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**Administrative Committee of the
European Agreement concerning the International Carriage
of Dangerous Goods by Inland Waterways (ADN)**

Twenty-fourth session

Geneva, 31 January 2020

Item 5 of the provisional agenda

Work of the Safety Committee

Proposed amendments to the Regulations annexed to ADN for entry into force on 1 January 2021

Note by the secretariat*

1. At its twenty-third session, the ADN Administrative Committee asked the secretariat to consolidate in a single document all the draft amendments adopted in 2018 and 2019 that had not yet been approved by the Administrative Committee (ECE/ADN/51, para.15).
2. The present document is a consolidation of the proposed amendments to the Regulations annexed to ADN that the Safety Committee has adopted for entry into force on 1 January 2021:
 - (a) at its thirty-fifth session (ECE/TRANS/WP.15/AC.2/72, annex I);
 - (b) at its thirty-fourth session (ECE/TRANS/WP.15/AC.2/70, annex I);
 - (c) at its thirty-third session (ECE/TRANS/WP.15/AC.2/68, annex I).
3. Each proposed amendment is followed by a reference to the document in which the amendment was proposed.
4. The Safety Committee is expected to verify at its thirty-sixth session the proposed amendments which are still in square brackets, if any and to report its conclusions to the ADN Administrative Committee which will be invited to endorse all amendments.

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Chapter 1.1

1.1.3.6.1 Amend to read as follows:

“1.1.3.6.1 In the event of the carriage of dangerous goods in packages, the provisions of ADN other than those of 1.1.3.6.2 are not applicable when the gross mass of all the dangerous goods carried does not exceed 3,000 kg and for the individual classes does not exceed the quantity that is indicated in the Table below:

<i>Class</i>	<i>Substances or articles in packages</i>	<i>Exempted quantities in kg:</i>
all	Carriage in tanks, of any Class	0
1	Substances and articles of Class 1	0
2	- Substances and articles of Class 2, groups T, TF, TC, TO, TFC or TOC, according to 2.2.2.1.3 and - Aerosols of groups C, CO, FC, T, TF, TC, TO, TFC and TOC according to 2.2.2.1.6;	0
	- Substances and articles of Class 2 of group F in accordance with 2.2.2.1.3 or; Aerosols of group F according to 2.2.2.1.6;	300
	Any other substances of Class 2	3000
3	Substances and articles of Class 3, Packing Group I	300
	Any other substances of Class 3	3000
4.1	Substances and articles of Class 4.1 for which a danger label of model No. 1 is required in column (5) of Table A of Chapter 3.2;	0
	Any other substances and articles of Class 4.1, Packing Group I	300
	Any other substances and articles of Class 4.1	3000
4.2	Substances and articles of Class 4.2, Packing Group I	300
	Any other substances and articles of Class 4.2	3000
4.3	Substances and articles of Class 4.3, Packing Group I	300
	Any other substances and articles of Class 4.3	3000
5.1	Substances and articles of Class 5.1, Packing Group I	300
	Any other substances and articles of Class 5.1	3000
5.2	Substances and articles of Class 5.2 for which a danger label of model No. 1 is required in column (5) of Table A of Chapter 3.2;	0
	Any other substances and articles of Class 5.2	3000
6.1	Substances and articles of Class 6.1, Packing Group I	0
	Any other substances and articles of Class 6.1	3000
6.2	Substances and articles of class 6.2, Category A	0
	Any other substances and articles of Class 6.2	3000

<i>Class</i>	<i>Substances or articles in packages</i>	<i>Exempted quantities in kg:</i>
7	Substances and articles of Class 7 under UN Nos. 2908, 2909, 2910 and 2911	3000
	Any other substances and articles of Class 7	0
8	Substances and articles of Class 8, Packing Group I	300
	Any other substances and articles of Class 8	3000
9	All substances and articles of Class 9	3000

”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.1.3.6.2 Amend as follows:

Insert a new subparagraph (b), to read as follows:

“(b) The requirements of sections 1.10.1, 1.10.2 and 1.10.3 apply to packages bearing UN Nos. 2910 and 2911 of Class 7 if the activity level (per package) exceeds the A₂ value.”.

