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Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)

Thirty-sixth session

Geneva, 27-31 January 2020

Report of the Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN Safety Committee) on its thirty-sixth session*

Addendum

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Annex I

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

A. Draft amendments adopted at previous sessions

The draft amendments adopted at previous sessions (ECE/ADN/2020/1) were confirmed with the following modifications:

In 1.6.7.5.1 (c) Replace “entered in the list” by “entered in the list of substances on the vessel”.

In 3.2, Table C, new entry for UN 3082 Insert “45” in column 20.

B. Draft amendments adopted on the basis of the work of the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods by the RID/ADR/ADN Joint Meeting and WP.15

Document ECE/TRANS/WP.15/AC.2/2020/23 and informal documents INF.7 and INF.8 adopted with the following modifications:

1.1.3.7 (b) Delete the amendment.

Table 1.10.3.1.2 Delete “For Class 6.2, amend the text in column “Substance or article” to read “Infectious substances of Category A (UN Nos. 2814 and 2900, except for animal material) and medical waste of Category A (UN No. 3549)”.”.

2.1.5 In the Note, amend the beginning to read: “For articles which do not have...”. Remainder unchanged.

2.2.2.3 In the first amendment, replace “The Note remains unchanged” by “Delete the Note”.

2.2.62.1.4.1, Note 1 Delete the amendment.

2.2.62.1.4.2, Note Delete the amendment.

2.2.62.1.11.1 Delete the amendment.

3.2, Table A Delete the new entries.

3.2, Table B Delete the new entries.

5.1.5.3.2 Amend the beginning to read: “The TI for each overpack, vessel or cargo transport unit shall be determined...”. Remainder unchanged.

5.4.1.2.2 (d) Delete the amendment.

5.5.4 Delete the amendment.

7.1.4.14.7.3.3 (b) Amendment should read:

“7.1.4.14.7.3.3 Amend sub-paragraph (b) to read as follows:

“(b) The dose rate under routine conditions of carriage shall not exceed 2 mSv/h at any point on the external surface of vehicles, wagons or containers and 0.1 mSv/h at 2 m from the external surface of vehicles, wagons or containers, except for consignments carried under exclusive use for which the dose rate limits around the vehicles or wagons are set forth in 7.1.4.14.7.3.5 (b) and (c).”.

7.1.4.14.7.5.4 (c) Amendment is to paragraph 7.1.4.14.7.5.4 (b)

C. Other draft amendments

Chapter 1.2

1.2.1 Amend the definition for *Cargo tank type* as follows:

Insert a new subparagraph (d) to read as follows:

“(d) *Membrane tank* means a cargo tank which consists of a thin liquid-tight and gastight layer (membrane) and insulation supported by the adjacent inner hull and inner bottom structure of a double hull vessel.”

At the end of (c) replace “.” by “;”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/11)

1.2.1 In the definition for “*Classification of zones*”, amend the fifth indent of the paragraph “**Zone 1** comprises” to read as follows:

“Every opening in zone 0 except the high velocity vent valves/safety valves of pressurized cargo tanks shall be surrounded by a cylindrical ring whose inner radius is that of the opening, the outer radius is equal to that of the opening plus 2.5 m and the height is 2.50 m above the deck and 1.50 m above the piping.

For openings with a diameter of less than 0.026 m (1”), the distance to the outer cofferdam bulkhead may be reduced to 0.50 m, provided it is ensured that such an opening is not opened to the atmosphere within this distance.”

(Reference document: ECE/TRANS/WP.15/AC.2/2020/18 as amended)

1.2.1 Delete the definition for *Connection for a sampling device*.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/2)

1.2.1 In the definition for *Closed-type sampling device*, delete the last sentence.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/2)

1.2.1 In the definition for *Partly closed-type sampling device*, delete the last sentence.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/2)

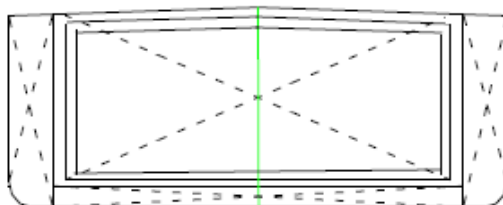
1.2.1 Amend the definition for *Type of vessel* as follows:

Amend the entry for “Type G” to read as follows:

“Type G: means a tank vessel intended for the carriage of pressurized or refrigerated gases.”

