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### 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

Sixty-second session Geneva, 3-7 July 2023 Item 17 of the provisional agenda Adoption of the report

# **Report of the Sub-Committee of Experts on the Transport of Dangerous Goods held its sixty-second session**

held in Geneva from 3 to 7 July 2023

Contents

			Part	agraph(s)	Page
I.	Atte	ndan	ce	1-6	5
II.	Org	aniza	tional matters	7-9	5
III.	Ado	ption	of the agenda (agenda item 1)	10-14	6
IV.	Exp	losive	es and related matters (agenda item 2)	15-38	6
	A.	Rev	iew of test series 6	18	7
	B.	Imp	rovement of test series 8	19	7
	C.	Rev	iew of tests in Parts I, II and III of the Manual of Tests and Criteria	20	7
	D. "UN" standard detonators				7
	E. Energetic samples			22	7
	F.	Rev	iew of packaging and transport requirements for ammonium nitrate emulsions	23	7
	G.	Elec	ctrification and alternative fuels and how they will affect transport of explosives	24	7
	H.	Mis	cellaneous	25-38	8
		1.	Amendment to section 51.4.4.2 (e) of the Manual of Tests and Criteria	25-26	8
		2.	Amendment of definition "explosive or pyrotechnic effect"	27-28	8
		3.	Consideration of amendments to chapter 2.17 (Desensitized explosives) of the Globally Harmonized System and section 51 of the Manual of Tests and Criter		8
		4.	Proposal to amend the definition for class 1 explosives	31	8
		5.	Proposal to extend the entry for UN 3375 to provide for all potential packing groups	32	8



		6. Packing instruction P130 and metal on metal contact between explosives and packaging	33	9
		7. Polymerizing substances and self-acceleration polymerization temperature	34	9
		8. Report of the intersessional correspondence group on fireworks	35	9
		<ol> <li>Termination of certain explosive classification approvals due to Model Regula test series 6(d) requirement</li> </ol>	ation 36	9
		10. New special provision and special packing provision of UN 2029	37	9
		11. Introduction of Division 1.4 Entry for 1,4-benzoquinone dioxime (QDO)	38	9
V.	List	ing, classification and packing (agenda item 3)	39-51	10
	A.	Proposal to add class 8 as subsidiary hazard to UN 1040, UN 1041 and UN 3300	39	10
	B.	Amendments on special provisions 145 and 146	40	10
	C.	Status of UN 1362 (CARBON, ACTIVATED) and its redefinition to provide greater clarity	41	10
	D.	Future considerations for medical devices powered by lithium batteries	42	10
	E.	Amendment to 2.6.3.2 of the Model Regulations - classification of infectious substances	43	10
	F.	Present and future products in the liquid petroleum gas industry - proposal for a new UN number	44	11
	G.	Hermetically sealed packaging	45	11
	H.	Classification of UN 2372 1,2-DI-(DIMETHYLAMINO) ETHANE	46	11
	I.	Report from the correspondence group on the differentiation between UN 1950 and UN 2037	47	11
	J.	Carriage of liquid organic hydrogen carrier (LOHC) - new special provision to UN 3082	48	11
	K.	Transport provisions for small quantities of environmentally hazardous paints and printing inks (and related materials)	49-50	12
	L.	Precedence of classes - corrections to 2.0.3.1 and 2.8.2.4 to align with 2.6.2.2.4.1	51	12
VI.	Ele	ctric storage systems (agenda item 4)	52-66	12
	A.	Testing of lithium batteries	52	12
	В.	Hazard based system for classification of lithium batteries	53-54	12
	C.	Transport provisions	55-59	13
		1. Amendments to special provision 384 in the Model Regulations	55	13
		2. Proposal for the lithium battery mark located on the same surface of the packa near the hazard labels	ige 56	13
		3. Future considerations for medical devices powered by lithium batteries	57-58	13
		4. Transport provisions for hybrid batteries with both lithium ion cells and sodium ion cells	59	13
	D.	Damaged of defective lithium batteries	60-61	13
	E.	Sodium-ion batteries	62-65	14
	F.	Miscellaneous	66	14
VII.	Tra	nsport of gases (agenda item 5)	67-71	14
	A.	Global recognition of UN and non-UN pressure receptacles	67	14
	B.	Limited quantities for division 2.2	68	14

