




---

**Committee of Experts on the Transport of Dangerous Goods  
and on the Globally Harmonized System of Classification  
and Labelling of Chemicals**

**Sub-Committee of Experts on the Transport of Dangerous Goods**

**Report of the Sub-Committee of Experts on the Transport of  
Dangerous Goods on its fifty-sixth session**

held in Geneva from 4 to 10 December 2019

**Contents**

	<i>Paragraphs</i>	<i>Page</i>
I. Attendance.....	1-5	5
II. Adoption of the agenda (agenda item 1) .....	6-13	5
A. Status of publications.....	7	5
B. Accreditation of experts.....	8-13	6
III. Explosives and related matters (agenda item 2) .....	14-26	6
A. Review of Test Series 6 .....	14	6
B. Improvement of Test Series 8.....	15	6
C. Review of tests in parts I, II and III of the Manual of Tests and Criteria .....	16	6
D. “UN” standard detonators .....	17	7
E. Review of packing instructions for explosives .....	18	7
F. Application of security provisions to explosives N.O.S .....	19	7
G. Test N.1 for readily combustible solids .....	20	7
H. Review of Chapter 2.1 of the GHS .....	21	7
I. Energetic samples .....	22-23	7
J. Issues related to the definition of explosives .....	24	7
K. Review of packaging and transport requirements for ANEs.....	25	7
L. Miscellaneous .....	26	7
IV. Listing, classification and packing (agenda item 3) .....	27-47	8
A. Excepted quantities of UN 3269 and UN 3527.....	27-28	8
B. Scope of 4.1.2.2 .....	29-30	8
C. Special provision for UN 1013 carbon dioxide .....	31-33	8
D. Considerations on dangerous goods offered for transport as UN 3363 .....	34-36	8

E.	Proper shipping names including “n.o.s” but not assigned to special provisions 220, 274 or 318 .....	37-38	9
F.	Classification of ethyl bromide (UN 1891).....	39-40	9
G.	Drop orientation for infectious substances packagings in 6.3.5.3.2.2.....	41	9
H.	Scope of the penultimate sentence in P903 (5).....	42	9
I.	Classification of cobalt dihydroxide powder and similar compounds in powder form .....	43-44	10
J.	Transport of transformers with gas cylinders .....	45	10
K.	New entry for aerosol generating, fire suppression devices.....	46-47	10
V.	Electric storage system (agenda item 4).....	48-66	10
A.	Testing of lithium batteries .....	48	10
	Amendment to 38.3.3 (d) and (g) of the Manual of Tests and Criteria.....	48	10
B.	Hazard-based system for classification of lithium batteries.....	49-50	11
C.	Transport provisions .....	51-60	11
	1. Provisions addressing the state of charge for large lithium-ion cells and batteries during transport.....	51-52	11
	2. Provisions for batteries (wet, non-spillable) installed in cargo transport units.....	53-54	11
	3. Applicability of large packing instruction LP906 and clarification of packing instruction P911 .....	55-56	12
	4. Corrections to special provisions 377 and 310.....	57	12
	5. Availability of the manufacturer’s quality management programme for consignors of lithium batteries .....	58-59	12
	6. Notes in special provision 188 .....	60	12
D.	Damaged or defective lithium batteries .....	61	12
E.	Sodium-ion batteries .....	62	12
F.	Miscellaneous .....	63-66	13
	1. Clarification of packing instruction P903.....	63	13
	2. Use of packagings not required to meet 4.1.1.3 and exceeding 400 kg net mass for the transport of lithium batteries .....	64	13
	3. Classification of vanadium redox flow battery.....	65	13
	4. Phone number on the lithium battery mark .....	66	13
VI.	Transport of gases (agenda item 5) .....	67-70	13
A.	Global recognition of UN and non-UN pressure receptacles.....	67	13
B.	Miscellaneous .....	68-70	14
	1. Updated ISO standards in Class 2 .....	68	14
	2. Provisions for pressure receptacles and their closures .....	69	14
	3. Triggering of pressure relief devices taking the operating temperature into account .....	70	14

VII.	Miscellaneous proposals for amendments to the Model Regulations on the Transport of Dangerous Goods (agenda item 6) .....	71-101	14
A.	Marking and labelling.....	71-74	14
1.	Hazard communication for oxidizers and organic peroxides .....	71	14
2.	Scope of 5.1.2.1 .....	72	14
3.	Optical differentiation of labels/placards for gases .....	73-74	15
B.	Packagings .....	75-85	15
1.	Use of recycled plastics material for all rigid plastics packagings .....	75-79	15
2.	Alternative service equipment, arrangements and methods of inspection and testing of IBCs .....	80-81	16
3.	Permitted period of use for composite IBCs with plastic inner receptacles .....	82	16
4.	Proposal to align the use of packagings for UN 3549 with those of other category A dangerous goods .....	83-85	16
C.	Fibre-reinforced plastics (FRP) portable tanks .....	86-87	16
D.	Portable tanks (other than FRP).....	88-89	17
E.	Other miscellaneous proposals .....	90-101	17
1.	Increase of the maximum allowed internal pressure for aerosol dispensers .....	90-92	17
2.	Steel types to be used for corrosivity determination .....	93	17
3.	Harmonisation of the requirement “structurally serviceable” .....	94-96	17
4.	Information in the transport document in accordance with 5.4.1.5.3 when using packagings not approved as salvage packagings .....	97-88	18
5.	“HOT” as part of the proper shipping name in the dangerous goods description in 5.4.1.4.3 .....	99	18
6.	Reorganization of section 37.4 in the Manual of Tests and Criteria .....	100	18
7.	Amendments to 5.4.1.4.3, 5.4.1.5.4 and 7.1.5.3.2 .....	101	18
VIII.	Global harmonization of transport of dangerous goods regulations with the Model Regulations (agenda item 7) .....	102-120	18
A.	Expert Working Group on the review of Annexes to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal .....	102-104	18
B.	Harmonization of RID/ADR/ADN with the twenty-first revised edition of the Model Regulations.....	105-116	19
1.	Reference to “except for animal material” in the table for high consequence dangerous goods.....	106	19
2.	Assignment of fireworks to UN 0431 .....	107	19
3.	Medical or clinical waste.....	108	19
4.	Technical name for UN 3077 and 3082 in special provision 274.....	109	19
5.	Proper shipping name of UN 3536.....	110-112	19
6.	Packing instructions P622, P801 (2) (a) and (c).....	113	20
7.	Reference to “type approval mark” in 6.1.3.1 (e) and 6.1.3.13 .....	114	20
8.	Corrections to 6.1.3.13, 6.5.2.1.3 and 6.6.3.4.....	115	20
9.	Miscellaneous corrections to the Model Regulations .....	116	20

