particularly the requirement of referring in the transport document to the competent authority which had issued the approval.

Transport of infectious substances in bulk

Document: ST/SG/AC.10/C.3/2002/30 (United Kingdom)

Informal document: INF.31 (Netherlands)

33. Opinions were divided on the United Kingdom proposal. It was also noted that the transport conditions referred to in 4.3.2.4 (c) and (d) did not correspond to the definition of bulk transport in ST/SG/AC.10/C.3/2002/29. Some experts considered that provisions should be established for the transport of infectious substances like hospital waste in bulk, but that the problem of the carcasses of sick animals, like that which the United Kingdom had had to deal with in the epidemic of foot and mouth disease, was for the competent authorities (if necessary, the health authorities) of the country in question to solve. They were similarly not in favour of a blanket authorization to carry infectious substances of UN No. 2900 in bulk.

ST/SG/AC.10/C.3/42 page 8

- 34. Others supported the United Kingdom's position whereby the Model Regulations did not only concern international transport operations but also served as a model for national regulations and should therefore take this type of situation into account.
- 35. It was decided to come back to this question after consideration of item 7 (Transport of infectious substances). The experts were also invited to send their comments in writing to the expert from the United Kingdom to enable a revised proposal to be submitted at the next session.

TANKS

Miscellaneous proposals

Documents: ST/SG/AC.10/C.3/2002/3 and Add.1 (Spain)

Informal document: INF.25 (Spain)

36. The proposals by Spain concerning paragraphs 6.7.2.12.2, 6.7.2.13.2 and 6.7.2.13.1 (e) of the Model Regulations were adopted with some amendments (see annex 4).

MAWP, design pressure and test pressure of portable tanks

Document: ST/SG/AC.10/C.3/2002/21 (UIC)

- 37. Several experts considered that the texts resulting from the work of an informal group at the last session, proposed by UIC for 6.7.2.1, were difficult to interpret. However, it was indicated that paragraph 6.7.2.1 was intended for tank constructors and it was also noted that users and consignors had not indicated any major problems in the interpretation of the existing text. Users should refer to columns (10) and (11) of Chapter 3.2 and to Chapter 4.2.
- 38. Other delegations stated that changes were necessary because the existing definition of design pressure in 6.7.2.1 renders the special provisions TP27, TP28 and TP29 in 4.2.5.3 inapplicable. This view was not shared by other experts.
- 39. No major objections were raised to the proposal concerning 6.7.3.1, but the proposed amendment seemed unnecessary.
- 40. The representative of the UIC expressed his disappointment that the problem of the existence of two different provisions for the test pressure of portable tanks again could not be solved, but in view of the comments made, he withdrew his proposal.

Transport of solids in portable tanks

<u>Document</u>: ST/SG/AC.10/C.3/2002/33 (United States of America)

Informal documents: INF.6 (UIC)

INF.41 (Germany)

41. The proposal by the United States of America was generally well received. Several comments were made, particularly with reference to how to carry solids in a molten state at temperatures lower than or greater than 100 °C and substances loaded molten but transported in the solid state after cooling.

- 42. A small group met to discuss points of detail, for example, the list of permitted substances, the comparison with the IMDG Code, RID/ADR/ADN and regulations in the United States of America.
- 43. As a result of these discussions, the expert from the United States of America intended to submit a revised proposal for the next session. Delegations which so wished were invited to send him any additional comments in writing.

PACKAGINGS (including IBCs and large packagings)

Performance testing

Documents: ST/SG/AC.10/C.3/2002/4 (Spain)

ST/SG/AC.10/C.3/2002/31 (ICDM)

Informal documents: INF.26, INF.30 (Spain)

INF.24 (SEFEL)

- 44. Some experts shared the opinion of the expert from Spain that an additional puncture test could improve the safety of some packagings, particularly those intended for the carriage of liquids.
- 45. It was pointed out, however, that existing tests were intended to ensure safety under normal conditions of carriage, and that problems of perforation tended to be accidental occurrences during carriage or handling. In addition, there were very few data on accidents of this type which were not necessarily the subject of detailed reports since it was generally possible to remedy them rapidly before they led to major consequences.
- 46. In view of the additional cost which the requirement of a puncture test would entail and the practical consequences for packagings already approved or in service, the Sub-Committee agreed that the proposal should first be justified by statistical data. The proposed test could not be discussed at the December session but could possibly be included in the programme of work for the next biennial period.

Vibration test

Documents: ST/SG/AC.10/C.3/2002/2 (Spain)

ST/SG/AC.10/C.3/2002/17 (United States of America)

ST/SG/AC.10/C.3/2002/50 (ICDM)

Informal documents: INF.14 (SEFEL)

INF.15 (SEFEL)

INF.37 (ICCR/ICPP/ICDM/ICIBCA/ICCA)

INF.48 (Germany)

INF.63 (United States of America)

- 47. It was recalled that it had already been decided that a vibration test should be included in the Model Regulations, on the understanding that the forms the test would take and the criteria for it were still to be defined and should take account of ISO standards and the rules in force, and that the expert from Spain would work on the vibration test with the cooperation of other countries (ST/SG/AC.10/C.3/34, para.100).
- 48. The expert from Spain proposed that manufacturers should guarantee that their packagings for the carriage of liquids would resist the effects of vibration by submitting the type of packaging to a test as described in document ST/SG/AC.10/C.3/2002/2. He also referred to standard ISO 2247:2001.