	C.	Miscellaneous	69-71	14
		1. Report of the intersessional working group on the pV-product limit for pressure receptacles	69-70	14
		2. Updated ISO standards	71	15
VIII.		cellaneous proposals for amendments to the Model Regulations on the Transport Dangerous Goods (agenda item 6)	72-91	15
	A.	Marking and labelling	72	15
	B.	Packagings, including the use of recycled plastics material	73-75	15
		1. Use of recycled plastics material for flexible intermediate bulk containers	73-74	15
		2. Revision of standard ISO 535:2014	75	15
	C.	Portable tanks	76-82	15
		1. Modification of the definitions of "FRP tank" and "FRP shell" in 6.9.2.1 of the Model Regulations	76	15
		2. Report from the informal working group on fibre reinforced plastics service equipment for portable tanks	77-80	16
		3. Transport of UN 1789 in intermediate bulk containers (IBC02) and portable tanks (T8)	81-82	16
	D.	Other miscellaneous proposals	83-91	16
		1. Amendments to the Spanish language version	83	16
		2. Proposal for the maximum permitted stacking load applicable for overpack with intermediate bulk containers	84-85	16
		3. Units of measurement	86-89	17
		4. Mass and weight	90-91	17
IX.		bal harmonization of transport of dangerous goods regulations with the Model gulations (agenda item 7)	92-96	17
	А.	International Maritime Organisation draft amendments to 5.5.4 of the International Maritime Dangerous Goods code	92-93	17
	B.	Amendments to the Model Regulations proposed by the Ad hoc Working Group on the Harmonization of RID/ADR/ADN with the UN Recommendations on the Transp of Dangerous Goods	oort 94-95	17
	C.	Outcome of the thirty-eighth session of the Editorial and Technical Group (on the IMDG Code)	96	18
X.	Coo	operation with the International Atomic Energy Agency (agenda item 8)	97	18
XI.	Gui	ding principles for the Model Regulations (agenda item 9)	98	18
XII.		tes relating to the Globally Harmonized System of Classification and Labelling Chemicals (GHS) (agenda item 10)	99-101	18
	A.	Testing of oxidizing substances	99	18
	B.	Simultaneous classification in physical hazards and possible combination preceden of hazards	ce 100	18
	C.	Miscellaneous	101	18
XIII.			102	19
XIV.	Imp	elementation of the Model Regulations (agenda item 12)	103	19
XV.	Dangerous goods safety training and capacity building (agenda item 13)			19
XVI.	United Nations 2030 Agenda for Sustainable Development (agenda item 14) 105			19

XVII.	Opportunities to enhance operational efficiency and inclusiveness (agenda item 15) 106		
XVIII.	Other business (agenda item 16)	107-116	19
	A. Report of the Secretary-General on the work of the Committee and its sub-commi during 2021-2022 and ECOSOC Resolution 2023/5	ttees 107-108	19
	B. Consultative relations between the United Nations and non-governmental organizations	109-110	20
	C. Any other business	111-115	20
	1. Infectious substance transport	111	20
	2. Meeting dates for the sixty-third session	112-114	20
	D. Tributes	115-116	20
IXX.	Adoption of the report (agenda item 17)	117	20

#### Annexes

I.	Draft amendments to the twenty-third revised edition of Recommendations on the
	Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.23) <sup>1</sup>

II. Draft amendments to the eighth revised edition of the Manual of Tests and Criteria  $(ST/SG/AC.10/11/Rev.8)^1$ 

<sup>&</sup>lt;sup>1</sup> For practical reasons, this annex has been published as an addendum with the symbol ST/SG/AC.10/C.3/124/Add.1.

## I. Attendance

1. The Sub-Committee of Experts on the Transport of Dangerous Goods held its sixtysecond session from 3 to 7 July 2023, with Mr. D. Pfund (United States of America) as Chair and Mr. C. Pfauvadel (France) as Vice-Chair.

2. Experts from the following countries took part in the session: Australia, Austria, Belgium, Brazil, Canada, China, Finland, France, Germany, Italy, Japan, the Netherlands, Poland, Republic of Korea, Russian Federation, South Africa, Spain, Sweden, Switzerland, United Kingdom and United States of America.

3. Under rule 72 of the rules of procedure of the Economic and Social Council, observers from Luxembourg and Türkiye also took part.

4. Representatives of the Intergovernmental Organization for International Carriage by Rail (OTIF) also attended.

5. Representatives of the Food and Agriculture Organization (FAO), the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO) and the World Health Organization (WHO) were also present.

6. Representatives of the following non-governmental organizations took part in the discussion on items of concern to those organizations: Advanced Rechargeable & Lithium Batteries Association (RECHARGE); Australasian Explosives Industry Safety Group (AEISG); Compressed Gas Association (CGA); Council on Safe Transportation of Hazardous Articles (COSTHA); Dangerous Goods Advisory Council (DGAC); Dangerous Goods Trainers Association (DGTA); European Chemical Industry Council (Cefic); European Confederation of Fuel Distributors (ECFD), European Industrial Gases Association (EIGA); Institute of Makers of Explosives (IME); International Confederation of Plastics Packaging Manufacturers (ICPP); International Dangerous Goods and Containers Association (IDGCA); Medical Device Transport Council (MDTC;) -The Rechargeable Battery Association (PRBA); Responsible Packaging Manugaement Association of Southern Africa (RPMASA); Sporting Arms and Ammunition Manufacturers' Institute (SAAMI); World Coating Council (WWC former IPPIC); and World LPG Association (WLPGA).

## **II.** Organizational matters

*Informal document:* INF.12 (Accreditation, registration, working arrangements and provisional timetable)

7. As announced during the previous session of the Sub-Committee and taking into account the global recovery from impact of the COVID-19 pandemic, the United Nations Office in Geneva returned back to in-person meetings. Therefore, the sixty-second session of the Sub-Committee was held again as an in-person meeting only. In this respect, the officers of the Sub-Committee agreed on the running of the sixty-second session, as indicated in informal document INF.12.

8. Upon the request of the Division of Conference Management (DCM) of the United Nations Office at Geneva, the Sub-Committee was again invited to take an online survey on the quality of conference services provided at the session<sup>2</sup>.

9. The Sub-Committee noted with misappreciation that its meeting started with a considerable delay, due to difficulties of numerous delegates in obtaining their identification badge from UNOG Security and Safety Section. It was noted that also the informal working group also started with a delay due to the unavailability of large rooms in the Palais des Nations and the technical problems to connect remotely in the smaller rooms which have been reserved.