C.	Information on recommendations made by the ICAO Dangerous Goods Panel .....	117-118	20
D.	Outcome of the thirty-second session of the Editorial and Technical Group (IMDG Code) .....	119-120	20
IX.	Cooperation with the International Atomic Energy Agency (agenda item 8) .....	121-124	21
A.	Harmonization with the IAEA Regulations for the Safe transport of Radioactive Material.....	121-123	21
B.	Transport by post of Class 7 excepted packages with limited activity .....	124	21
X.	Guiding principles for the Model Regulations (agenda item 9) .....	125-126	21
XI.	Issues relating to the Globally Harmonized System of Classification and Labelling of Chemicals (agenda item 10).....	127-133	22
A.	Testing of oxidizing substances .....	127	22
B.	Chemicals under pressure .....	128	22
C.	Updating of references to OECD Guidelines.....	129	22
D.	Review of Chapter 2.1 .....	130	22
E.	Simultaneous classification in physical hazards and precedence of hazards ..	131	22
F.	Miscellaneous .....	132-133	23
1.	Proposed changes to Annex 1 of the GHS .....	132	23
2.	Clarification of 2.9.3.4.3.4 of the Model Regulations and 4.1.3.3.4 of the GHS .....	133	23
XII	Other business (agenda item 11) .....	134-135	23
A.	Change in title of the ADR.....	134	23
B.	Tribute to Ms. G. Schwan (Germany) .....	135	23
XIII	Adoption of the report (agenda item 12) .....	136	23

## Annexes

I.	Draft amendments to the seventh revised edition of the Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.7) <sup>1</sup> .....		
II.	Draft amendments to the twenty-first revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.21) <sup>1</sup> .....		
III.	Corrections to the twenty-first revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.21) <sup>1</sup> .....		

<sup>1</sup> For practical reasons, this annex has been published as an addendum with the symbol ST/SG/AC.10/C.3/112/Add.1.

## I. Attendance

1. The Sub-Committee of Experts on the Transport of Dangerous Goods held its fifty-sixth session from 4 to 10 December 2019 with Mr. Duane Pfund (United States of America) as Chair and Mr. Claude Pfauvadel (France) as Vice-Chair.
2. Experts from the following countries took part in the session: Australia, Austria, Belgium, Canada, China, Finland, France, Germany, Italy, Japan, Netherlands, Poland, Republic of Korea, Russian Federation, Spain, Sweden, United Kingdom and United States of America.
3. Representatives of the European Union and the Intergovernmental Organization for International Carriage by Rail (OTIF) also attended.
4. Representatives of the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO), the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) were also present.
5. Representatives of the following non-governmental organizations took part in the discussion on items of concern to those organizations: Australian Explosives Industry Safety Group (AEISG), Compressed Gas Association (CGA), Council on Safe Transportation of Hazardous Articles (COSTHA), Dangerous Goods Advisory Council (DGAC), European Association for Advanced Rechargeable Batteries (RECHARGE), European Chemical Industry Council (Cefic), European Industrial Gases Association (EIGA), International Air Transport Association (IATA), International Association of Fire and Rescue Services (CTIF), International Confederation of Container Reconditioners (ICCR), International Confederation of Plastics Packaging Manufacturers (ICPP), International Council of Intermediate Bulk Container Associations (ICIBCA), International Fibre Drum Institute (IFDI), International Petroleum Industry Environmental Conservation Association (IPIECA), Kilofarad international (KFI), Medical Devices Battery Transport Council (MDBTC), Responsible Packaging Management Association of Southern Africa (RPMASA) and Sporting Arms and Ammunition Manufacturers' Institute (SAAMI). WLPGA, World LPG Association & Liquid Gas Europe (European LPG Association) - ex AEGPL.

## II. Adoption of the agenda (agenda item 1)

*Documents:* ST/SG/AC.10/C.3/111 (Provisional agenda)  
ST/SG/AC.10/C.3/111/Add.1 (List of documents)

*Informal documents:* INF.1 and INF.2 (List of documents)  
INF.10 (Changes in dates and provisional timetable for the session)  
INF.22 (Reception by NGOs)

6. The Sub-Committee adopted the provisional agenda prepared by the secretariat after amending it to take account of informal documents INF.1 to INF.52. Informal document INF.4 was withdrawn.

### A. Status of publications

7. The Sub-Committee was informed that the English and French versions of the seventh revised edition of the Manual of Tests and Criteria had already been published and that the Spanish, Russian, Chinese and Arabic versions of the Model Regulations and of the Manual of Tests and Criteria were under preparation.

## **B. Accreditation of experts**

*Informal document:* INF.32 (Accreditation of experts)

8. It was recalled that the Committee of Experts and its two subsidiary bodies are expert bodies composed of Governmental experts. In accordance with the original terms of reference of the Committee, Governments are invited, at the request of the Secretary-General and at their own expense, to make available the experts for the Committee (and its sub-committees). Other members of the delegation (advisors) may be designated by the Head of delegation.

9. For the Sub-Committee of Experts on the Transport of Dangerous Goods, it is expected that the government-nominated expert represents the coordinated expertise of his/her Government in relation to all modes of transport.

10. For the GHS Sub-Committee, it is expected that the government-nominated expert represents the coordinated expertise of his/her Government in relation to all sectors concerned by the GHS (in particular health, labour, transport, environment, trade).

11. For the Committee, it is expected that the government-nominated expert represents the coordinated position of his/her Government as regards all issues addressed by both subcommittees.

12. A member of the secretariat pointed out that for some countries, the information regarding the expert accredited to represent the government was missing, incomplete or outdated. It was noted that a request for updates had been circulated by email in 2010, both to heads of delegation and to the Permanent Missions, with very few answers.

13. The secretariat emphasized the importance of keeping this information up to date and invited delegations to check whether the name and contact details of the person listed as Head of delegation for their government or organisation was accurate. Changes should be notified to the secretariat as soon as possible, through official channels (i.e: through the Permanent Mission or Ministry of Foreign Affairs in the case of Governments and through an official letter or email in the case of NGOs).

## **III. Explosives and related matters (agenda item 2)**

### **A. Review of test series 6**

14. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

### **B. Improvement of Test Series 8**

15. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

### **C. Review of tests in parts I, II and III of the Manual of Tests and Criteria**

*Informal document:* INF.31 (Chair of the Working Group on Explosives)

16. The Sub-Committee took note of the outcome of the work on the review of test series H. Experts were invited to provide comments in writing to the representative of Cefic (Mr. P. Schuurman) who said he would revise the proposal accordingly and would submit an official document for the next session. It was recalled that the deadline for submission of official documents was 3 April 2020.