Re-number existing paragraphs accordingly.

In subparagraph (g) (former (f)) Replace “under (d) and (e)” by “under (e) and (f)”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.1.3.6 Insert “1.1.3.6.3 and 1.1.3.6.4 *Reserved*”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

1.1.3.6 Insert a new 1.1.3.6.5 to read as follows:

“1.1.3.6.5 For the purposes of this sub-section, dangerous goods exempted in accordance with 1.1.3.1 (a), (b) and (d) to (f), 1.1.3.2 to 1.1.3.5, 1.1.3.7, 1.1.3.9 and 1.1.3.10 shall not be taken into account.”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

Chapter 1.2

1.2.1 Amend the definition for “*Explosion group*” to read as follows:

“*Explosion group/subgroup* means a grouping of flammable gases and vapours according to their maximum experimental safe gaps (standard gap width, determined in accordance with specified conditions) and minimum ignition currents, and of electrical apparatus intended to be used in a potentially explosive atmosphere (see EN IEC 60079-0:2012), installations, equipment and self-contained protection systems. For self-contained protection systems, the explosion group II B is subdivided into subgroups.”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

1.2.1 Amend the definition for *Slops* to read as follows:

“*Slops* means a mixture of cargo residues with washing water, rust or sludge which may or may not be suitable for pumping;”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

1.2.1 In the definition for “*Vapour return piping (on shore)*” delete the last sentence.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.2.1 Add the following new definition in alphabetical order:

“*Oil sludge* means residual hydrocarbons from the normal operation of seagoing ships, e.g. residues from the treatment of fuel or lubricating oils for main or auxiliary machinery,

waste oil obtained by separation from oil filtering installations, oily residues collected in pits and residues of hydraulic and lubricating oils.

NOTE: In ADN, the definition of MARPOL also includes residues resulting from the treatment of bilge water on board sea-going vessels.”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

Chapter 1.6

1.6.7.2.1.3 Delete and insert “1.6.7.2.1.3 (Deleted)”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.6.7.2.2.2 Delete transitional provision for 7.2.3.20.1: Fitting of ballast tanks and compartments with level indicators.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.6.7.2.2.2 Delete transitional provision for 8.1.6.2: Hose assemblies.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.6.7.2.2.2 Delete the transitional provision for 9.3.1.8.4, 9.3.2.8.4, 9.3.3.8.4.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

1.6.7.2.2.2 Delete transitional provision for 9.3.1.21.5 (b), 9.3.2.21.5 (b), 9.3.3.21.5 (d): Installation of on-board pump switch-off from the shore.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.6.7.2.2.2 Delete transitional provision for 9.3.2.21.5 (c): Device for rapid shutting off of refuelling.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.6.7.2.2.2 Delete transitional provision for 9.3.1.41.2, 9.3.2.41.2, 9.3.3.41.2, in conjunction with 7.2.3.41: Heating, cooking and refrigerating appliances.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.6.7.2.2.3.1 Delete and insert “1.6.7.2.2.3.1 (Deleted)”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

1.6.7.2.2.2 Add the following additional transitional provision:

“

1.2.1	Vacuum valve	N.R.M. from 1 January 2019
	Deflagration safety	Renewal of certificate of approval after 31 December 2034
	Test according to standard EN ISO 16852:2016	The deflagration safety shall be tested according to EN 12874:2001 including the manufacturer’s confirmation under Directive 94/9/EC or equivalent on board vessels built or modified from 1 January 2001 or if the vacuum valve has been replaced since 1 January 2001.
	Proof of conformity with applicable requirements	In other cases, they shall be of a type approved by the competent authority for the use prescribed.