In the Sketches section, add the following Type G sketch:

“



Type G Cargo tanks design 2
Type of cargo tank 4”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/11)

Chapter 1.6

1.6.7.2.1.1 Delete the following transitional provision:

1.16.1.4 and 1.16.2.5	Annex to certificate of approval and provisional certificate of approval	Renewal of the certificate of approval after 31 December 2014
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(Reference document: ECE/TRANS/WP.15/AC.2/2020/1)

1.6.7.2.2.2 Delete the following transitional provisions:

1.16.1.4 and 1.16.2.5	Annex to certificate of approval and provisional certificate of approval	Renewal of the certificate of approval after 31 December 2014
7.2.2.6	Approved gas detection system	N.R.M. Renewal of the certificate of approval after 31 December 2010

(Reference document: ECE/TRANS/WP.15/AC.2/2020/1)

1.6.7.2.2.2 Amend the transitional provisions for 7.2.2.19.3 and 7.2.2.19.4 to read as follows:

7.2.2.19.3	Vessels used for propulsion Adaptation to new provisions Provisions of 9.3.3.12.4, 9.3.3.51 and 9.3.3.52.1 to 9.3.3.52.8	N.R.M. from 1 January 2019 Renewal of certificate of approval after 31 December 2034 Until that date, the following requirements apply to vessels in service: Vessels moving a pushed convoy or a side-by-side formation shall comply with the requirements of the following sections, subsections and paragraphs: 1.16.1.1, 1.16.1.2, 1.16.1.3, 7.2.2.5, 8.1.4, 8.1.5, 8.1.6.1, 8.1.6.3, 8.1.7, 9.3.3.0.1, 9.3.3.0.3.1, 9.3.3.0.5, 9.3.3.10.1, 9.3.3.10.4, 9.3.3.12.4 (a) except the wheelhouse, 9.3.3.12.4 (b) except for the t90 response time, 9.3.3.12.4 (c), 9.3.3.12.6, 9.3.3.16, 9.3.3.17.1 to 9.3.3.17.4, 9.3.3.31.1 to 9.3.3.31.5, 9.3.3.32.2, 9.3.3.34.1, 9.3.3.34.2, 9.3.3.40.1 (although a single fire or ballast pump is sufficient), 9.3.3.40.2, 9.3.3.41, 9.3.3.50.1 (c), 9.3.3.50.2, 9.3.3.51, 9.3.3.52.6, 9.3.3.52.7, 9.3.3.52.8, 9.3.3.56.5, 9.3.3.71 and 9.3.3.74, when at least one vessel of the convoy or side-by-side formation is carrying dangerous goods. The requirement of 9.3.3.10.4 may be met by fitting vertical protection walls not less than 0.50 m in height. Vessels moving only type N open tank vessels do not have to meet the requirements of paragraphs 9.3.3.10.1, 9.3.3.10.4 and 9.3.3.12.6. These derogations shall be specified in the certificate of approval or the provisional certificate of approval as follows: “Permitted derogations”: “Derogation from 9.3.3.10.1, 9.3.3.10.4 and 9.3.3.12.6; the vessel may only move type N open tank vessels.”.
7.2.2.19.4	Vessels of the formation for which explosion protection is required	N.R.M. from 1 January 2019 Renewal of the certificate of approval after 31 December 2034

(Reference document: ECE/TRANS/WP.15/AC.2/2020/17, proposals III and IV as amended by INF.26)

1.6.7.2.2.2 Amend the third column of the following transitional provisions to read as follows:

Paragraphs	Subject	Time limit and comments
9.3.2.20.4 9.3.3.20.4	Explosion group/subgroup	N.R.M. From 1 January 2019 Renewal of the certificate of approval after 31 December 2020
9.3.2.21.1 (g) 9.3.3.21.1 (g)	Explosion group/subgroup	N.R.M. From 1 January 2019 Renewal of the certificate of approval after 31 December 2020

<i>Paragraphs</i>	<i>Subject</i>	<i>Time limit and comments</i>
9.3.2.22.4 (e) 9.3.3.22.4 (d)	Explosion group/subgroup	N.R.M. From 1 January 2019 Renewal of the certificate of approval after 31 December 2020
9.3.2.26.2 9.3.3.26.2 (b)	Explosion group/subgroup	N.R.M. From 1 January 2019 Renewal of the certificate of approval after 31 December 2020

(Reference document: ECE/TRANS/WP.15/AC.2/2020/12 as amended)

1.6.9.1 Delete and insert “1.6.9.1 (Deleted)”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/1)

Chapter 3.2, Table C

3.2.3.1 In *Explanations concerning Table C*, column (8), add a new entry to read: “4. Membrane tank”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/11)

3.2.3.1 In *Explanations concerning Table C*, column (20), add a new remark 45 to read as follows:

“45. When this substance is received from seagoing vessels as waste related to the operation of the vessel, appropriate measures shall be taken on board the vessels to avoid or minimize, to the extent possible, the exposure of personnel on board to gas/air mixtures escaping from the cargo tanks of the receiving vessel during loading and to ensure the protection of personnel on board during such activities. Appropriate personal protective equipment shall be made available to the employees in question and shall be worn for the duration of the increased exposure.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/7, as amended by INF.30)

For UN No. 2057, packing groups II and III, amend column (10) to read “35” and column (11) to read “95”.