<sup>&</sup>lt;sup>2</sup> Survey at: http://conf.unog.ch/dcmsurvey

### **III.** Adoption of the agenda (agenda item 1)

Documents:	ST/SG/AC.10/C.3/123 (Provisional agenda) ST/SG/AC.10/C.3/123/Add.1 (List of documents and annotations)
Informal documents:	INF.1 and INF.2 (List of documents) INF.40 (Reception by non-governmental organizations)

10. The Sub-Committee adopted the provisional agenda prepared by the secretariat after amending it to take account of informal documents INF.1 and INF.47.

11. Upon the request by IATA and ISO, the Sub-Committee agreed to postpone to its next session consideration of documents ST/SG/AC.10/C.3/2023/23 and ST/SG/AC.10/C.3/2023/24 (listed under agenda item 4 (f)) as well as document ST/SG/AC.10/C.3/2023/21 (agenda item 5 (c)).

12. The Sub-Committee adopted the provisional annotated agenda prepared by the secretariat including the informal documents (see informal document INF.2, as amended).

#### **Status of publications**

13. The Sub-Committee was informed that the English and French versions of the twentythird revised edition of the Model Regulations, the tenth revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) had already been published and that the Spanish, Russian, Chinese and Arabic versions of the Model Regulations and the GHS were under preparation. The publication of the eighth revised edition of the Manual of Tests and Criteria is expected to be published before the end of 2023.

14. The Sub-Committee noted that the seventh version of the guiding principles had been published beginning of 2023 at the website: https://unece.org/guiding-principles.

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

15. After preliminary consideration in plenary, all questions relating to this agenda item were referred to the Working Group on Explosives (EWG), which met from 3 to 6 July 2023 under the chairmanship of Mr. E. de Jong (Netherlands). The Sub-Committee was informed that Mr. Martyn Sime (United Kingdom) would chair the future meetings of the EWG, due to the retirement in near future of Mr. de Jong.

16. Items related to explosives in document ST/SG/AC.10/C.3/2023/2 (Spain) and informal documents INF.35 (China) and INF.39 (COSTHA) were also entrusted to the EWG for consideration.

#### **Report of the Working Group on Explosives**

Informal document: INF.47 (Chair of the EWG)

17. Having considered the report of the EWG and heard the explanations provided by its Chair, the Sub-Committee noted the conclusions listed below for each subject considered under agenda sub-items 2(a) to (h).

#### A. Review of test series 6

Document:	ST/SG/AC.10/C.3/2023/26 (COSTHA, SAAMI)
Informal documents:	INF.25 and INF.27 (SAAMI)
	INF.31 (COSTHA)
	INF.32 (COSTHA, SAAMI)

18. On informal document INF.27, the EWG was undecided on whether a first aid injury would be acceptable for 1.4S. Following the presentation of informal document INF.25 the

group had no proposal to consider. On informal document INF.31, the EWG concluded that risk is not the paramount consideration in transport regulations; however, classification does consider risk to some extent. While some authorities might view safety devices as a security risk, a systematic way of weighing those risks against societal benefits does not exist.

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

19. Documents initially listed under this item were discussed under agenda sub-item 2(f) below.

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

Informal document: INF.36 (United Kingdom, United States of America)

20. There was unanimous consent that this work is valuable and should be continued. Thus, Germany will finalize its review of the current quasi-static burst pressure procedure; the remaining quasi-static burst pressure tests will be performed; the laboratories that have not completed the round-robin tests will do so; and the NOURYON laboratory in the Netherlands will develop a test matrix for diluted quantities of tert-Butyl peroxybenzoate.

#### D. "UN" standard detonators

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

#### E. Energetic samples

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

## F. Review of packaging and transport requirements for ammonium nitrate emulsions

Proposal to remove requirement of test series 8(d) for assessing the suitability of ammonium nitrate emulsions for transport in portable tanks

Document:	ST/SG/AC.10/C.3/2023/16 (IME)	
Informal documents:	INF.10 (RPMASA)	
	INE.37 (IME)	

23. The EWG did not make a recommendation on the proposal and instead supported the establishment of an 8(d)-Informal Correspondence Group (ICG) to continue the work. Belgium, Canada, Germany, Japan, Netherlands, Spain, Sweden, United States of America, AEISG, Cefic and RPMASA joined the 8(d)-ICG.

## G. Electrification and alternative fuels and how they will affect transport of explosives

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

#### H. Miscellaneous

#### 1. Amendment to section 51.4.4.2 (e) of the Manual of Tests and Criteria

Document:

*nent:* ST/SG/AC.10/C.3/2023/6 (China)

25. Following the recommendation by the EWG, the Sub-Committee adopted the amendment in document ST/SG/AC.10/C.3/2023/6 as modified and agreed to keep it in square brackets (see annex II).

26. Further improvements and inconsistencies were identified by the EWG during their review and it agreed that a Burn Rate-ICG will work on them. The findings and suggestions will be considered through subsequent informal or official documents. China will coordinate the Burn Rate-ICG.

#### 2. Amendment of definition "explosive or pyrotechnic effect"

#### Document: ST/SG/AC.10/C.3/2023/12 (Sweden)

27. During the EWG meeting, many experts supported this proposal, and some others opposed it. However, those who opposed were willing to continue the discussion at the next meeting. The EWG recommended accepting proposal 1A in square brackets and continuing the work to review the locations where the term "explosive or pyrotechnic effect" is used to determine if it is appropriate in those instances.

28. The Sub-Committee agreed to adopt the amendment in proposal 1A in document ST/SG/AC.10/C.3/2023/12 and to keep it in square bracket (see annex I).