”

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

1.6.7.5 Amend to read as follows:

“1.6.7.5 Transitional provisions concerning the modification of tank vessels

1.6.7.5.1 For vessels for which a modification of the cargo area, in order to achieve a Type N double-hull vessel, has been accomplished before 31 December 2018, the following conditions apply:

- (a) The modified or new cargo area shall comply with the provisions of these regulations. Transitional provisions under 1.6.7.2.2 may not be applied for the cargo area.
- (b) The vessel parts outside of the cargo area shall comply with the provisions of these regulations. However, transitional provisions under 1.6.7.2.2 for 1.2.1, 9.3.3.0.3 (d), 9.3.3.51.3, 9.3.3.52.4 last sentence, applicable until 31 December 2018, may be applied.
- (c) If goods which require explosion protection are entered in the list according to 1.16.1.2.5, accommodation and wheelhouses shall be equipped with a fire alarm system according to 9.3.3.40.2.3.
- (d) The application of this sub-section shall be entered in the certificate of approval under No. 13 (Additional observations).

1.6.7.5.2 Modified vessels may continue to be operated beyond 31 December 2018. The time limits stipulated in the transitional provisions under 1.6.7.2.2 for 1.2.1, 9.3.3.0.3 (d), 9.3.3.51.3, 9.3.3.52.4 last sentence, applicable until 31 December 2018, shall be observed.”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

Chapter 1.8

1.8.1.2 Add a new paragraph 1.8.1.2.4 to read as follows:

“1.8.1.2.4 Checklists used by the authorities of Contracting Parties shall be drawn up at least in the language of the issuing country and also, if that language is not French, English or German, in French, English or German¹.”.

¹ The checklist is not included in the documents to be kept on board according to 8.1.2.1.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

Chapter 1.10

1.10.4 Amend the beginning of the first sentence to read as follows: “Except for radioactive material bearing UN Nos. 2910 and 2911, if the activity level (per package) exceeds the A₂ value, the requirements of 1.10.1, 1.10.2 and 1.10.3 do not apply...”. Remainder unchanged.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

Chapter 1.16

1.16.1.3.2 In last sentence, replace “Number 12” with “Number 13”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

Chapter 2.2

2.2.41.2.3 At the end, delete: “Barium azide with a water content less than 50 % (mass).”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

2.2.61.1.14 Amendment to footnote 3 does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

2.2.9.1.2 At the end insert: “M12 Other substances and articles presenting a danger during carriage in tank vessels, but not meeting the definitions of another Class”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

2.2.9.1.10.3 Amendment to footnote 3 does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

2.2.9.3 In classification code M6, delete the entries for substance numbers 9005 and 9006.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

2.2.9.3 List of entries In subdivision “M11”, add the following entries: “2216 FISH MEAL, STABILISED” and “2216 FISH SCRAP, STABILISED”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

2.2.9.3 List of entries: Insert the following new entry at the end:

	Only substances and articles listed in Table A of Chapter 3.2 are subject to the provisions for Class 9 under this classification code, as follows:
Other substances and articles presenting a danger during carriage in tank vessels, but not meeting the definitions of another Class	M12
	9003 SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C AND NOT MORE THAN 100 °C, which do not belong to another class
	9004 DIPHENYLMETHANE-4, 4'-DIISOCYANATE
	9005 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN
	9006 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

Chapter 3.1

3.1.2.8.1.4 Delete and insert “3.1.2.8.1.4 Deleted”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

Chapter 3.2

3.2.3.1 In the explanatory text for column (3b), in the penultimate indent, delete “, 8”. Add a new indent right after to read as follows:

“- For dangerous substances or articles of Class 8, the codes are explained in 2.2.8.1.4.1;”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

Chapter 3.2, Table A

3.2.1 For UN Nos. 2074, 3468 and 1153, packing group II, in column (8) delete “T”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.1 For UN No. 2216, amend column (2) to read as follows: “FISH MEAL, STABILISED or FISH SCRAP, STABILISED”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.1 For UN Nos. 2288, 2582, 2785, 2984 and 3429, in column (8) insert “T”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.1 Amendment for UN No. 2785 does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.1 For UN No. 3456 in column (8) delete "T3".