- 49. The expert from the United States of America proposed a repetitive shock and vibration design type test in conformity with international standards ISO 2247:2001 and ASTM 999 and as required by national regulations in the United States of America although other equivalent tests could be accepted.
- 50. The representatives of ICCR, ICPP, ICDM, ICIBCA, ICCA and SEFEL regretted that there had been no consultation with other countries on the proposals by Spain and the United States of America. They said that the tests proposed were not adequate for all packagings. They considered that the procedures proposed were not representative of a vibration test and feared a lack of uniformity in the interpretation of the results. They also deplored the considerable additional costs that this test would entail for the packaging industry and considered that the proposals were not sufficiently backed by justifications in terms of statistics concerning accidents due to vibrations or additional safety.
- 51. In response to the technical concerns raised by SEFEL, ICCR and Germany, the expert from the United States of America provided technical justification indicating why he believed that the proposed repetitive shock and vibration test was the most appropriate, low cost, effective and reproducible at the types of tests that could be used. He agreed that the repetitive shock test was not intended to exactly replicate the actual vibration in transport, but that it provided an effective method for determining a packaging ability to withstand shock and vibration.
- 52. Some delegations said that, despite the earlier Sub-Committee decision, they opposed the principle of the vibration test because of missing data on incidents and accidents due to vibration.
- 53. Other delegations withdrew their support to the principle of the vibration test, but hoped that more account would be taken of the current work of standardization bodies on vibration tests, that more detailed studies would be made of accident reports and with regard to the real transport conditions, that the packagings for which the test was justified would be specified, that transitional measures would be considered or that the discussion might possibly be postponed until the next biennium.
- 54. The expert from the United States of America said that he was prepared to revise his proposal during the session in order to include transitional measures to replace the design type vibration test which was compulsory in the certification process by a design type performance requirement which would satisfy the vibration test, since the test was not part of the certification process. He requested that the proposal should be put to the vote in order to ascertain whether a conclusion could be arrived at in the course of the current biennium.
- 55. This proposal gave rise to further argument, since some delegations considered that the inability to reproduce the proposed test would lead to discriminatory hindrances to international trade.
- The proposal for further work during this meeting was put to the vote and adopted, and the expert from the United States of America was requested to prepare a new proposal which would be discussed at a later stage of the session (INF.63).

Informal document: INF.63 (United States of America)

57. The revised proposal by the United States of America was again the subject of lengthy discussion. It was not clear to some experts whether the proposed test was a capability test concerning the design type or manufactured packagings, while the transitional measures proposed seemed neither clear nor adequate for packagings and IBCs already in service and design types already approved. It was pointed out in particular that if a capability test was envisaged, it was for the manufacturers to take responsibility for ensuring that their packagings complied with the vibration test, which could only be monitored by random checks which should not penalize consignors. In this case, the transitional measures should only concern packagings and IBCs already in service, and manufacturers should revise their manufacturing

processes if approved design types did not satisfy the vibration test. It would also be necessary to dissociate the vibration test from the design type tests of sections 6.1.5 and 6.5.4 since paragraph 4.1.1.3 required packagings to conform to a design type tested in accordance with 6.1.5 or 6.5.4, for example.

- 58. The expert from the United States of America confirmed that his proposal was intended to introduce a capability test applicable to manufactured packagings, that this requirement also concerned packagings for Division 6.2, that it would in fact not be appropriate to apply requirements to packagings and IBCs already in service and that packagings for packed goods or limited quantities or for consumer commodities were not concerned. He failed to understand the industry's objections to a capability requirement, in so far as such requirements had, at the industry's request, been introduced for remanufactured packagings in connection with the leakproofness test. He asked that his proposal should be put to the vote as it stood, even if it meant coming back to it on the basis of written proposals at the next session.
- 59. Due to a tie in the voting, the proposal was rejected. The expert from the United States of America indicated that, since the Sub-Committee had previously decided to introduce a vibration test in the Model Regulations during this biennium, he would submit a new proposal to the next session.

ISO standard 16 104

Informal document: INF.55 (United Kingdom)

60. The expert from the United Kingdom said that ISO had adopted standard 16 104 on tests of packagings intended for the carriage of dangerous goods on the basis of the requirements of Chapter 6.1 of the Model Regulations. This standard would be published in autumn 2002.