**D. “UN” standard detonators**

17. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

**E. Review of packing instructions for explosives**

18. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

**F. Application of security provisions to explosives N.O.S**

19. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

**G. Test N.1 for readily combustible solids**

20. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

**H. Review of Chapter 2.1 of the GHS**

21. This topic was discussed under agenda item 10 (d) (see informal documents INF.3 and INF.8).

**I. Energetic samples**

*Document:* ST/SG/AC.10/C.3/2019/64 (Cefic)

22. Pending final review and recommendation for final adoption by the Explosives Working Group at the next session, the Sub-Committee adopted the proposals in paragraphs 30 to 35 in document ST/SG/AC.10/C.3/2019/64, with an additional amendment to paragraph 31, between square brackets (see annex I).

23. It was stressed that the proposed tests were suitable for samples of substances and mixtures covered by 2.4.2.3.2.4 (b) and 2.5.3.2.5.1 when it is not possible to determine the self-accelerating decomposition temperature (SADT)/self-accelerating polymerisation temperature (SAPT) and that they were not intended to replace test series H.

**J. Issues related to the definition of explosives**

24. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

**K. Review of packaging and transport requirements for ANEs**

25. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

**L. Miscellaneous**

26. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

## **IV. Listing, classification and packing (agenda item 3)**

### **A. Excepted quantities of UN 3269 and UN 3527**

*Document:* ST/SG/AC.10/C.3/2019/47 (China)

27. There was general agreement that the excepted quantities currently allowed for polyester resin kits were not equally appropriate to the two components of these kits (i.e. the base material and the activator). While it was pointed out that the “E0” code had intentionally been assigned to UN 3269, most experts noted that special provision 340 contained specific provisions for determining the excepted quantity limits applicable to the individual substances contained in these kits. They were in favour of inserting a reference to this special provision in column 7 b of the dangerous goods list. It was pointed out that this solution was suitable for all transport modes.

28. On these grounds, the Sub-Committee adopted the proposal to replace “E0” with a reference to special provision 340 (see annex II).

### **B. Scope of 4.1.2.2**

*Document:* ST/SG/AC.10/C.3/2019/56 (Switzerland)

29. The Sub-Committee confirmed that the provisions of 4.1.2.2 also applied to non-metal IBCs (e.g. rigid plastics and composite IBCs) transported after the date of expiry of their period of use (i.e.: 5 years, see 4.1.1.15).

30. The expert from Switzerland welcomed this clarification and withdrew his proposal.

### **C. Special provision for UN 1013 carbon dioxide**

*Document:* ST/SG/AC.10/C.3/2019/62 (COSTHA)

31. Views were divided on the proposal by COSTHA. Some experts considered that since the transport conditions for these cylinders depended to a large extent on the transport mode, the current differences were justified. Others pointed out, in addition, that the approvals referred to in paragraph 2 of document ST/SG/AC.10/C.3/2019/62 issued by some national competent authorities included additional provisions (e.g. on marking; maximum number of cylinders and their contents; closed distribution network, etc.) providing an additional oversight framework that should be maintained.

32. Some others, on the contrary, felt that the proposal to follow a similar approach to that in special provision 653 of RID/ADR/ADN for the transport of carbon dioxide by sea and land modes would increase harmonisation between these modes and should be considered, provided that the specific transport conditions were further developed.

33. In view of the above, the representative of COSTHA withdrew the proposal and said that he might reconsider it in the light of the comments received and submit a revised proposal for consideration by the Sub-Committee at a future session.

### **D. Considerations on dangerous goods offered for transport as UN 3363**

*Document:* ST/SG/AC.10/C.3/2019/63 (IATA)

34. Most experts who spoke confirmed that flammable gases (Division 2.1) are not allowed for transport in limited quantities and that, in accordance with special provision 301, machinery, apparatus or devices containing such flammable gases cannot be assigned to UN 3363. They considered that the current text of special provision 301 was clear in this respect and did not need to be amended. Some experts suggested that UN 2037 (gas cartridges) could be used instead for the devices described in the document by IATA.



35. It was confirmed that, according to special provision 301, UN 3363 should not be used for articles that are already assigned a proper shipping name, as it is the case for explosive articles of UN 0012, 0014 and 0055. Considering that the current wording of special provision 301 could be further improved to clarify this interpretation, several experts welcomed the proposal by IATA in paragraph 7 of its document.

36. The representative of IATA took note of the comments received and said that he would submit a proposal for the next session.

#### **E. Proper shipping names including “n.o.s.” but not assigned to special provisions 220, 274 or 318**

*Document:* ST/SG/AC.10/C.3/2019/66 (COSTHA)

37. There was no support for the proposal to delete the mention “n.o.s” for entries for which special provisions 220, 274 or 318 were not assigned. It was pointed out that the “n.o.s” specification in the proper shipping name has proven to be useful to make shippers consider whether a more specific entry was available. Some experts pointed out that assignment of special provision 274 was not only linked to the requirement to provide a technical name, to help emergency responders to identify the appropriate first aid and fire extinguishing measures. As explained in the “Guiding principles for the development of the Model Regulations”, special provision 274 is also assigned to generic and “n.o.s” entries for which a special provision refers to the prohibition of transport for one or more substances. This helps carriers and enforcement officers to check whether goods are authorized for transport. On these grounds, the Sub-Committee considered that deletion of the mention “n.o.s”, if needed, should only be considered on a case-by-case basis.

38. The representative of COSTHA welcomed the explanations provided by the Sub-Committee on the need to keep the “n.o.s” mention in the proper shipping name and on the rationale for the assignment of special provision 274 and withdrew the proposal.

#### **F. Classification of ethyl bromide (UN 1891)**

*Informal document:* INF.11 (Belgium)

39. The Sub-Committee agreed that the classification of UN 1891 should be reconsidered and, based on the data provided, several experts expressed support for the proposal in paragraph 8 (a) of informal document INF.11 to reclassify ethyl bromide as flammable (class 3, packing group II). It was noted, however, that more data was needed to assess toxicity by inhalation that could trigger classification as toxic (Division 6.1). Some experts indicated that it would be useful to know the rationale or the data supporting the original assignment to division 6.1 at the time UN 1891 was first introduced in the dangerous goods list.

40. The expert from Belgium said that he would submit an official document for the next session that would take account of the comments received.

#### **G. Drop orientation for infectious substances packagings in 6.3.5.3.2.2**

*Informal document:* INF.23 (Secretariat)

41. The Sub-Committee adopted the proposed corrections to 6.3.5.3.2.2 (see annex III).

#### **H. Scope of the penultimate sentence in P903 (5)**

*Informal document:* INF.34 (Switzerland)

42. The Sub-Committee adopted the amendment to the last but one sentence in paragraph 5) of packing instruction P903 (see annex II).