## **3.** Consideration of amendments to chapter 2.17 (Desensitized explosives) of the Globally Harmonized System and section 51 of the Manual of Tests and Criteria

Document: ST/SG/AC.10/C.3/2023/17 (AEISG)

Informal document: INF.28 (SAAMI)

29. The EWG did not reach a consensus for a recommendation on the proposal in paragraph 13 of document ST/SG/AC.10/C.3/2023/17. AEISG offered to take the comments from the EWG and revise its proposal for the next session. The EWG recommended that the proposals in paragraphs 14 and 15 be accepted.

30. The Sub-Committee adopted the amendments proposed in paragraph 15 of document ST/SG/AC.10/C.3/2023/17 (see annex I).

#### 4. Proposal to amend the definition for class 1 explosives

Document:

ST/SG/AC.10/C.3/2023/18 (AEISG)

31. The majority of the EWG experts supported the proposal as amended. The Sub-Committee adopted the amendment with a modification (see annex I).

#### 5. Proposal to extend the entry for UN 3375 to provide for all potential packing groups

*Document:* ST/SG/AC.10/C.3/2023/19 (AEISG)

Informal document: INF.19 (Sweden)

32. There was insufficient support by the EWG to accept this proposal.

# 6. Packing instruction P130 and metal on metal contact between explosives and packaging

#### Document: ST/SG/AC.10/C.3/2023/25 (SAAMI)

33. The EWG agreed that, in general, metal-on-metal contact should be avoided but recognized situations where it is not an issue, such as in painted drums or ammo cans. The EWG supported the future submission of a document and suggested that only specific UN numbers should be included in that proposal. This could include small arms or others, if appropriate.

#### 7. Polymerizing substances and self-acceleration polymerization temperature

Informal document: INF.3 (Cefic, DGAC)

34. The EWG agreed that the communication of a numerical value of specific selfacceleration polymerization temperatures (SAPTs) does not ensure the safe transport of these polymerizing substances. The EWG agreed that an ICG could work on evaluating industry best practices for ensuring that a stabilizer is present and effective to ensure safety during transport. Canada, France, Germany, Netherlands, Spain, United States of America, Cefic, COSTHA, DGAC and SAAMI agreed to participate in the ICG.

#### 8. Report of the intersessional correspondence group on fireworks

Informal document: INF.5 (Netherlands, Chair of the EWG)

35. The EWG noted the progress report of the ICG on fireworks and welcomed the commitment of the ICG chair to continue his chairmanship. The ICG is expected to meet again online in the coming months.

## 9. Termination of certain explosive classification approvals due to Model Regulation test series 6(d) requirement

Informal document: INF.29 (United States of America)

36. The EWG thanked the United States of America for the explanation.

#### 10. New special provision and special packing provision of UN 2029

Informal document: INF.35 (China)

37. The EWG did not support the proposal as written and agreed that it needed additional development. It was recommended that China reach out to those members who had made suggestions for improvements.

#### 11. Introduction of Division 1.4 Entry for 1,4-benzoquinone dioxime (QDO)

*Informal document:* INF.39 (COSTHA)

38. The EWG supported that COSTHA submit a proposal based on the input that was received from the EWG members.

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

# A. Proposal to add class 8 as subsidiary hazard to UN 1040, UN 1041 and UN 3300

#### Document: ST/SG/AC.10/C.3/2023/5 (Germany)

39. The Sub-Committee noted divided opinions on the proposed amendments. While most experts expressed their support to amend the classification of ethylene oxides by adding class 8 as a subsidiary hazard, some others however believed that the data did not justify this addition. In the lack of problems with the current requirements, most experts agreed that there was not enough data to support the prohibition of transport of UN 1040 and UN 1041 with portable tanks and therefore did not support the deletion of portable tank instruction T50. The expert from Germany volunteered to further work on an updated proposal for consideration at a future session taking into account the comments received.

#### **B.** Amendments on special provisions 145 and 146

#### *Document:* ST/SG/AC.10/C.3/2023/7 (China)

40. The Sub-Committee confirmed that the packing group for alcoholic beverages was based on the alcohol content and not on the flashpoint. The delegations that spoke considered that the proposal by China provided in this respect a better clarity of special provisions 145 and 146. The Sub-Committee adopted the amendments in document ST/SG/AC.10/C.3/2023/7, as amended (see annex I).

# C. Status of UN 1362 (CARBON, ACTIVATED) and its redefinition to provide greater clarity

#### *Document:* ST/SG/AC.10/C.3/2023/13 (Cefic)

41. Some experts who took the floor supported in principle the proposal but preferred to keep flexibility on the different possible methods of carbon activation and to use a special provision for clarification. It was noted that the proposed changes could hamper future technological developments. It was noted that steam activated carbon could easily be excluded from the transport provisions on the basis of further test data being provided. The representative of Cefic indicated that they would take the comments into consideration and submit a revised proposal for the next meeting.

#### D. Future considerations for medical devices powered by lithium batteries

Document:

ST/SG/AC.10/C.3/2023/15 (MDTC)

42. The document initially listed under this sub-item was discussed under agenda item 4(a) below.

# E. Amendment to 2.6.3.2 of the Model Regulations - classification of infectious substances

*Document:* ST/SG/AC.10/C.3/2023/28 (WHO)

43. The Sub-Committee welcomed the initiative by WHO to review the indicative list of category A infectious substances in the Model Regulations taking account of the potential risks for humans and animals as well as the hazard during the transport of such infectious substances. The Sub-Committee agreed to coordinate on a regular basis the update of the non-exhaustive list on the basis of the concerted expertise of WHO and FAO, including the needs in the different regions. The representative of WHO volunteered to develop a proposal

for sustainable and flexible review procedure for consideration at the next session of the Sub-Committee.