Miscellaneous proposals

Packing instructions P403 and P400

<u>Documents</u>: ST/SG/AC.10/C.3/2002/11 (United Kingdom) ST/SG/AC.10/C.3/2002/12 (United Kingdom)

61. The proposed amendments to packing instructions P403 and P400 were adopted with some changes (see annex 4).

Packing instruction LP02

<u>Document</u>: ST/SG/AC.10/C.3/2002/14 (United Kingdom)

- 62. Some experts were in favour of the application of instruction LP02 to UN Nos. 1327, 1363, 1364, 1365 and 1856, while noting, however, that instruction LP02 provided that these substances, including straw, rags, etc. must be contained in inner packagings. Some experts, however, were categorically against applying this instruction to articles of Class 2, in particular lighters and aerosols, fearing that faulty articles might be carried in bulk in large packagings without an inner packaging.
- 63. It was pointed out that large packagings for aerosols met a distribution requirement, that provision was made for containing them in an intermediate packaging inside the large packaging and that since these large packagings had to be tested, the method seemed safer than the P003 packing method which made no provision for a performance test for outer packagings.

- 64. The expert from the United Kingdom amended his proposal to the effect that articles must be placed in appropriate outer packagings and lighters excluded. The proposal was not, however, adopted.
- 65. In reply to a question from UIC, the representative of IMO said that the term "bhusa" in UN No. 1327 came from an Urdu word meaning cut straw.

Amendments to packing instruction LP02

Documents: ST/SG/AC.10/C.3/2002/15 and Add.1 (ICCA)

The proposal was adopted with some amendments (see annex 4).

Packaging for lighters

<u>Document</u>: ST/SG/AC.10/C.3/2002/39 (United States of America)

67. The proposal was adopted with some amendments (see annex 4).

Multiple use of flexible IBCs

Document: ST/SG/AC.10/C.3/2002/40 (ICCA, ICCR, ICPP)

- 68. The representative of ICIBCA said that this proposal on the multiple use of flexible IBCs was unnecessary and that his organization opposed it. Some delegates expressed the hope that the industry would agree on the multiple use of flexible IBCs before a proposal was discussed.
- 69. Several experts, however, supported the principle of the proposal. Following an exchange of views on the details, the Sub-Committee took a vote and decided that the texts referring to the multiple use of flexible IBCs could be adopted during the current biennium.
- 70. At the request of the Sub-Committee, the representatives of ICCA, ICCR and ICCP prepared a new proposal (INF.64) which was adopted with some amendments (see annex 4).

Transport of ferrosilicon (UN No. 1408) in IBCs

<u>Document</u>: ST/SG/AC.10/C.3/2002/45 (Netherlands and Norway)

71. The Sub-Committee noted that, according to the provisions of RID, ADR and the IMDG Code applicable on 1 January 1999, UN No. 1408 could be carried in non-UN certified IBCs, as was logical, since this substance could also be carried unpackaged in bulk in containers, wagons or ships' holds. The Sub-Committee adopted the proposal to add special provision B6 to column (9) of the table in Chapter 3.2 for UN No. 1408 (see annex 4).

Special provision PP83 for UN No. 2813

Document: ST/SG/AC.10/C.3/2002/54 (United States of America)

72. The proposal by the United States of America was adopted (see annex 4).

Use of vents for IBCs

Informal document: INF.11 (DGAC)

73. The Sub-Committee adopted with some drafting amendments the proposal by DGAC to specify in 4.1.1.8 that the provisions of this paragraph concerning vents also applied to IBCs (see annex 4).

Packagings for hydrogen peroxide (UN No. 2014)

Informal document: INF.29 (ICCA)

- 74. The Sub-Committee noted that the Model Regulations (P504, PP29) provided for a maximum degree of filling of 90% for packagings intended for UN No. 2014, although requirements for carriage by land to date prescribed vents only and, in practice, such packagings were filled to 94%.
- 75. The Sub-Committee confirmed that it was essential for these packagings to be fitted with a vent, particularly for lengthy transport by sea and rail, and that provision PP29 should therefore be amended. The representative of ICCA would submit an official proposal at the next session.

Packing instruction P601

<u>Informal document</u>: INF.47 (United States of America)

76. Noting that paragraph 3(c) of packing instruction P601 had been introduced to account for methods which had proved their worth in the United States of America, the Sub-Committee adopted the proposal specifying test conditions for these packagings in accordance with established practice in the United States of America (see annex 4).

TRANSPORT OF INFECTIOUS SUBSTANCES

<u>Document</u>: ST/SG/AC.10/C.3/2002/16 (Canada)

Informal documents: INF.4 (WHO)

INF.33 (Netherlands) INF.40 (ABSA)

- 77. The expert from Canada introduced the report of the informal working group which had met in Paris from 11 to 13 March 2002.
- 78. The Sub-Committee welcomed the impressive work the expert from Canada had done in organizing the working group, in her efforts to achieve a consensus and in the results obtained by the group in the form of a full revised text of the provisions for Division 6.2. The text would permit an efficient solution to the problems of implementing the requirements currently applicable, particularly for the medical profession. The Sub-Committee also welcomed the active cooperation of WHO and the secretariat of the Basel Convention.
- 79. The expert from Germany and the representative of CP mentioned a problem in connection with paragraph 2.6.3.2.2.2. In their opinion, cultures prepared by doctors for the purpose of diagnosis should not come under UN Nos. 2814 or 2900 since the stringent conditions of carriage for these UN numbers would discourage doctors from carrying out these diagnoses. It was confirmed that the paragraph in question referred to cultures as defined in 2.6.3.1.3, namely, cultures intended for the deliberate generation of pathogens, and not routine cultures intended for diagnosis which came under UN No. 3373.