(Reference document: ECE/TRANS/WP.15/AC.2/2019/27)

For UN No. 3082, amend column (2) to read as follows: “ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BILGE WATER, FREE OF SLUDGE)”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/7, as amended by INF.30)

3.2.3.2 Insert the following new entries:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1010	1,2-BUTADIENE, STABILIZED, REFRIGERATED	2	3F		2.1+unst.	G	2	4	1; 3		95		1	no	T2 ₁₂₎	II B ⁴⁾	yes	PP, EX, A	1	2; 3; 31
1010	1,3-BUTADIENE, STABILIZED, REFRIGERATED	2	3F		2.1+unst.+CMR	G	2	4	1; 3		95		1	no	T2 ₁₂₎	II B (II B2 ⁴⁾)	yes	PP, EP, EX, TOX, A	1	2; 3; 31
1010	BUTADIENES STABILIZED or BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED, REFRIGERATED, having a vapour pressure at 70 °C not exceeding 1.1 MPa (11 bar) and a density at 50 °C not lower than 0.525 kg/l (contains less than 0.1% 1.3-butadiene)	2	3F		2.1+unst.	G	2	4	1; 3		95		1	no	T2 ₁₂₎	II B ⁴⁾ (II B2 ⁴⁾)	yes	PP, EX, A	1	2; 3; 31
1010	BUTADIENES, STABILIZED or BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED, REFRIGERATED, having a vapour pressure at 70° C not exceeding 1.1 MPa (11 bar) and a density at 50° C not lower than 0.525 kg/l, (with 0.1% or more 1.3-butadiene)	2	3F		2.1+unst.+CMR	G	2	4	1; 3		95		1	no	T2 ₁₂₎	II B ⁴⁾ (II B2 ⁴⁾)	yes	PP, EP, EX, TOX, A	1	2; 3; 31
1011	BUTANE, REFRIGERATED, (contains less than 0.1% 1.3-butadiene)	2	3F		2.1	G	2	4	1; 3		95		1	no	T2 ₁₂₎	II A	yes	PP, EX, A	1	2; 31
1011	BUTANE, REFRIGERATED, (with 0.1% or more 1.3-butadiene)	2	3F		2.1+CMR	G	2	4	1; 3		95		1	no	T2 ₁₂₎	II A	yes	PP, EP, EX, TOX, A	1	2; 31
1012	1-BUTYLENE, REFRIGERATED	2	3F		2.1	G	2	4	1; 3		95		1	no	T2 ₁₂₎	II A	yes	PP, EX, A	1	2; 31

1020	CHLOROPENTAFLUORO-ETHANE, REFRIGERATED, (REFRIGERANT GAS R 115)	2	3A	2.2	G	2	4	1; 3	95	1	no			no	PP	0	31
1030	1,1-DIFLUOROETHANE, REFRIGERATED, (REFRIGERANT GAS R 152a)	2	3F	2.1	G	2	4	1; 3	95	1	no	T1 ¹²⁾	II A	yes	PP, EX, A	1	2; 31
1033	DIMETHYL ETHER, REFRIGERATED	2	3F	2.1	G	2	4	1; 3	95	1	no	T3	II B (II B2)	yes	PP, EX, A	1	2; 31
1038	ETHYLENE, REFRIGERATED LIQUID	2	3F	2.1	G	2	4	1; 3	95	1	no	T1 ¹²⁾	II B (II B3)	yes	PP, EX, A	1	2; 31; 42
1055	ISOBUTYLENE, REFRIGERATED	2	3F	2.1	G	2	4	1; 3	95	1	no	T2 ^{1), 12)}	II A	yes	PP, EX, A	1	2; 31
1063	METHYL CHLORIDE, REFRIGERATED, (REFRIGERANT GAS R 40)	2	3F	2.1	G	2	4	1; 3	95	1	no	T1 ¹²⁾	II A	yes	PP, EX, A	1	2; 31
1077	PROPYLENE, REFRIGERATED	2	3F	2.1	G	2	4	1; 3	95	1	no	T1 ¹²⁾	II A	yes	PP, EX, A	1	2; 31
1086	VINYL CHLORIDE, STABILIZED, REFRIGERATED	2	3F	2.1+unst.	G	2	4	1; 3	95	1	no	T2 ¹²⁾	II A	yes	PP, EX, A	1	2; 3; 13; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S.	2	3F	2.1 + CMR	G	2	4	1; 3	95	1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A, EP, TOX	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A)	2	3F	2.1	G	2	4	1; 3	95	1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A0)	2	3F	2.1	G	2	4	1; 3	95	1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A01)	2	3F	2.1	G	2	4	1; 3	95	1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A02)	2	3F	2.1	G	2	4	1; 3	95	1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31