## **I. Classification of cobalt dihydroxide powder and similar compounds in powder form**

*Informal documents:* INF.19 (RPMASA, Cefic, ICPP)  
INF.54 (RPMASA)

43. There was general support to the proposal to address classification of cobalt dihydroxide powder and similar compounds in powder form. Several comments were provided during the introduction of the document in plenary that were then considered by a working group that met on 5 December 2019. The Sub-Committee took note of the report on the work of the working group as well as on the way forward in paragraphs 14 to 18 in informal document INF.54.

44. The representative of RPMASA invited expression of interest in this work from additional experts and said that work will continue intersessionally with a view to develop a formal proposal for the next session.

## **J. Transport of transformers with gas cylinders**

*Document:* ST/SG/AC.10/C.3/2019/42 (Germany)

*Informal documents:* INF.42 (United Kingdom)  
INF.46 and INF.53 (Germany)

45. Following an exchange of views in plenary, the expert from Germany volunteered to lead an informal working group to revise the proposal. The working group developed the proposal in informal document INF.46 and further revised it in informal document INF.53 to take account of additional comments. Put to the vote, the Sub-Committee adopted the proposal in informal document INF.53 (see annex II).

## **K. New entry for aerosol generating, fire suppression devices**

*Document:* ST/SG/AC.10/C.3/2019/61 (COSTHA)

*Informal documents:* INF.28 (France)  
INF.51 (France, COSTHA)

46. After discussion in plenary, the Sub-Committee agreed to refer consideration of the issue to the Working Group on Explosives for technical assessment. A working group led by COSTHA and the expert from France met in parallel to the plenary to consider available options and a list of issues for consideration by the Working Group on Explosives that were circulated as informal document INF.51.

47. Following the interventions of some delegations regarding the questions in paragraphs 3 to 5 of informal document INF.51, the representative of COSTHA said that he would work with interested experts to refine them, would include the references to the relevant background documents and would submit an official document for the next session, inviting the Sub-Committee to entrust its consideration to the Working Group on Explosives. The Sub-Committee agreed on this way forward.

## **V. Electric storage systems (agenda item 4)**

### **A. Testing of lithium batteries**

#### **Amendment to 38.3.3 (d) and (g) of the Manual of Tests and Criteria**

*Document:* ST/SG/AC.10/C.3/2019/50 (RECHARGE, PRBA)

48. Put to the vote, the Sub-Committee adopted the amendments to 38.3.3 (d) and (g) of the Manual of Tests and Criteria, as amended following a proposal by a coffee-break working group (see annex I).

## **B. Hazard-based system for classification of lithium batteries**

*Informal document:* INF.33 (France)

49. The Sub-Committee took note of the report of the informal working group and invited the expert from France to provide a new update on progress at the next session.

50. The representative of PRBA indicated that two more laboratories had expressed interest in joining the second round of tests, raising the number of testing laboratories to nine. It was pointed out that the intent of the testing exercise was to gather data to assist the working group during the development of provisions for the hazard-based classification of lithium cells and batteries and not necessarily an indication of finalised recommendations for test methods to be included in the Manual of Tests and Criteria.

## **C. Transport provisions**

### **1. Provisions addressing the state of charge for large lithium-ion cells and batteries during transport**

*Document:* ST/SG/AC.10/C.3/2019/46 (China)

*Informal document:* INF.50 (United States of America)

51. There was general recognition that the state of charge had a direct impact on safety. However, most of the experts who spoke considered that it would be premature at this stage to agree on the 30% value since new technologies were being developed to avoid propagation in batteries with a higher state of charge. It was also pointed out that this value might not be appropriate for all modes of transport and that some batteries (e.g. those used for emergency or military purposes) need to be transported at 100% state of charge. Some experts raised questions on the concept of “unused” batteries. They considered that the proposal should also address used and waste batteries as well as large and small batteries. Finally, some concerns were expressed on how the state of charge could be measured or verified during transport.

52. The Sub-Committee welcomed the information provided in informal document INF.50 and invited the expert from China to take account of the comments received and come back with a revised proposal in the future.

### **2. Provisions for batteries (wet, non-spillable) installed in cargo transport units**

*Document:* ST/SG/AC.10/C.3/2019/48 (China)

*Informal document:* INF.41 (China)

53. There was some support for the proposals in options 2 and 3 in document ST/SG/AC.10/C.3/2019/48 but most of the experts who spoke considered that they needed to be further developed before they could be adopted. Some others were not convinced about the need to develop additional provisions for the transport of this type of batteries under a specific UN number and invited the expert from China to provide additional details such as: their intended use (e.g. providing power external to the cargo transport unit); their differences with respect to batteries installed in cargo transport units covered by UN 3536, etc.

54. After an exchange of views and having heard the comments and questions raised during the discussion, the expert from China volunteered to come back at a future session with a revised proposal and the additional information requested by other experts.

**3. Applicability of large packing instruction LP906 and clarification of packing instruction P911**

*Document:* ST/SG/AC.10/C.3/2019/49 (RECHARGE, OICA, PRBA, COSTHA)

*Informal document:* INF.47 (RECHARGE, OICA, PRBA, COSTHA)

55. There was some support for the proposal but most experts agreed that it needed further refinement before it could be considered for adoption (e.g.: consider using “wrapped” instead of “inner packaging”; improve the wording to clarify that testing and approval should be specific to the intended configuration of the package; avoid use of the plural in the proposal in paragraph 7 of informal document INF.47).

56. The authors of the proposal said that they would submit a revised proposal for a future session that would take account of the comments received.

**4. Corrections to special provisions 377 and 310**

*Document:* ST/SG/AC.10/C.3/2019/54 (RECHARGE, PRBA)

57. The corrections to special provisions 377 and 310 were adopted (see annex III).

**5. Availability of the manufacturer’s quality management programme for consignors of lithium batteries**

*Informal document:* INF.20 (IATA)

58. The Sub-Committee was informed that there was consensus among the experts who considered the document informally during a coffee-break on the interpretation provided by IATA in paragraph 4 of informal document INF.20, i.e.: that there is no requirement for the manufacturer to provide evidence of a quality management programme to any other party than the competent authority.

59. The representative of IATA indicated that he would submit a proposal to clarify the requirements of section 2.9.4 in the Model Regulations accordingly.

**6. Notes in special provision 188**

*Informal document:* INF.21 (IATA)

60. The proposal to delete note 1 under sub-paragraph (f) of special provision 188 was adopted (see annex II).

**D. Damaged or defective lithium batteries**

61. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

**E. Sodium-ion batteries**

62. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

## **F. Miscellaneous**

### **1. Clarification of packing instruction P903**

*Document:* ST/SG/AC.10/C.3/2019/60 (RECHARGE, PRBA)

63. Noting that the definition of batteries in the Manual of Tests and Criteria included “assemblies of batteries”, the Sub-Committee considered that the text between brackets in the proposal in paragraph 4 of document ST/SG/AC.10/C.3/2019/60 was redundant and decided to delete it. The proposal was adopted as amended (see annex II).