# F. Present and future products in the liquid petroleum gas industry - proposal for a new UN number

#### Document: ST/SG/AC.10/C.3/2023/30 (World LPG Association)

44. Some experts preferred to use existing UN numbers instead of a new one. Others felt that blends with higher percentage of dimethyl ether would become a trend in near future and therefore a new UN number would be justified. Some experts raised concerns on the assignment of packing instruction P200, the authorization of bundles of cylinders and multiple-element gas containers (MEGCs) and the assigned special packing provisions. The Sub-Committee welcomed the purpose of the proposal for decarbonization goals. It was agreed to further discuss this subject at the next session based on an updated and more detailed document, taking into account the comments received.

#### G. Hermetically sealed packaging

#### Informal document: INF.6 (Netherlands)

45. The Sub-Committee agreed on the need to clarify in the Model Regulations the term "hermetically sealed". Most of the experts who spoke were of the opinion that it should be defined as "air or gas tight", but in additional to such a definition, an appropriate test method could be considered including a proof that the dangerous goods packagings remain sealed during transport. The expert from the Netherlands invited all experts to send him further written comments and volunteered to work on a more detailed proposal for consideration at the next session.

#### H. Classification of UN 2372 1,2-DI-(DIMETHYLAMINO) ETHANE

#### Informal document: INF.18 (Belgium)

46. The Sub-Committee welcomed the proposal and noted some support in principle. It was agreed that further work was needed and delegates were invited to send detailed information to the expert from Belgium. It was noted that transitional measures would need to be added. The expert from Belgium offered to work on a more detailed document for submission to the next session.

## I. Report from the correspondence group on the differentiation between UN 1950 and UN 2037

#### Informal document: INF.22 (Germany)

47. The Sub-Committee noted the report of the correspondence group and encouraged Germany to continue working on this suitable solution for the differentiation of UN 1950 and UN 2037. It was agreed to resume consideration of this subject at the next session on the basis of an official document.

## J. Carriage of liquid organic hydrogen carrier (LOHC) - new special provision to UN 3082

Informal document: INF.30 (Germany)

48. The Sub-Committee welcomed the proposal by Germany and underlined the importance of safe transport of such liquid organic hydrogen carriers in the context of the green energy transition. Delegates were invited to send their written comments to the expert

from Germany, who volunteered to prepare an official document for consideration at the next session.

# K. Transport provisions for small quantities of environmentally hazardous paints and printing inks (and related materials)

Informal document: INF.11 (WCC)

49. The Sub-Committee agreed to have a more in-depth discussion during an informal session led by WCC as a follow-up on informal document INF.11. During that discussion, ways were discussed on how to go forward with the industry's transport issues related to small packaging of class 9 environmentally hazardous materials.

50. Finally, the representative of WCC offered to prepare an official document for the next session taking into account the valuable feedback received during the informal discussions.

# L. Precedence of classes - corrections to 2.0.3.1 and 2.8.2.4 to align with 2.6.2.2.4.1

Document: ST/SG/AC.10/C.3/2023/11 (Canada, Republic of Korea)

Informal document: INF.41 (Canada, Republic of Korea)

51. The Sub-Committee adopted the amendments proposed in paragraphs 7 to 10 of informal document INF.41 (see annex I).

### VI. Electric storage systems (agenda item 4)

#### A. Testing of lithium batteries

Informal document: INF.23 (PRBA, RECHARGE)

52. The Sub-Committee noted the difficulties encountered in the testing of lithium ion batteries of a new design type with short circuit protection. Most of the experts who took the floor did not accept a general exemption for testing of such new design types. Following the discussion, it was agreed that a differentiation was necessary to clarify the existing provisions. The representative of RECHARGE offered to come back at the next session with a new proposal taking account of the comments received.

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

Informal document: INF.14 (France, RECHARGE)

53. The Sub-Committee welcomed the work progress made by the recent meeting of the informal working group on hazard-based classification of lithium batteries and cells. The principles proposed in informal document INF.14 were agreed and it was recommended to go forward with a two-step approach:

(a) finalise the hazard classification for the Model Regulations and the test protocol for the Manual of Tests and Criteria, including the drafting of amendments, and

(b) develop the transport conditions for each hazard category, taking into account the assessment at a reduced state of charge and the conditions related to packagings.

54. Finally the Sub-Committee agreed to extend in this respect the terms of reference of the informal working group (see para. 53 (b) above). The Chair of the informal working group announced that the group would meet again after the December session of the Sub-Committee (6-8 December 2023).

#### C. Transport provisions

#### 1. Amendments to special provision 384 in the Model Regulations

Document: ST/SG/AC.10/C.3/2023/8 (China)

55. The Sub-Committee acknowledged the purpose of the proposal by China to improve the communication of hazards. One expert did support the amendments proposed in item (a) of document ST/SG/AC.10/C.3/2023/8. However, most experts did not support the current proposal as written. The expert from China offered to review the labelling provisions in his proposal for further consideration at the next session.

## 2. Proposal for the lithium battery mark located on the same surface of the package near the hazard labels

#### *Document:* ST/SG/AC.10/C.3/2023/10 (China)

56. Some experts supported in principle the proposal, but preferred to insert the text of the note into the provisions. Others were hesitant to adopt already at this stage the text as proposed and preferred to study it in depth. The expert from China volunteered to review his proposal and to submit a new proposal for the next session.