- 80. Two working groups were set up, on the one hand to settle the question of cultures, and on the other the various comments made orally or in informal documents INF.33 and INF.40.
- 81. The representative of WHO presented a new version of the definition of "cultures" on behalf of one of the two groups; it was adopted with some amendments (see annex 4).
- 82. The expert from Germany said that this did not address his concerns with regard to cultures produced in a laboratory for diagnosis purposes and he might submit a formal document in this regard.
- 83. The expert from Canada submitted the amendments proposed by the second group, which were adopted (see annex 4).
- 84. The expert from the United States of America said that he would submit a new proposal concerning Part 2 of packing instruction P650 and refrigeration using liquid nitrogen or dry ice (solid carbon dioxide).
- 85. The observer from Switzerland pointed out that if packing instruction P650 was implemented, the other provisions of the Model Regulations did not apply, those of Part 5, for example, and that all relevant packing, marking and labelling provisions should therefore be regulated in this instruction, for example, the marking of packages and overpacks.
- 86. The expert from France asked whether cultures for the purpose of diagnosis could be made using mediums other than human or animal substances; if so, it might be appropriate to review the wording of special provision YYY for UN No. 3373.
- 87. During the discussion on document INF.40, the representative of ABSA explained that including the name of the pathogen, in addition to the proper shipping name for the purpose of emergency response, was not essential since the technical name was not sufficient to determine the antibiotic treatment or the appropriate medical prescription, while a telephone number where the appropriate information could be obtained round-the-clock seemed preferable.
- 88. Opinions were divided on the ABSA proposal. IMO, WHO, UIC and several experts wished to keep the technical name in the transport document for safety reasons. The WHO representative said that this information could be put inside the package. Some experts did not wish to have the technical name on the package for security reasons. Similarly, although some experts were in favour of a telephone number being included, others thought that telephone communication during an international transport operation was not always the ideal means (problems of languages, accents, access to communications networks, etc.) and that it was difficult to require the consignor to provide a round-the-clock service for immediate communication of the necessary information in the event of an accident.
- 89. The representative of ABSA was requested to revise her proposal in the light of the comments made.

Genetically modified micro-organisms and genetically modified organisms

Document: ST/SG/AC.10/C.3/2002/34 (United States of America)

Informal document: INF.32 (Netherlands)

90. Several experts pointed out that the proposal by the United States of America to add appropriate provisions concerning genetically modified micro-organisms (GMMOs) and genetically modified

organisms (GMOs) of Class 9 to Chapter 2.9 included substantive amendments to the requirements contained in 2.6.3.1.4.

- 91. The expert from the United States of America agreed to amend the first sentence of 2.9.3.1 to take account of the wording used in the current version of 2.6.3.1.4.
- 92. The proposal to exempt all GMOs intended for food or feed (last sentence of 2.9.3.1) was not adopted.
- 93. Several experts regretted that the word "unconditional" which appeared before "use" in 2.6.3.1.4 (d) as it stood had disappeared from the proposed 2.9.3.2. This was tantamount to exempting from the Model Regulations all non-infectious GMOs and GMMOs from the moment when their use, of whatever nature, was authorized by the competent authorities in question, including their "contained use" as the Cartagena Protocol on Biosafety to the Convention on Biological Diversity provided, although the Protocol let it be understood that special measures should be taken for this type of use. The expert from the United States of America did not wish to amend his proposal in that regard.
- 94. Several experts indicated that they could not support the removal of the word "transit" in the proposal by the United States of America because it could result in GMOs being transported as unregulated in their countries even if their national authorities did not agree. On the basis of a clear majority, the word "transit" was reinserted.
- 95. The proposal by the United States of America was adopted with some further additional amendments (see annex 4).

LISTING AND CLASSIFICATION

Correct assignment of UN numbers with respect to physical state (liquid or solid)

Document: ST/SG/AC.10/C.3/2002/44 (Germany and Netherlands)

96. This proposal followed on from the principles adopted by the Sub-Committee (see ST/SG/AC.10/C.3/38, paras. 71 to 75) and was adopted subject to consideration by an ad hoc group of experts whose conclusions were accepted (see annex 4).