### **2. Use of packagings not required to meet 4.1.1.3 and exceeding 400 kg net mass for the transport of lithium batteries**

*Informal document:* INF.17 (PRBA, RECHARGE)

64. There was some support in principle for the proposal. Some experts suggested that packing instructions P130 and P408 should also be addressed. Others indicated that the proposed provisions could be inserted in the applicable instructions for packagings and large packagings or in the definitions in 1.2.1 rather than in 4.1.3.3. Some others requested more time to consider the proposal and get feedback from stakeholders. After an exchange of views, the authors of the document said that they would take account of the comments received and would submit a revised proposal for a future session.

### **3. Classification of vanadium redox flow battery**

*Informal document:* INF.29 (China)

65. The Sub-Committee took note of the information on vanadium redox flow batteries. Noting that these batteries were intended to be transported uncharged and that an outer packaging was not required, it was suggested that they could be transported as “articles” rather than as “batteries”. Experts were encouraged to provide additional comments to the expert from China, who was invited to submit a formal proposal for consideration by the Sub-Committee at a future session.

### **4. Phone number on the lithium battery mark**

*Informal document:* INF.30 (PRBA, RECHARGE)

66. There was support in principle to remove the requirement for a phone number from the lithium battery mark. The Sub-Committee invited the representatives of PRBA and RECHARGE to submit an official document for the next session.

## **VI. Transport of gases (agenda item 5)**

### **A. Global recognition of UN and non-UN pressure receptacles**

67. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

## **B. Miscellaneous**

### **1. Updated ISO standards in Class 2**

*Document:* ST/SG/AC.10/C.3/2019/43 (ISO)

*Informal document:* INF.24 (ISO)

68. The proposals in ST/SG/AC.10/C.3/2019/43 were adopted as amended by informal document INF.24 (see annex II).

### **2. Provisions for pressure receptacles and their closures**

*Document:* ST/SG/AC.10/C.3/2019/52 (EIGA, CGA, ECMA)

*Informal document:* INF.25 (EIGA, CGA, ECMA)

69. The consolidated list of amendments to chapters 1.2, 4.2, 5.2 and 6.2 in informal document INF.25 was adopted (see annex II).

### **3. Triggering of pressure relief devices taking the operating temperature into account**

*Informal document:* INF.35 (Germany)

70. The expert from Germany was invited to take into account existing provisions at national and regional level on operating temperatures. The Sub-Committee encouraged interested delegations to send their comments in writing to the expert from Germany.

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

### **A. Marking and labelling**

#### **1. Hazard communication for oxidizers and organic peroxides**

*Document:* ST/SG/AC.10/C.3/2019/65 (COSTHA)

71. Most experts pointed out that, contrary to the change made several years ago to differentiate labels for organic peroxides and oxidizing substances, the amendment proposed by COSTHA was not justified from a safety point of view. While acknowledging the rationale behind the proposal, they considered that the potential advantages would not outweigh the costs and downstream consequences for the supply and chain sector. On these grounds, the Sub-Committee did not support the proposal.

#### **2. Scope of 5.1.2.1**

*Informal document:* INF.26 (Switzerland)

72. The French speaking experts considered that the current text of 5.1.2.1 was clear and did not need to be modified. Consequently, the proposal in informal document INF.26 was not adopted.

### 3. Optical differentiation of labels/placards for gases

*Informal documents:* INF.37 (CTIF, Spain)  
INF.40 (WLPGA, LGE)  
INF.55 (Spain, CTIF)

73. Views were divided on the proposal for amendment of the labels for flammable gases. Several experts were not convinced that the proposed changes would improve the hazard communication and raised concerns about their implications from a cost-benefit perspective. They pointed out that emergency responders did not rely only on the label to identify the hazard but also on the orange plates, which provide information about the UN number and type(s) of hazard(s). Others on the contrary considered that the issues raised by the authors of the proposal deserved further consideration. After an exchange of views, the expert from Spain and the representative of CTIF volunteered to lead an informal working group which met in the margins of the plenary.

74. The Sub-Committee took note of the outcome of the report of the working group in informal document INF.55. The expert from Spain indicated that work would continue intersessionally with a view to developing a formal proposal for consideration by the Sub-Committee at a future session.

## B. Packagings

### 1. Use of recycled plastics material for all rigid plastics packagings

*Document:* ST/SG/AC.10/C.3/2019/51 (ICPP, ICCR)

*Informal document:* INF.16 (ICPP, ICCR)

75. There was general agreement on the need to revise the existing provisions in the Model Regulations to further encourage the use of recycled plastics materials for IBCs in support of a circular economy. The expert from Belgium suggested that in this context, the Sub-Committee might wish to consider in the future a more generic approach to allow the use of post-industrial plastics materials for the manufacture of recycled plastics packagings for dangerous goods. He also noted the existence of other types of recycled plastics (e.g. post-consumer plastics materials). The representative of ICPP explained that, in the absence of enough experience on the use of recycled plastics for flexible IBCs and large packagings, the proposal had been intentionally restricted for the time being to rigid plastics IBCs and composite IBCs with plastics inner receptacles.

76. The expert from China indicated that the use of recycled plastics materials for dangerous goods packagings was currently restricted in China and welcomed information about current practices in other countries.

77. After an exchange of views, most experts expressed support for the proposed amendments to 6.5.5.3 and 6.5.5.4, on the understanding that other types of plastics packagings might need to be addressed in the future. Put to the vote, the proposal was adopted (see annex II).

78. There was no support on the contrary for the deletion of the provisions addressing quality assurance. Most experts agreed that a minimum set of provisions to ensure a harmonized approach towards quality assurance was necessary. However, it was recognized that some of them might need to be reconsidered, for example, in the light of the revision of ISO 16103 as regards quality controls by selection into batches.

79. The representative of ICPP withdrew the proposal for amendment to the definition in Chapter 1.2. He indicated that he would contact the delegations who provided comments and would consider submitting a revised proposal at a future session.

## **2. Alternative service equipment, arrangements and methods of inspection and testing of IBCs**

*Informal document:* INF.13 (Germany)

80. The Sub-Committee adopted the proposal in paragraph 5 of informal document INF.13, as amended (see annex II) thus superseding the amendment to 6.5.1.1.2 adopted at the fifty-fifth session (see ST/SG/AC.10/C.3/110, para. 77 and Annex I).

81. The expert from Germany took note of the additional suggestions for consequential amendments to the definitions in Chapter 1.2 and to paragraph 4.1.1.9. She said that she would consider addressing them in conjunction with those listed in paragraph 6 of informal document INF.13 in a separate proposal to be submitted for consideration at a future session.