#### 3. Future considerations for medical devices powered by lithium batteries

*Document:* ST/SG/AC.10/C.3/2023/15 (MDTC)

57. The Sub-Committee noted divided opinions on the proposed amendments. While some experts expressed their support in principle on the purpose of the document, others felt that instead of new UN numbers a special provision would be more appropriate. Most experts however considered the definition of "medical device" as proposed in paragraph 17 of document ST/SG/AC.10/C.3/2023/15 by far too broad and were of the opinion that an amendment to the Model Regulations was not justified as no clear evidence was provided for the need of differentiation for the transport of such devices. It was noted that the current work on hazard-based classification of lithium batteries might provide a solution to this issue.

58. It was recommended that the issue raised by MDTC should be addressed by the ICAO dangerous goods panel as the concern is mainly related to air transport. The representative of ICAO reported on the outcome of discussions within the dangerous goods panel.

## 4. Transport provisions for hybrid batteries with both lithium ion cells and sodium ion cells

#### Informal document: INF.33 (China)

59. The Sub-Committee noted general support for the intent and approach of the proposal. Some experts were of the opinion that further adaptations were needed in the current provisions for testing (e.g. thresholds) and also special provisions (e.g. 388). The expert from China offered to further develop his proposal and to submit a new proposal to the next session.

#### D. Damaged or defective lithium batteries

#### Informal document: INF.9 (Belgium)

60. It was recalled that, for the transport of critically damaged cells and batteries, the initial intention of the Sub-Committee was to introduce packing and transport conditions aimed at making these cells and batteries inert and non-reactive during transport. Since the Sub-Committee could not come to a harmonized text describing the wide range of possible solutions to achieve this goal, it was decided to introduce packing instructions P911/LP906 with a set of requirements aimed at containing a dangerous reaction during the transport of critically damaged cells and batteries. In addition, it was decided to introduce the last sentence of the fifth paragraph of special provision 376 to allow the competent authority to approve alternative packaging methods and/or alternative transport conditions, which achieve an acceptable level of safety.

61. The expert from Belgium volunteered to come back at the next session with a revised proposal taking account of the comments received, including a clarification on the communication and a detailed justification.

#### E. Sodium ion batteries

#### Informal document: INF.24 (ICAO)

62. Regarding the limitation on dangerous goods contained in batteries specified in paragraph (f) of special provision 400, it was noted that existing batteries typically contain an amount of electrolyte well below the limited quantity limits, although it is expected that larger batteries may appear in the future. The representative of RECHARGE offered to provide information on typical mass of such batteries concerned and the percentage of electrolyte.

63. Regarding the markings specified in paragraph (c) of special provision 400, opinions were divided on the benefits and drawbacks of including this marking on such packages.

64. Most of the experts who took the floor supported the editorial amendments proposed.

65. It was agreed that the editorial amendments would be presented in an official document by ICAO at the next session.

#### F. Miscellaneous

Documents:

ST/SG/AC.10/C.3/2023/23 and ST/SG/AC.10/C.3/2023/24 (IATA)

66. The Sub-Committee recalled its decision to defer consideration of the official documents listed under this item to the December 2023 session (see para. 11 above).

## VII. 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.** Limited quantities for division 2.2

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

#### C. Miscellaneous

## 1. Report of the intersessional working group on the pV-product limit for pressure receptacles

*Document:* ST/SG/AC.10/C.3/2023/1 (Germany on behalf of the informal working group)

*Informal document:* INF.44 (Germany)

69. The Sub-Committee welcomed the final report on the outcome of the informal working group. It adopted the proposals P.1 to P.4 in document ST/SG/AC.10/C.3/2023/1 and agreed to keep them in square brackets (see annex I).

70. The Sub-Committee noted some comments on the need to clarify the additional amendments to 6.2.3.5 in informal document INF.44 and to add marking provisions. It was agreed to resume consideration at the December 2023 session on the basis of an official document by Germany.

#### 2. Updated ISO standards

*Document:* ST/SG/AC.10/C.3/2023/21 (ISO)

71. The Sub-Committee recalled its decision to defer consideration of the official document listed under this item to the December 2023 session (see para. 11 above). The secretariat recalled that the standards listed in the document have recently been circulated by email.

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

#### A. Marking and labelling

*Document:* ST/SG/AC.10/C.3/2023/10 (China)

72. The document initially listed under this item was discussed under agenda item 4(c) above (see para. 56 above).

#### B. Packagings, including the use of recycled plastics material

#### 1. Use of recycled plastics material for flexible intermediate bulk containers

Document: ST/SG/AC.10/C.3/2023/27 (Belgium)

73. Most experts who spoke supported in principle the proposal and recalled the Sub-Committee's decision to allow an increased use of recycled plastics material through recyclable polymer and quality assurances procedures. Others were of the opinion that the proposed text was unnecessary as the provision in 6.5.5.2.8 was not referring to plastics material but materials in general (such as components and parts) and the use of recycled plastics materials was already permitted under the current wording.

74. The expert from Belgium invited all delegates to send him their written comments. He offered to prepare for the next session a revised document, taking into account the feedback received.

#### 2. Revision of standard ISO 535:2014

Informal document: INF.20 (Spain)

75. Most experts who took the floor supported in principle the amendments proposed in informal document INF.20. Some experts however preferred to proceed with a thorough check before adopting the amendments. The secretariat was requested to reach out to ISO for an electronic copy of standard ISO 535:2023 for circulation to delegates. The Sub-Committee agreed to resume discussion at the next session on the basis of an official document by Spain.