Miscellaneous amendment proposals

Calcium hypochlorite

<u>Document</u>: ST/SG/AC.10/C.3/2002/5 (Germany)

Informal documents: INF.8 (Japan)
INF.67 (Germany)

- 97. The Sub-Committee adopted the revised proposals contained in document INF.67 with some amendments (see annex 4).
- 98. A verbal proposal by the expert from Belgium was put forward that, besides the indication that IBCs are forbidden for sea transport, it should also be mentioned that the carriage of these substances in bags is prohibited. This was rejected, after the expert from the United States of America explained that proposals were envisaged to delete this prohibition from the IMDG Code.

ST/SG/AC.10/C.3/42 page 16

99. The expert from Germany said that, for the time being, he was withdrawing his proposal to prescribe temperature control provisions for the carriage of UN Nos. 1748, 2208 and 2880 pending test results from ICCA, Japan and DGAC. Once these results were available, he would come back to the question, possibly during the next biennial period.

Flammable solvents absorbed in wipes

Document: ST/SG/AC.10/C.3/2002/13 (United Kingdom)

100. The Sub-Committee preferred to amend special packing provision PP9 insofar as it applied to UN No. 3175, rather than create new entries for all special cases in which liquids were absorbed by different solid mediums (see annex 4). It was noted that the original proposal was limited to 10 ml sachets and that the amendment in PP9 includes all types of packagings without capacity limits.

Special provision 179

<u>Document</u>: ST/SG/AC.10/C.3/2002/19 (United States of America)

101. The proposal was adopted with some drafting changes (see annex 4).

Acute oral toxicity

<u>Document</u>: ST/SG/AC.10/C.3/2002/23 (United States of America)

102. The purpose of the proposal was to amend the definition of LD_{50} in order to take account of the new OECD Test Guidelines 420, 423 and 425 which replaced Test Guideline 401. This proposal was adopted (see annex 4).

Toxic by inhalation substances

Document: ST/SG/AC.10/C.3/2002/24 (United States of America)

- 103. The proposal to add n.o.s. entries for toxic by inhalation substances was adopted (see annex 4).
- 104. The expert from Germany stated that the hazard of inhalation should not be restricted to division 6.1 only.

Schematic classification of organometallic substances

<u>Document</u>: ST/SG/AC.10/C.3/2002/25 (ICCA)

105. The Sub-Committee agreed to add new N.O.S. entries for organometallic substances in divisions 4.2 and 4.3, but not to delete existing entries (see annex 4).

Special provision 296

Document: ST/SG/AC.10/C.3/2002/35 (United States of America)

106. The proposal to amend special provision 296 was adopted with a few modifications (see annex 4).

Calcium hypochlorite, dry (UN No. 1748) in tablet form

Document : ST/SG/AC.10/C.3/2002/41 (South Africa)

107. The proposal to include a packing group III entry for UN No. 1748 was adopted, and extended to UN 2880; those entries were restricted to the substance transported in non-friable tablet form (see annex 4).

Criteria for the corrosiveness of liquids and solids belonging to Class 8, packing group III, for steel and aluminum

<u>Documents</u>: ST/SG/AC.10/C.3/2002/6 (Germany)

ST/SG/AC.10/C.3/2002/10 (Austria)

Informal document: INF.72 (Drafting group)

108. At the request of the Sub-Committee, the proposal by Germany and comments thereon by Austria were submitted to a drafting group for consideration. The revised text proposed by the drafting group in INF.72 was adopted with a few corrections (see annex 4).

HARMONIZATION WITH THE INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA) REGULATIONS FOR THE TRANSPORT OF RADIOACTIVE MATERIAL

<u>Document</u>: ST/SG/AC.10/C.3/2002/55 (IAEA)

Informal document: INF.70 (IAEA)

- 109. The Sub-Committee adopted the proposals from IAEA in ST/SG/AC.10/C.3/2002/55, except for proposal No. 28 where the addition of a footnote <u>a</u>/ as in IAEA Table VIII was not deemed necessary since the equivalent explanations can be found in more detail in 3.1.2 of the Model Regulations. The addition of a provision equivalent to footnote <u>b</u>/ to IAEA Table VIII was adopted but under the form of a new special provision for all entries applicable to "fissile excepted" packages (see annex 4).
- 110. The Sub-Committee also noted that some changes had also been adopted by the IAEA Commission of Safety Standards (INF.70). The expert from Germany did not agree with these additional changes, but it was recalled that for such provisions relating to radioprotection the Sub-Committee would be expected to follow the IAEA decision. The Sub-Committee could revert to this question in December depending on other developments at IAEA level.

Informal document: INF.9 (IAEA)

- 111. The Sub-Committee noted that IAEA was questioning the relevance of the trefoil as a warning sign for radioactive sources and was consulting its member States and relevant organizations as regards the possible development of a new warning sign.
- 112. Although it was not clear whether this IAEA project would affect the labelling system presently used under transport regulations, several experts indicated that, under the present regulatory regimes, all persons involved in transport of dangerous goods operations are required to be trained and that, as a consequence, the trefoil meaning is well-known to all participants in a transport chain. It seemed also that this trefoil symbol was familiar to the public at large.