## **3. Permitted period of use for composite IBCs with plastic inner receptacles**

*Informal document:* INF.14 (Germany)

82. The amendment to special packing provision B15 was adopted (see annex II).

## **4. Proposal to align the use of packagings for UN 3549 with those of other category A dangerous goods**

*Informal document:* INF.15 (Switzerland)

83. Some experts expressed some sympathy for the proposal to allow the use of packagings for UN 3549 after the current 5-year time limit. Others considered that should the Sub-Committee follow this approach, a maximum time limit should be established as well as some requirements to ensure that the packagings were still fit for purpose after that time. However, they did not support an amendment to the general provisions in 4.1.8 and suggested that packing provision P622 could be modified instead.

84. Some others on the contrary did not support the proposal. They considered that the current 5-year use time limit was appropriate and voiced concerns about the fact that, if not properly stored, the packagings could deteriorate after the 5-year time limit. The expert from the United Kingdom considered, in addition, that the issue raised by Switzerland could be addressed at national level through an authorisation by the competent authority. It was also pointed out that due to the strict precautionary measures and handling conditions required to prevent contagion while emptying these packagings, they were not meant to be reused. This was confirmed by most experts, who indicated that the packagings, once filled-in, were directly sent for incineration.

85. After discussion, the expert from Switzerland said that he might consider revising the proposal to take account of the comments received and submit it for consideration at a future session.

## **C. Fibre-reinforced plastics (FRP) portable tanks**

*Informal documents:* INF.7/Rev.1 and INF.49 (Chair of the informal working group)

86. The Sub-Committee took note of the progress report on the work of the informal working group described in informal document INF.49 (paragraphs 2 to 4 and annex). The Chair of the informal working group informed the Sub-Committee that a document containing a draft proposal for amendment to the Model Regulations would be submitted to the next session for information. It was requested that the draft proposal be submitted as an official document to give experts enough time to consider it and provide comments.

87. The Chair of the informal working group indicated that, subject to availability of a meeting room, a face-to-face meeting will be convened during the fifty-seventh session of the Sub-Committee, in parallel to the plenary.



## **D. Portable tanks (other than FRP)**

*Document:* ST/SG/AC.10/C.3/2019/59 (United Kingdom)

88. There was support in principle for the development of provisions addressing minimum properties for titanium to be used for the construction of shells of UN portable tanks. It was noted however that the 20% value for elongation at fracture was based on the requirements currently applicable in 6.7.2.3.3.3 to some steels, and that some suitable titanium types could be excluded if this value was applied. It was also noted that although it was current practice to check the specification requirements to the material standard referred to in the material inspection certificates, there was currently no provision to this end in the Model Regulations for steel and aluminium. There was agreement on the need to address this provision in a harmonized manner for all types of metals. The expert from Germany suggested that titanium plasticity characteristics should also be considered as they differ from those of steel and aluminium.

89. The expert from the United Kingdom invited interested experts to send their comments in writing to him so that he could revise his proposal accordingly. The expert from Germany volunteered to work with the expert from the United Kingdom on the identification of titanium specific parameters.

## **E. Other miscellaneous proposals**

### **1. Increase of the maximum allowed internal pressure for aerosol dispensers**

*Document:* ST/SG/AC.10/C.3/2019/55 (FEA, HCPA)

*Informal document:* INF.9 (FEA, HCPA)

90. There was support for the proposal in principle. Noting that in RID/ADR the equivalent provisions were placed in Chapter 6.2, most experts suggested that the same approach should be followed in the Model Regulations. Others expressed the view that a pressure limit should be considered in the context of design provisions and noted that the Model Regulations currently did not include such provisions. Alternatively, some others considered that an amendment to packing instruction P207 could also be appropriate.

91. The expert from China invited the authors of the proposal to consider including provisions addressing aerosols containing several propellants of different nature (e.g. flammable and non-flammable).

92. The representative of FEA withdrew the proposal. He indicated that he will work with the delegations who provided comments and would submit a revised proposal at a future session.

### **2. Steel types to be used for corrosivity determination**

*Document:* ST/SG/AC.10/C.3/2019/39 (Belgium)

93. The proposed amendments were adopted (see annex II).

### **3. Harmonisation of the requirement "structurally serviceable"**

*Document:* ST/SG/AC.10/C.3/2019/40 (Germany, Cefic)

94. The expert from the United States of America indicated that the available data and records of inspection reports did not show any issues encountered with the current provisions and did not support the proposal.

95. Others on the contrary considered that the existing differences between the requirements for structure serviceability of cargo transport units for explosives with respect to other classes were not justified and welcomed a harmonized approach across modes.

96. Put to the vote, the proposal and the consequential amendments in paragraphs 12 and 13 of document ST/SG/AC.10/C.3/2019/40 were adopted (see annex II).

**4. Information in the transport document in accordance with 5.4.1.5.3 when using packagings not approved as salvage packagings**

*Document:* ST/SG/AC.10/C.3/2019/41 (Germany)

97. There was general agreement on the need for the mention “salvage” in the transport document as required by 5.4.1.5.3, for all types packagings used as salvage packagings, including those addressed in 4.1.1.18 and 4.1.1.19. To help further clarifying this interpretation, some experts suggested that a reference to these two paragraphs could be included in 5.4.1.5.3.

98. The expert from Germany withdrew the proposal and said that she will work with those who provided comments on a revised proposal to be submitted at a future session.

**5. "HOT" as part of the proper shipping name in the dangerous goods description in 5.4.1.4.3**

*Document:* ST/SG/AC.10/C.3/2019/45 (Spain)

99. The Sub-Committee noted that, depending on the language used, the mention “HOT” required in accordance with 5.4.1.3 (d) may need to be placed after the proper shipping name. Noting that this had already been taken into account in the French version of the Model Regulations, the Sub-Committee requested the secretariat to amend the Spanish version of the twenty-second revised edition of the Model Regulations accordingly, as indicated in paragraph 6 of document ST/SG/AC.10/C.3/2019/45.

**6. Reorganization of section 37.4 in the Manual of Tests and Criteria**

*Document:* ST/SG/AC.10/C.3/2019/71 (Secretariat)

100. The proposal was adopted (see annex I).

**7. Amendments to 5.4.1.4.3, 5.4.1.5.4 and 7.1.5.3.2**

*Informal documents:* INF.5 and INF.6 (Spain)

101. There was support for the amendments to 5.4.1.5.4 and 7.1.5.3.2 in informal document INF.5 and for the addition of a new sub-paragraph (d) in 5.4.1.4.3, as proposed in informal document INF.6. Since several delegations provided comments on the proposed text for 5.4.1.4.3 (e), the Sub-Committee invited the expert from Spain to revise it accordingly and to consolidate all the proposed amendments in an official document for the next session. Experts were invited to send their comments in writing to the expert from Spain.