#### C. Portable tanks

## 1. Modification of the definitions of "FRP tank" and "FRP shell" in 6.9.2.1 of the Model Regulations

Document:	ST/SG/AC.10/C.3/2023/20 (Poland)
Informal document:	INF.43 (Russian Federation on behalf of the informal working group on FRP service equipment)

76. The Sub-Committee adopted the amendments proposed in informal document INF.43 and agreed to keep them in square brackets, subject to a final review at a future session. The expert from Poland indicated that he would bring a revised proposal to the next session taking into account the comments received.

## 2. Report from the informal working group on fibre reinforced plastics service equipment for portable tanks

*Document:* ST/SG/AC.10/C.3/2023/22 (Russian Federation on behalf of the informal working group on FRP service equipment)

*Informal document:* INF.42 (Russian Federation on behalf of the informal working group on FRP service equipment)

77. The Sub-Committee noted the work progress of the informal working group on FRP service equipment for portable tanks made during their meeting held from 3-5 July 2023.

78. Most experts supported the proposals in informal document INF.42 to amend the Model Regulations and the Manual of Tests and Criteria. Others preferred to have a final review with their national experts before adoption.

79. To ensure a good quality of the reproduction of figures in the Model Regulations and the Manual of Tests and Criteria, delegates were reminded to provide the secretariat with editable vector graphics.

80. The Sub-Committee agreed to resume discussion at its December 2023 session on the basis of an official document by the Russian Federation.

## 3. Transport of UN 1789 in intermediate bulk containers (IBC02) and portable tanks (T8)

Document:	ST/SG/AC.10/C.3/2023/29 (IDGCA)
Informal documents:	INF.21 (ICIBCA, ICPP)
	INF.38 (IDGCA)

81. The experts who took the floor were of the opinion that the current provisions in 4.1.4.2 allow IBCs to be equipped with bottom discharge devices for the transport of dangerous goods, which is however not the case for portable tanks. Most experts did not support the need to amend 4.1.4.2 in this respect and preferred to keep the current provisions as outlined in informal document INF.21.

82. The representative of IDGCA added that the questions raised in his document were triggered by an incident. He announced his intention to share with the Sub-Committee the outcome of the investigations, once concluded.

#### D. Other miscellaneous proposals

#### 1. Amendments to the Spanish language version

Document: ST/SG/AC.10/C.3/2023/4 (Mexico, Spain)

Informal document: INF.7 (Spain)

83. The Sub-Committee adopted the amendments proposed in document ST/SG/AC.10/C.3/2023/4 and in informal document INF.7 to the Spanish versions of the Model Regulations and the Manual of Tests and Criteria (see annex I).

## 2. Proposal for the maximum permitted stacking load applicable for overpack with intermediate bulk containers

Document: ST/SG/AC.10/C.3/2023/9 (China)

84. While several experts felt that further work and discussions were needed, other experts raised caution on the stacking of overpacks and preferred to clarify the provisions to prohibit such practices for the transport or handling of dangerous goods.

85. The Sub-Committee acknowledged the complexity of this subject and agreed to resume discussion at its next session on the basis of a more detailed proposal by China.

#### 3. Units of measurement

Document: ST/SG/AC.10/C.3/2023/2 (Spain)

86. The Sub-Committee adopted the amendments in proposals 1 and 2 of document ST/SG/AC.10/C.3/2023/2 (see annex I).

87. Some experts were of the opinion that the amendments in proposals 4 and 5 needed some further improvements to ease the application.

88. The opinions of the EWG were divided in proposal 6 on whether the term "net explosives mass (NEM)" should be removed from the Model Regulations. There was unanimous agreement that NEM is scientifically correct but EWG also recognized the widespread use of the term "net explosives weight".

89. The Sub-Committee agreed to resume discussion at its next session on the basis of a revised proposal by Spain.

#### 4. Mass and weight

Document: ST/SG/AC.10/C.3/2023/3 (Spain)

Informal document: INF.8 (Spain)

90. The Sub-Committee adopted the amendments proposed in document ST/SG/AC.10/C.3/2023/3, as amended (see annex I).

91. Following an informal meeting on informal document INF.8, the expert from Spain volunteered to submit an updated proposal to the next session.

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

## A. International Maritime Organisation draft amendments to 5.5.4 of the International Maritime Dangerous Goods code

*Document:* ST/SG/AC.10/C.3/2023/14 (France)

Informal document: INF.45 (France)

92. Most experts who took the floor were of the opinion that the provisions in 5.5.4.3 and 5.5.4.4 proposed in document ST/SG/AC.10/C.3/2023/14 on data loggers, sensors and cargo tracking devices were appropriate for maritime transport but not necessarily for other transport modes. The Sub-Committee preferred to keep the provision in the Model Regulations basic and adopted the amendments to 5.5.4, 5.5.4.1 and 5.5.4.2 as amended (see annex I).

93. The expert from the United States of America volunteered to work with the IMO secretariat to prepare for the next session a paper with more a detailed justification for the new provisions in 5.5.4.3 and 5.5.4.4 of the IMDG code.