MISCELLANEOUS PROPOSALS OF AMENDMENTS TO THE MODEL REGULATIONS

Overpacks

Document: ST/SG/AC.10/C.3/2002/43 (Netherlands)

113. The proposal to mark the word "OVERPACK" on overpacks containing dangerous goods was adopted with an addition at paragraph 5.1.2.2 specifying that the mark was an indication by the consignor that packages contained inside the overpack complied with the Regulations (see annex 4).

Sodium perborate monohydrate and sodium carbonate peroxyhydrate

Informal document: INF.5 (United States of America)

114. The proposal to modify the decisions taken at the last session for these two new entries was adopted (see annex 4).

Metal hydride storage system for hydrogen powered proton exchange membrane (PEM) fuel cells

Informal documents: INF.35 (Canada)

INF.56 (United States of America)

- 115. The Sub-Committee supported the principle of developing provisions for such storage systems, and several experts expressed support for adopting at least an entry in the Dangerous Goods List during this biennium, on the understanding that the transport conditions could be decided by the competent authority pending the development of relevant provisions in the course of the next biennium.
- 116. The expert from Canada said that she would present a new document at the next session.

Confettis

Informal document: INF.42 (China)

- 117. The expert from China sought guidance from the Sub-Committee as regards the development of provisions for devices containing compressed nitrogen intended to propell confettis.
- 118. Some experts recommended classification in Class 9, others would prefer the use of existing UN numbers such as 2037 or 1066 in Class 2 to avoid proliferation of new entries. The expert from China was invited to provide more detailed information on the construction of the devices so that appropriate classification and transport conditions may be agreed upon.

Relevance of the system of exemption for the transport of dangerous goods packed in limited quantities

Document: ST/SG/AC.10/C.3/2002/47 (France)

Informal document: INF.28 (France)

119. The Sub-Committee took note of the study undertaken by France and of its various conclusions, notably that the transport of dangerous goods packed in limited quantities could not be regarded as harmless in safety terms and that requiring placarding of cargo transport units should be envisaged.

120. Some experts did not agree with the conclusions of that study, and said that they would comment on it at a later stage if necessary.

Consumer commodities

Document: ST/SG/AC.10/C.3/2002/32 (United Kingdom)

<u>Informal documents</u>: INF.51 (United States of America, Canada, United Kingdom) INF.62 (France, Germany, Netherlands and Sweden)

- 121. The proposal by the United Kingdom was based on discussions at previous Sub-Committee's sessions and on the experience with the ICAO system for the transport of consumer commodities (ID 8000). This proposal was supported by the United States of America and Canada and further developed by the experts of the three countries in INF.51. This proposal was also supported by IATA, IECC and ICAO.
- 122. Although the successful experience with this system in North America and air transport could not be denied, several experts were concerned by the fact that the same kind of dangerous goods and the same kind of quantities could be transported under different exemption regimes depending on the use or mode of distribution rather than on their danger (i.e. 1.1.2 c); Chapter 3.4; and now a proposed new entry in Class 9). They felt that the system was becoming too complex, both for the industry and enforcement authorities. Furthermore, they did not support classification in Class 9 of products known as belonging to other classes, such as Class 3.
- 123. The proposal in INF.62 intended to simplify the system by having one set of provisions for limited quantities and consumer commodities, which should be more convenient for the industry.
- 124. Several experts considered that INF.62 proposed a rather new concept and said that they could not hold the necessary consultations with those concerned.
- 125. After a debate on these questions, the Sub-Committee decided by vote not to take a decision on any of these proposals at this session.

Informal document: INF.7 (UIC)

- 126. The Sub-Committee agreed that the footnote to 2.6.2.2.4.3 should refer to "Tear gas Substances" rather that to "Tear gases" (see annex 4).
- 127. The Sub-Committee considered that the reference to ammonia solutions (UN 2672) in Class 8 was correct in the description of UN No 2857.
- 128. The Sub-Committee agreed that the addition of the word "LIQUID" to the proper shipping name of UN No. 3207 was appropriate. However the expert from France said that this entry was not needed any longer because of the adoption of the ICCA proposal relating to organometallic substances, and that he would prepare a consequential proposal for the next session.
- 129. The Sub-Committee agreed that the word "certified" could be deleted in Chapters 6.2 and 6.7 in relation to UN "certified" pressure receptacles and MEGCs (see annex 4).
- 130. The Sub-Committee considered that the problems related to items 4 (transport of gases under temperature control) and 6 (Fumigated Units) could not be solved at the present session and should be addressed in official proposals. The Sub-Committee also noted that the question of fumigated units would be addressed by IMO next September.