## **VIII. Global harmonization of transport of dangerous goods regulations with the Model Regulations (agenda item 7)**

### **A. Expert Working Group on the review of Annexes to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal**

*Informal document:* INF.18 (Secretariat of the Basel, Rotterdam and Stockholm Conventions)

102. The Sub-Committee noted that the Conference of the Parties to the Basel Convention has established an expert working group on the revision of annexes I to IV to the Convention. It also noted that the proposals for the review of Annex III have been addressing so far the reference to the transport classes, the alignment with the GHS and the ADR, the level of specificity of H-characteristics, the testing methods and the structure of the annex.

103. The Sub-Committee was informed that the expert working group invited comments on the review of Annex III from Parties and observers to the Convention and will be considering an information document on this review on 24 January 2020. The fourth meeting

of the expert working group is expected to take place during the second half of 2020. Unless otherwise decided, the proposals on the review of annexes I and III will be considered by the Open-Ended Working Group in 2022 and subsequently by the Conference of the Parties in 2023.

104. Sub-Committee experts were invited to consider the proposals referred to in paragraph 7 of informal document INF.18 and provide comments, if any, to their counterparts dealing with the Basel Convention or to the Basel Convention secretariat, at the contact indicated in paragraph 12 of informal document INF.18.

## **B. Harmonization of RID/ADR/ADN with the twenty-first revised edition of the Model Regulations**

*Document:* ST/SG/AC.10/C.3/2019/69 (Secretariat)

*Informal documents:* INF.38, INF.48 and INF.52 (Secretariat)

105. The Sub-Committee considered each of the issues raised in documents ST/SG/AC.10/C.3/2019/69 and informal documents INF.38, INF.48 and INF.52 and decided as follows:

### **1. Reference to “except for animal material” in the table for high consequence dangerous goods**

106. The Sub-Committee considered that animal material of Category A should not be excluded from the list of high consequence dangerous goods and, therefore, did not support its deletion from table 1.4.1 of the Model Regulations.

### **2. Assignment of fireworks to UN 0431**

107. The correction to 2.1.3.5.2 in annex I to ST/SG/AC.10/C.3/2019/69 was adopted (see annex III).

### **3. Medical or clinical waste**

108. Several experts considered that the proposed correction to note 1 to 2.6.3.2.2.1 (b) for UN 2900 could have unintended consequences. In addition, noting that the use of upper- and lower-case characters in the proper shipping name was addressed in paragraph 3.1.2.1, the Sub-Committee considered that the correction was unnecessary and did not adopt it.

### **4. Technical name for UN 3077 and 3082 in special provision 274**

109. The Sub-Committee was informed that the amendments proposed by the Ad-hoc Working Group had not been adopted by the RID/ADR/ADN Joint Meeting of Experts. Consequently, the proposed consequential amendments to special provision 274 in the Model Regulations were withdrawn.

### **5. Proper shipping name of UN 3536**

110. The Sub-Committee was informed that this question had been put on hold by the RID/ADR/ADN Joint Meeting of Experts pending a decision by the Sub-Committee, as a follow-up to the discussions held on this matter at its fifty-fifth session.

111. Following a question raised by the expert from Germany and noting that no revised proposal had been submitted to this session, some experts volunteered to reconsider document ST/SG/AC.10/C.3/2019/8 (submitted by OTIF at the fifty-fifth session), which was circulated as informal document INF.48. The document was considered by a working group led by the expert from France, who reported orally to the plenary as follows:

- (a) the group confirmed that the term “cargo transport unit” was appropriate in the context of UN 3536 and was meant to cover containers, wagons and vehicles, in accordance with the definition in 1.2.1. Therefore, there is no need to consider other terms;

- (b) the group concluded that placarding and marking should be required on the four sides of the cargo transport unit, to ensure they remain visible irrespective of its configuration.

112. The Sub-Committee noted that a proposal addressing the above would be submitted at the next session.

**6. Packing instructions P622, P801 (2) (a) and (c)**

113. The Sub-Committee was informed that the corrections proposed by the Ad-hoc Working Group to packing instructions P801 (2) (a) and (c) had not been adopted by the Joint Meeting. Consequently, they were withdrawn. The correction to packing instruction P622 was adopted (see annex III).

**7. Reference to “type approval mark” in 6.1.3.1 (e) and 6.1.3.13**

114. The Sub-Committee confirmed that the term “UN design type mark” was appropriate and did not accept the proposals to replace it with “type approval mark” in 6.1.3.1 (e) and 6.1.3.13. The additional amendment to 6.1.3.1 (e) was not adopted.

**8. Corrections to 6.1.3.13, 6.5.2.1.3 and 6.6.3.4**

115. The Sub-Committee agreed to the replacement of “must” with “shall” in 6.1.3.13 and 6.6.3.4 and of “a packaging” with “an IBC” in 6.5.2.1.3 as proposed (see annex III).

**9. Miscellaneous corrections to the Model Regulations**

116. The Sub-Committee adopted the corrections listed in Annex II to ST/SG/AC.10/C.3/2019/69, and in informal documents INF.38 and INF.52 (see annex III).

**C. Information on recommendations made by the ICAO Dangerous Goods Panel**

*Document:* ST/SG/AC.10/C.3/2019/58 (ICAO)

*Informal document:* INF.43 (ICAO)

117. The Sub-Committee supported in principle the amendments to special provision 388 and 6.1.3.13 in paragraphs 8 and 12 of document ST/SG/AC.10/C.3/2019/58 and invited the representative of ICAO to submit an official document with a proposal for amendment to the Model Regulations at the next session.

118. For the amendments related to the transport of radioactive material refer to paragraph 121 under agenda item 8.

**D. Outcome of the thirty-second session of the Editorial and Technical Group (IMDG Code)**

*Informal document:* INF.27 (IMO)

119. The Sub-Committee took note of the outcome of the thirty-second session of the editorial and technical group of the IMO Sub-Committee on Carriage of Cargoes and Containers in informal document INF.27. The Sub-Committee noted the outcome of the review of the footnotes on the IMDG Code in paragraph 3.17 of the informal document. The Chair of the IMO editorial and technical group informed the Sub-Committee that he may work with the IMO secretariat on a proposal to conduct a similar review of the current notes in the Model Regulations.

120. For the amendments related to the transport of radioactive material refer to paragraph 121 under agenda item 8.

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

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

*Documents:* ST/SG/AC.10/C.3/2019/58 (ICAO)  
ST/SG/AC.10/C.3/2019/70 (Secretariat)

*Informal documents:* INF.43 (ICAO)  
INF.27 (IMO)  
INF.45 (Secretariat)

121. The Sub-Committee was informed that the proposals and comments addressing the transport of radioactive material in document ST/SG/AC.10/C.3/2019/58 (paragraphs 3 to 7 and 9 to 11) and informal documents INF.27 (paragraph 3.17.1 and 3.18) and INF.43 would be addressed by the authors of the documents during an inter-agency meeting and submitted for consideration by IAEA as corrections to the IAEA Regulations on the transport of radioactive material, as appropriate. Once endorsed by IAEA, the corrections would be notified to the modal bodies, as well as to the Sub-Committee at its next session.