#### B. Amendments to the Model Regulations proposed by the Ad hoc Working Group on the Harmonization of RID/ADR/ADN with the UN Recommendations on the Transport of Dangerous Goods

Informal document: INF.13 (Secretariat)

94. The Sub-Committee considered that the amendments to 2.0.5.2, P006 and LP03 were not editorial ones since they originated from the application of existing provisions for articles containing lithium batteries to articles containing sodium ion batteries. It was recalled that the initial intention was to apply the same provisions for lithium batteries and sodium ion batteries. The Sub-Committee invited the secretariat to submit these proposals in an official document to the next session for confirmation. Other amendments proposed in Part II of

informal document INF.13 were considered as editorial ones and were adopted by the Sub-Committee (see annex I).

95. For Part III, the Sub-Committee noted that the change of the name of the mark should be further discussed on the basis of an official proposal. On the question raised in Part IV, interested delegations were invited to send to the secretariat their comments on mixed packing provisions for UN 0514.

# C. Outcome of the thirty-eighth session of the Editorial and Technical Group (on the IMDG Code)

Informal document: INF.17 (IMO)

96. The expert from IMO reported on the outcome of recent session of the Editorial and Technical Group of the IMO Sub-Committee on carriage of cargoes and containers (CCC). The Sub-Committee noted that some of the clarifications in informal document INF.17 could have consequences in multimodal transport and thus result in a number of future amendments to the Model Regulations.

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

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

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

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

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

#### A. Testing of oxidizing substances

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

## B. Simultaneous classification in physical hazards and possible combination precedence of hazards

Informal document: INF.26 (Germany)

100. The Sub-Committee noted the status report of the informal working group on combinations of physical hazards.

#### C. Miscellaneous

Aerosols – Alignment of special provision 63 with special provision 362

Informal document: INF.4 (FEA)

101. In the absence of a representative of FEA, the Sub-Committee did not consider the document.

# XIII. Unified interpretations of the Model Regulations (agenda item 11)

Informal document: INF.34 (China)

102. The Sub-Committee agreed in principle with the intent of this document. The expert from China invited all delegates to send him their written comments and announced that following the outcome of the discussions at the forty-forth session of the GHS, China may consider submitting a revised proposal as an official document to the next session.

## **XIV.** Implementation of the Model Regulations (agenda item 12)

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

# XV. Dangerous goods safety training and capacity building (agenda item 13)

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

# XVI. United Nations 2030 Agenda for Sustainable Development (agenda item 14)

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

# XVII. Opportunities to enhance operational efficiency and inclusiveness (agenda item 15)

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

## XVIII. Other business (agenda item 16)

# A. Report of the Secretary-General on the work of the Committee and its sub-committees during 2021-2022 and ECOSOC Resolution 2023/5

Informal documents: INF.16 and Add.1 (Secretariat)

107. A member of the secretariat informed the Sub-Committee that on 7 June 2023, the Economic and Social Council had considered the report of the Secretary-General on the work of the Committee and its sub-committees during 2021-2022 (document E/2023/56) and had adopted without change the resolution prepared by the Committee at its eleventh session (ST/SG/AC.10/50, annex IV), as reproduced in informal document INF.16/Add.1.

108. The programme of work of the Committee included its calendar of meetings and that of its sub-committees for 2023-2024 as specified in paragraph 50 of the report of the Secretary-General on the work of the Committee, contained in  $E/2023/56.^3$ 

<sup>&</sup>lt;sup>3</sup> https://documents-dds-ny.un.org/doc/UNDOC/GEN/N23/087/79/PDF/N2308779.pdf?OpenElement

### **B.** Consultative relations between the United Nations and nongovernmental organizations

#### Informal document: INF.15 (Secretariat)

109. 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).

110. The secretariat pointed out that for some countries, the information on the expert accredited to represent the government was missing, incomplete or outdated. It was also recalled that only NGOs in consultative status with ECOSOC or with the Committee or its sub-committees concerned with matters falling within the competence of the Committee or its sub-committees, are entitled to participate in the sessions. NGOs which are in consultative status with the Committee and its subcommittees (but not with ECOSOC) are invited to submit information about any changes in name to the secretariat. More detailed information and links may be consulted in informal document INF.15.

#### C. Any other business

#### 1. Infectious substance transport

#### Informal document: INF.46 (COSTHA, DGTA, FAO)

111. The Sub-Committee noted the request in informal document INF.46 to organize in conjunction with the forthcoming sessions of the TDG and GHS sub-committees informal meetings on infectious substance transport. The Sub-Committee endorsed that request and invited the organizers to arrange already in advance some virtual preparation meetings.

#### 2. Meeting dates for the sixty-third session

112. The Sub-Committee noted the meeting dates and document submission deadlines for its sixty-third session as follows:

- 113. Meeting dates: from 27 November to 6 December 2023;
- 114. Deadline for submission of official documents: 1 September 2023.

#### **D.** Tributes

115. Learning that Mr. Ed de Jong (Netherlands) would retire soon and will no longer attend the sessions, the Sub-Committee expressed its deep appreciation for the excellent contributions since 1993 to the work of both sub-committees and wished him a long and happy retirement. The Chair thanked him for his substantive contributions over the last fifteen years as chair of the informal working group on explosives.

116. The Sub-Committee noted that Mrs. Laurence Berthet, who had provided with great devotion secretariat services since 2007 has retired in May 2023 and would no longer attend the future sessions. The Sub-Committee acknowledged her support and dedication during all the years of service and wished her a long and happy retirement.

## IXX. Adoption of the report (agenda item 17)

117. In accordance with established practice, the Sub-Committee adopted the report on its sixty-second session and its annexes on the basis of a draft prepared by the secretariat.