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.1 For substance number 9001, amend column (2) to read as follows: "SUBSTANCE WITH A FLASHPOINT ABOVE 60° C, HEATED within a range of 15 K below the flashpoint".

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.1 For substance numbers 9003, 9004, 9005 and 9006, in column 3(b) insert "M12".

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

Chapter 3.2, 3.2.3

3.2.3.1, 3.2.3.3 and 3.2.4.3, column (20) Delete remark 29 and insert "Deleted".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

3.2.3.1 In "Explanations concerning Table C", for column (20) "Additional requirements/Remarks", amend the end of remark 44 to read as follows:

"...or equivalent that allows for an assignment to subgroups II B3, II B2 or II B1 of explosion group II B or explosion group II A."

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

Chapter 3.2, Table C

In the heading, add a new second row to read as follows:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
7.2.4.21	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1

Amendments to the descriptions of column 3 (b) and column (7) do not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

3.2.3.2 For all applicable entries, in column (20) delete "29".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1010, 1,2-BUTADIENE, STABILIZED, amend column (2) to read as follows: "BUTADIENES (1,2-BUTADIENE), STABILIZED".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1010, 1,3-BUTADIENE, STABILIZED, amend column (2) to read as follows: "BUTADIENES (1,3-BUTADIENE), STABILIZED".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1020, amend column (2) to read as follows: "CHLOROPENTAFLUOROETHANE (refrigerant gas R 115)".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1108, amend column (2) to read as follows: "1-PENTENE (n-amylene)".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

3.2.3.2 Amendment to UN No. 1177 does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

For UN No. 1179, amend column (16) to read "II A".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1193, amend column (2) to read as follows: "ETHYL METHYL KETONE (methyl ethyl ketone)".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1212, amend column (2) to read as follows: "ISOBUTANOL (isobutyl alcohol)".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1216, amend column (16) to read "II B (II B1)".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1219, amend column (2) to read as follows: "ISOPROPANOL (isopropyl alcohol)".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1268, (16 entries with more than 10 % Benzene), in column (20) delete "27".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1274 (all entries), amend column (2) to read as follows: "n-PROPANOL (propyl alcohol, normal)".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 1823, SODIUM HYDROXIDE amend column (2) to read as follows: "SODIUM HYDROXIDE, SOLID".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN Nos. 1993 (first 6 entries), 3145 (all entries), 3295 (first 6 entries), 9002 (all entries), 9005 and 9006, in column (20) add "27".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

3.2.3.2 For UN No. 2785, in column (2) replace "(3-MÉTHYLMERCAPTO-PROPIONALDÉHYDE)" by "(3-METHYLMERCAPTO- PROPIONALDEHYDE)".

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

For UN No. 3256, "ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (Low QI Pitch)" amend column (16) to read "II B (II B2)".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 3295, HYDROCARBONS, LIQUID, N.O.S. CONTAINING ISOPRENE AND PENTADIENE, STABILIZED (all entries), in column (20) delete "27".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For UN No. 3494 (all entries), in column (20) delete "27".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

For substance number 9000, in column (2) delete "NHYDROUS".

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

3.2.3.2 For substance number 9001, amend column (2) to read as follows: "SUBSTANCE WITH A FLASHPOINT ABOVE 60 °C, HEATED within a range of 15 K below the flashpoint".

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.3.2 For substance numbers 9003, 9004, 9005 and 9006, in column 3(b) insert “M12”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

For substance number 9003 (all entries), in column (2) delete “or SUBSTANCES WHERE 60 °C < flash-point ≤ 100 °C”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

Add the following entry:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OIL SLUDGE)	9	M6	III	9+ CMR+ N1	N	2	3		10	97		3	Yes			No	PP, EP, TOX, A	0	

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

3.2.3.3 Amend scheme A to read as follows:

“Scheme A: Criteria for cargo tank equipment in vessels of type C

Ascertain which substance/cargo tank characteristics in the first three columns are relevant. Select the applicable row in the relevant column. The cargo tank equipment requirements for C-vessels are then described in this row in the fourth column.