122. Proposals 1 and 2 in document ST/SG/AC.10/C.3/2019/70 were adopted (see annexes III and II respectively). For proposal 3, the expert from France expressed concerns about the change as it would bring inconsistencies with the use of these terms in different parts of the Model Regulations dealing with radioactive material. On these grounds, the Sub-Committee did not adopt the proposal and invited IAEA to consider aligning the French translation for “safety” and “security” in the IAEA Regulations for the Safe Transport of Radioactive Materials with that in the Model Regulations.

123. A member of the secretariat informed the Sub-Committee that the proposals in informal document INF.45 would be submitted as an official document to the next session.

### **B. Transport by post of Class 7 excepted packages with limited activity**

*Document:* ST/SG/AC.10/C.3/2019/57 (Switzerland)

124. Several experts noted that although the provisions were applicable for air transport, they were not suitable for other modes. Some indicated that this type of transport by post was not allowed at national level in their countries. Due to the lack of support, the expert from Switzerland withdrew the proposal.

## **X. Guiding principles for the Model Regulations (agenda item 9)**

*Document:* ST/SG/AC.10/C.3/2019/44 (Canada)

*Informal document:* INF.44 (ICAO)

125. The Sub-Committee welcomed the additional explanations and guidance on the rationale behind the excepted quantity provisions for air transport. It adopted the proposed amendments to Chapter 3.5 of the guiding principles in document ST/SG/AC.10/C.3/2019/44 as amended in informal document INF.44, for publication on the UNECE website.

126. The expert from the Netherlands encouraged ICAO to provide further information on the rationale behind the more restricted thresholds applicable for transport in excepted quantities when compared to limited quantities. The representative of ICAO said that she will bring this comment to the attention of the ICAO Dangerous Goods Panel.

## **XI. Issues relating to the Globally Harmonized System of Classification and Labelling of Chemicals (agenda item 10)**

### **A. Testing of oxidizing substances**

*Document:* ST/SG/AC.10/C.3/2019/68 (France)

*Informal document:* INF.39 (France)

127. The Sub-Committee took note of the preliminary findings of the Round Robin tests in paragraphs 7 and 8 of informal document INF.39. The expert from France indicated that ten laboratories had already completed the tests and that the evaluation of the results from the four remaining laboratories was expected to be finished by the end of 2019. He informed the Sub-Committee that based on these results, a concrete proposal for amendment to the tests in the Manual of Tests and Criteria was expected to be completed on time to be submitted for consideration by the Sub-Committee at its next session.

### **B. Chemicals under pressure**

128. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

### **C. Updating of references to OECD Guidelines**

*Document:* ST/SG/AC.10/C.3/2019/53 (European Union and the Netherlands)

129. The Sub-Committee decided to adopt the amendment to 2.8.3.2 in paragraph 4 of document ST/SG/AC.10/C.3/2019/53 between square brackets (see annex II) and invited those who provided oral proposals to improve the text to submit them in writing for consideration at the next session.

### **D. Review of Chapter 2.1**

*Informal documents:* INF.3 and INF.8 (Sweden)

130. The expert from Sweden informed the Sub-Committee that the work on the review of Chapter 2.1 of the GHS is entering its final phase and that the new classification system for explosives will be fully harmonized with the Model Regulations, without entailing changes to the transport classification of explosives. The Sub-Committee noted that an official document including the proposed revised Chapter 2.1 for the GHS as well as some consequential amendments to the Manual of Tests and Criteria will be submitted for the next session<sup>2</sup>.

### **E. Simultaneous classification in physical hazards and precedence of hazards**

*Informal document:* INF.36 (Germany)

131. The Sub-Committee took note of the status of work and the agenda for the meeting of the informal working group in informal document INF.36. Interested experts were

---

<sup>2</sup> *Note by the secretariat:* Following the discussions on this subject during the thirty-eighth session of the GHS Sub-Committee, the Chair of the GHS Sub-Committee considered that it would be appropriate to discuss this item jointly with the TDG sub-committee at the next session and suggested that a joint session of both sub-committees be organised in June-July 2020. The GHS Sub-Committee and the Chair of the TDG Sub-Committee concurred with this suggestion (see the report of the GHS Sub-Committee on its thirty-eighth session, ST/SG/AC.10/C.4/76). Further details on the date and the organisation of the joint session will be provided in the provisional agenda for the sessions of each Sub-Committee.

encouraged to participate in the meeting of the informal working group on 11 December 2019.

## **F. Miscellaneous**

### **1. Proposed changes to Annex 1 of the GHS**

*Document:* ST/SG/AC.10/C.3/2019/67 (United Kingdom)

132. The Sub-Committee took note of the proposed amendments to Annex 1 of GHS. It was pointed out that these amendments did not entail amendments to the Model Regulations.

### **2. Clarification of 2.9.3.4.3.4 of the Model Regulations and 4.1.3.3.4 of the GHS**

*Informal document:* INF.12 (China)

133. Some experts considered that the proposed note under 2.9.3.4.3.4 could be clarified and suggested alternative wording. The expert from China invited experts to submit their comments in writing and said that she would revise the proposal accordingly, taking also into account any additional feedback that the GHS Sub-Committee may wish to provide.

## **XII. Other business (agenda item 11)**

### **A. Change in title of the ADR**

134. The Sub-Committee was informed that the Protocol of amendment to the title of ADR adopted by the Conference of the Parties on 13 May 2019, was deemed accepted on 30 November 2019 (see depositary notification C.N.606.2019.TREATIES-XI.B.14)<sup>3</sup>. The amendment will enter into force for all Contracting Parties to the Agreement on 1 January 2021. It was pointed out that this amendment would facilitate accession to the agreement for those countries for which the word “European” on its title represented an obstacle.

### **B. Tribute to Ms. G. Schwan (Germany)**

135. The Sub-Committee was informed that Ms. Gudula Schwan (head of the German delegation), who has been participating in the work of the Sub-Committee since 2005 would take on new responsibilities at national level and would no longer participate in the sessions. The Sub-Committee expressed its gratitude for her work and dedication and wished her every success in her future endeavours.

## **XIII. Adoption of the report (agenda item 12)**

136. In accordance with the established practice, the Sub-Committee adopted the report on its fifty-sixth session and its annexes based on a draft prepared by the secretariat.

---

<sup>3</sup> [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XI-B-14&chapter=11&clang=\\_en](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-B-14&chapter=11&clang=_en)