131. The Sub-Committee noted that the expression "chemical group name" in 3.1.2.8.1 and 5.4.1.4.3 (a) caused problems of interpretation, in particular in the case of N.O.S. entries such as UN 1987 ALCOHOLS, N.O.S or UN 1989 ALDEHYDES, N.O.S. which could be considered as chemical group names and therefore for which it was not clear whether additional information such as technical name/chemical group name was still required. For this reason, the concept of "chemical group name" as acceptable supplementary information to N.O.S. entries had not been adopted for RID/ADR/ADN and should be clarified.

Informal document: INF.19 (Secretariat)

132. The proposals concerning paragraphs 3.1.2.7, 3.1.2.8.1, 4.1.3.6 and 4.1.4.1 were adopted (see annex 4).

GLOBAL HARMONIZATION OF SYSTEMS OF CLASSIFICATION AND LABELLING OF CHEMICALS

Classification of substances hazardous for the aquatic environment

Document: ST/SG/AC.10/C.3/2002/51 (Italy)

Informal document: INF.39 (United Kingdom) INF.58 (Belgium)

133. The Sub-Committee adopted the proposal by the expert from Italy for the editorial revision of Chapter 2.9, subject to the following changes:

- (a) Section 2.9.1 should be revised by the secretariat to take account of other decisions made during the session with respect to class 9 (e.g. genetically modified organisms);
- (b) References should be checked by the secretariat (e.g. references to OECD documents could now be replaced by references to the GHS publication which is expected to be issued in 2003):
- (c) The comments from Belgium in INF.58 concerning 2.9.2.3.1 and the rearrangement of paragraphs and headings (first option of proposal 2.3) should be taken into account;
- (d) Paragraph 2.9.2.4.3 concerning the bridging principles is maintained as well as references thereto in 2.9.2.4.1;
- (e) Correction to 2.9.2.1.1 and 2.9.2.8 could be made as proposed in INF.39.
- 134. As regards the request by the expert from the United Kingdom that material be included linking the "transport" text to the GHS in the proposed UN Model Regulations Guiding Principles document, the Sub-Committee agreed that the secretariat could cooperate with the expert of the United Kingdom to develop an appropriate text once the GHS document has been finalized. It has been noted, however, that the guiding principles the secretariat had been invited to consolidate could be prepared only during the next biennium.

Document: ST/SG/AC.10/C.3/2002/52 (Netherlands)

135. Several experts supported the proposal by the Netherlands that the GHS criteria for classification should be applicable to all substances and mixtures under transport regulations and that the GHS label should be required for all substances and mixtures meeting these criteria.

- 136. Other experts considered that, for practical reasons, it was appropriate to introduce the classification criteria on the UN Model Regulations immediately, but that more consultation with the industry and IMO was necessary before introducing hazard communication elements based on the GHS.
- 137. The Sub-Committee agreed that, apart from the introduction of classification criteria, the various options to be envisaged for fully implementing the GHS through the UN Model Regulations as regards hazards to the aquatic environment could be considered only during the next biennium.

Cooperation with the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

Comprehensibility testing of GHS pictograms and transport of dangerous goods labels

Document: ST/SG/AC.10/C.3/2002/46 (United States of America)

138. The Sub-Committee noted that the expert from the United States of America had initiated a study to evaluate the GHS red diamond border pictograms and their impact on the effectiveness of transport regulations, transport emergency response, transport safety, compliance and enforcement. Phase I of the study (emergency response) had been completed but the results were still being compiled and analysed. Phase II of the study, intended to evaluate transport worker reactions, had not yet been carried out, and the expert from the United States of America would present the complete results at the next December session.

Classification criteria for aerosols

Document: ST/SG/AC.10/C.3/2002/48 (Secretariat)

Informal documents: INF.34 (FEA)

INF.50 (Sweden) INF.54 (Germany)

- 139. The proposal by the secretariat for a new section in the Manual of Tests and Criteria for flammable aerosols was adopted together with the corrections proposed by FEA in items 1 to 4 of INF.34 and by Sweden in INF.30 subject to some additional corrections (see annex 5).
- 140. The proposal by FEA (item 5 of INF.34) that non-tested flammable aerosols should be classified as "extremely flammable" was also adopted but the corresponding text was placed between square brackets subject to concurrence by the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS Sub-Committee) (see annex 5).*
- 141. For amendments to special provision 63 of Chapter 3.3 of the UN Model Regulations, the Sub-Committee preferred, by a majority vote, the solution proposed by Germany in INF.54 to that proposed by the secretariat in ST/SG/AC.10/C.3/2002/48, on the grounds that a comprehensive listing of criteria for flammable aerosols in special provision 63 would be more user friendly in transport regulations than a reference to the Manual of Tests and Criteria. Nevertheless, it was noted that the criteria for flammable liquids in the Model Regulations for flammable liquids were different from these applicable to flammable aerosols in the GHS system (flash point not more than 93 °C) and therefore a reference to NOTES 1 to 3 of paragraph 31.1.3 of the Manual of Tests and Criteria was added to the last paragraph of the German proposal, which makes consultation of the Manual of Tests and Criteria necessary for classification of flammable aerosols (see annex 4).