Substance/cargo tank characteristics			Requirements arising
Cargo tank internal pressure at liquid temperature of 30 °C and gaseous phase temperature of 37.8 °C > 50 kPa	Cargo tank internal pressure at liquid temperature of 30 °C and gaseous phase temperature of 37.8 °C ≤ 50 kPa	Cargo tank internal pressure unknown, owing to absence of certain data	Cargo tank equipment
Refrigerated			With refrigeration (No. 1 in column (9))
Non-refrigerated	Cargo tank internal pressure at 50 °C > 50 kPa without water spraying	Boiling point ≤ 60°C	Pressure tank (400 kPa)
	Cargo tank internal pressure at 50 °C > 50 kPa with water spraying	60 °C < boiling point ≤ 85°C	Pressure relief valve/high velocity vent valve opening pressure: 50 kPa, with water-spraying system (No. 3 in column (9))
	Cargo tank internal pressure at 50 °C ≤ 50 kPa		Pressure relief valve/high velocity vent valve opening pressure as calculated, but at least 10 kPa
		85 °C < boiling point ≤ 115°C	Pressure relief valve/high velocity vent valve opening pressure: 50 kPa
		Boiling point > 115°C	Pressure relief valve/high velocity vent valve opening pressure: 35 kPa

”

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.3.3 Amend scheme C to read as follows:

“Scheme C: Criteria for equipment of vessels of type N with open cargo tanks

As certain which substance/characteristics in the first three columns are relevant. Select the applicable row in the relevant column. The cargo tank equipment requirements for N-vessels with open cargo tanks are then described in this row in the fourth column.

Substance characteristics			Requirements arising
Classes 3 and 9	Flammable substances	Corrosive substances	Cargo tank equipment
$23^{\circ}\text{C} \leq \text{flash-point} \leq 60^{\circ}\text{C}$	Flash-point $> 60^{\circ}\text{C}$ carried while heated to $\leq 15\text{ K}$ below flash-point or Flash-point $> 60^{\circ}\text{C}$, at or above their flash-point	Acids, transported while heated or flammable substances	With flame-arrester
$60^{\circ}\text{C} < \text{flash-point} \leq 100^{\circ}\text{C}$ or elevated temperature substances of Class 9		Non-flammable substances	Without flame-arrester

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

3.2.3.3 and 3.2.4.3 H, column (16) Amend to read as follows:

“Flammable substances shall be assigned to an explosion group on the basis of their maximum experimental safe gaps.

The maximum experimental safe gaps shall be determined in accordance with standard IEC 60079-20-1.

The different explosion groups are as follows:

Explosion group	Maximum experimental safe gap in mm
II A	> 0.9
II B	≥ 0.5 to ≤ 0.9
II C	< 0.5

Where self-contained protection systems are in place, the different subgroups for explosion group II B are as follows:

Explosion group/subgroup	Maximum experimental safe gap in mm
II B1	> 0.85 to ≤ 0.9
II B2	> 0.75 to ≤ 0.85
II B3	> 0.65 to ≤ 0.75
II B	≥ 0.5 to ≤ 0.65

When anti-explosion protection is required and the relevant data are not provided, reference shall be made to explosion group II B, considered safe.”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

3.2.3.3 and 3.2.4.3, column (20) Amend remark 27 to read as follows:

“Reference shall be made in column (20) to remark 27 for substances for which the reference N.O.S. or a generic reference is made in column (2) and for which the proper shipping names are not already supplemented with the technical name of the goods or additional information concerning the benzene content.”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

Chapter 5.4

5.4.3.2 Amend to read as follows:

“5.4.3.2 These instructions shall be provided by the carrier to the master in the language(s) that the master and the expert can read and understand before loading. The master shall ensure that each member of the crew and any other person on board concerned understands and is capable of carrying out the instructions properly.”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

Chapter 7.2

7.2.3.7 Delete 7.2.3.7.3 to 7.2.3.7.6 and insert “7.2.3.7.3 to 7.2.3.7.6 (Deleted)”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