^{*} Note by the secretariat: The GHS Sub-Committee accepted this change (ST/SG/AC.10/C.4/6, para. 27, therefore the square brackets have been removed in annex 5 to this report.

OTHER BUSINESS

Emergency measures

Documents: ST/SG/AC.10/C.3/28 and -/Add.1 (UIC)

Informal document: INF.57 (CTIF)

- 142. Several experts considered that emergency response was not necessarily linked to classification and that harmonization on the basis of a systematic approach was not necessarily relevant since emergency response could be addressed differently depending on the mode of transport and, especially for land transport, could be left to the appreciation of national authorities on the basis of their own experience. Different models existed, such as the IMO Emergency Schedules, the North American Emergency Response Guide, the various European systems (UK Emergency Action Code, ERICARDS, etc.) all based or partially based on the UN number, and could be used in other countries where needed, as deemed most appropriate or convenient.
- 143. The Sub-Committee agreed that proposals for harmonization could be considered only on the basis of concrete proposals of amendments to the Model Regulations, but it was recalled that emergency response was not part of transport conditions and that marking, labelling and placarding provisions of the Model Regulations were mostly intended to provide for effective hazard communication elements rather than to recommend precise and uniform emergency response guidance.
- Nevertheless, the representative of UIC invited the experts of the Sub-Committee to compare the systematic approach with the systems for the attribution of emergency codes in the different countries.

Transport and security

Document: ST/SG/AC.10/C.3/2002/56 (Secretariat)

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

INF.53 (United Kingdom)

- 145. The Sub-Committee noted that, in the wake of the tragic events of 11 September 2001, the Inland Transport Committee of the United Nations Economic Commission for Europe was considering measures for intensified international cooperation and action to prevent and suppress terrorist acts and to evaluate the security aspects of transport in the UNECE region, notably with respect to the transport of dangerous goods.
- The representatives of ICAO and IMO informed the Sub-Committee of the measures being 146. undertaken by their respective organizations in this respect, e.g. under the framework of Annex 17 to the Chicago Convention (ICAO) or of the IMO Maritime Safety Committee (development of an International Ship and Port Security and Safety Code, revision of the Recommendations on the Safe Transport of Dangerous Cargoes and related activities in Port areas and of the IMO/ILO/UNECE Guidelines for Packing of Cargoes in Freight Containers or Vehicles).
- The Sub-Committee also noted that the United States of America has already proposed measures for implementation at national level and that the European Commission was also preparing such measures.
- 148. Several delegations expressed the wish that measures related to the security of the transport of dangerous goods be harmonized at international level and considered that, in the absence of other relevant international instrument, they should become a subset of the transport safety regulations which could be

addressed to governments and international organizations through the UN Model Regulations on the Transport of Dangerous Goods.

149. The expert from the United Kingdom considered that action could be taken already during the present biennium, at least for measures concerning all modes of transport, and proposed to establish a correspondence working group which could develop proposals for relevant provisions for inclusion in the Model Regulations to be discussed at the next December session. This proposal was adopted.

Procedure for incident reporting

Informal document: INF.12 (DGAC)

150. The Sub-Committee, noting that provisions for incident reporting had been included in RID/ADR/ADN for entry into force on 1 January 2003, and existed as well in the ICAO Technical Instructions and in the national regulations of countries other than those applying RID, ADR or ADN, agreed that such provisions could also be developed for inclusion in the UN Model Regulations during the next biennium.

ADOPTION OF THE REPORT

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

* * * * *

Annex 1

Report of the Working Group on Additional Provisions for the Transport of Gases

(see ST/SG/AC.10/C.3/42/Add.1)

* * * * *

Annex 2

Report of the Working Group on the Classification of Fireworks

(see ST/SG/AC.10/C.3/42/Add.2)

* * * * *

Annex 3

<u>Statement by the expert from the Netherlands</u> concerning the discussion on the classification of fireworks

(Refer to paragraph 21 of the report)

The expert of the Netherlands considers that it is very disappointing to see that the Sub-Committee after two working group sessions could not come to a default list for the classification of fireworks in this biennium.

The Working Group, in accordance with its mandate, prepared a default list on the basis of existing criteria. The Working Group agreed on many issues, but it was not possible to come to an agreement with respect to roman candles and rockets.

In the Netherlands, articles which show a fiercy projection of more than 15 meters in the test series 6 according to the criteria will be treated as belonging to Division 1.3. The expert from the Netherlands considers two options:

- 1. To regulate this issue on a national basis, as many other countries do; or
- 2. To come back on this issue during the next biennium.

* * * * *

Annex 4

<u>Draft amendments to the Model Regulations annexed to the Recommendations</u> on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rev.12)

(see ST/SG/AC.10/C.3/42/Add.3)

* * * * *

Annex 5

<u>Draft amendments to the Recommendations on the Transport of Dangerous Goods,</u>

<u>Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.3)</u>

(see ST/SG/AC.10/C.3/42/Add.3)