7.2.4.16.4 Delete and insert “7.2.4.16.4 (Deleted)”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

7.2.4.17.3 Add a new last sentence to read as follows: “The provision of 7.2.4.17.1 and 7.2.4.17.2 however, shall apply to the handing over of liquefied natural gas (LNG) for the operation of vessels.”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

7.2.4.25.5, second indent Amend the last sentence to read as follows: “If these conditions are not met and the vapour return piping is not used, the measured concentrations shall be recorded in writing.”,

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

Chapter 8.1

8.1.2.1 (b) After “for all dangerous goods” insert “carried as cargo”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

8.1.2.3 Amend subparagraph (f) to read as follows:

“(f) The certificates concerning the inspection of the gas detection systems and the oxygen measuring system prescribed in 8.1.6.3;”

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

8.1.7.2 Amend the end of the second paragraph to read as follows:

“...within the third year from the date of issue of the certificate of approval, by the classification society that classified the vessel or by a person authorized for this purpose by the competent authority. A certificate concerning this inspection shall be carried on board.”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

Chapter 8.2

8.2.2.3.1 Under “Basic course on transport by tank vessels”:

Replace “Knowledge: ADN in general, except Chapter 3.2, Tables A and B, Chapters 7.1, 9.1, 9.2 and sections 9.3.1 and 9.3.2” by “Knowledge: ADN in general, except Chapter 3.2, Table A, Chapters 7.1, 9.1 and 9.2”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

8.2.2.3.1 Under “Basic course – combination of transport of dry cargo and transport in tank vessels”:

Replace “Knowledge: ADN in general, except sections 9.3.1 and 9.3.2” by “Knowledge: ADN in general”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

8.2.2.3.2 Under “Refresher training course on transport by tank vessels”:

Replace “Knowledge: ADN in general, except Chapter 3.2, Tables A and B, Chapters 7.1, 9.1, 9.2 and sections 9.3.1 and 9.3.2” by “Knowledge: ADN in general, except Chapter 3.2, Table A, Chapters 7.1, 9.1 and 9.2”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

8.2.2.3.2 Under “Basic course – combination of transport of dry cargo and transport in tank vessels”:

Replace “Knowledge: ADN in general, including sections 9.3.1 and 9.3.2” by “Knowledge: ADN in general”.

(Reference document: ECE/TRANS/WP.15/AC.2/72, annex I)

Chapter 9.3

9.3.1.8.4, 9.3.2.8.4, 9.3.3.8.4 Delete and insert “(Deleted)”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

9.3.2.22.4 (b) Amend to read as follows:

“(b) When the list of substances on the vessel according to 1.16.1.2.5 will contain substances for which explosion protection is required in column (17) of Table C of Chapter 3.2,

- At the connection to each cargo tank, the venting piping and the vacuum valve shall be equipped with a flame arrester capable of withstanding a detonation; and
- The device for the safe depressurization of cargo tanks shall be deflagration safe and capable of withstanding steady burning;”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

9.3.2.22.4 (e) Amend the first paragraph to read as follows:

“The autonomous protection systems mentioned in (b) and (c) shall be chosen according to the explosion groups/subgroups of the substances foreseen for inclusion in the list of substances on the vessel (see column (16) of Table C of Chapter 3.2). The outlets of the high-velocity vent valves shall be located not less than 2.00 m above the deck and at a distance of not less than 6.00 m from the openings of the accommodations, the wheelhouse and the service spaces outside the cargo area. This height may be reduced to 1.00 m when there is no drive unit within a radius of 1.00 m around the pressure relief valve outlet. This area shall be marked as a danger zone;”.

(Reference document: ECE/TRANS/WP.15/AC.2/68, annex I)

9.3.2.42.4 Replace “9.3.2.52.3” by “9.3.2.52.1”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)

9.3.3.42.4 Replace “9.3.3.52.3” by “9.3.3.52.1”.

(Reference document: ECE/TRANS/WP.15/AC.2/70, annex I)