1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE A1)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE B)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE B1)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE B2)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1965	HYDROCARBON GAS MIXTURE, REFRIGERATED, N.O.S., (MIXTURE C)	2	3F		2.1	G	2	4	1; 3		95		1	no	T4 ³⁾	II B ⁴⁾	yes	PP, EX, A	1	2; 31
1972	METHANE, REFRIGERATED or NATURAL GAS, REFRIGERATED, with high methane content	2	3F		2.1	G	2	4	1; 3		95		1	no	T1 ¹²⁾	IIA	yes	PP, EX, A	1	2; 31; 42
1978	PROPANE, REFRIGERATED	2	3F		2.1	G	2	4	1; 3		95		1	no	T1 ¹²⁾	II A	yes	PP, EX, A	1	2; 31
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BILGE WATER, CONTAINS SLUDGE)	9	M6	III	9+CMR+N1	N	2	3		10	97		3	yes			no	PP, EP TOX, A	0	45
9000	AMMONIA, ANHYDROUS, DEEPLY REFRIGERATED	2	3TC		2.1+2.3+8+N1	G	2	4	1; 3		95		1	no	T1 ¹²⁾	II A	yes	PP, EP, EX, TOX, A	2	1; 2; 31

(Reference documents: ECE/TRANS/WP.15/AC.2/2020/7, as amended by INF.30 and ECE/TRANS/WP.15/AC.2/2020/11)

Chapter 7.1

7.1.4.1 Amend to read as follows:

“7.1.4.1 *Limitation of the quantities carried*

7.1.4.1.1 Single-hull vessels may carry goods of Classes 1, 2, 3, 4.1, 4.2, 4.3, 5.1, 5.2, 6.1, 7, 8 and 9 only in the limited quantities set out in 7.1.4.1.4. This provision also applies to pushed barges and double-hull vessels which do not meet the additional rules of construction in 9.1.0.88 to 9.1.0.95 or 9.2.0.88 to 9.2.0.95.

7.1.4.1.1.1 Where substances and articles of different divisions of Class 1 are loaded in a single vessel in conformity with the provisions for prohibition of mixed loading of 7.1.4.3.3 or 7.1.4.3.4, the entire load shall not exceed the smallest maximum mass given in 7.1.4.1.4 below for the goods of the most dangerous division loaded, the order of precedence being 1.1, 1.5, 1.2, 1.3, 1.6, 1.4.

7.1.4.1.1.2 For pushed convoys and side-by-side formations, the quantity limitations specified in 7.1.4.1.4 apply to each unit. A maximum of 1,100,000 kg is permitted for each unit.

7.1.4.1.1.3 When a vessel is carrying several types of dangerous goods, the total quantity shall not exceed 1,100,000 kg.

7.1.4.1.2 Double-hull vessels meeting the additional construction rules in 9.1.0.88 to 9.1.0.95 or 9.2.0.88 to 9.2.0.95 may carry goods without limitation of the quantity carried, except for:

- goods of Class 1, and
- goods of classes 2, 3, 4.1, 4.2, 4.3, 5.1, 5.2, 6.1, 7, 8 and 9 for which a danger label of model No. 1 is required in column (5) of Table A of Chapter 3.2,

for which the limitations set in 7.1.4.1.1 and 7.1.4.1.1.1 to 7.1.4.1.1.3 apply.

7.1.4.1.3 For activity limits, transport index (TI) limits and criticality safety indices (CSI) in the case of the carriage of radioactive material, see 7.1.4.14.7.

7.1.4.1.4 Quantity limitations

<i>Class</i>	<i>Description</i>	0 kg	90 kg	15,000 kg	50,000 kg	120,000 kg	300,000 kg	1,100,000 kg
1	All substances and articles of Division 1.1, compatibility group A ⁽¹⁾		X					
	All substances and articles of Division 1.1, compatibility groups B, C, D, E, F, G, J or L ⁽²⁾			X				
	All substances and articles of Division 1.2, compatibility groups B, C, D, E, F, G, H, J or L				X			
	All substances and articles of Division 1.3, compatibility groups C, G, H, J or L ⁽³⁾						X	
	All substances and articles of Division 1.4, compatibility groups B, C, D, E, F, G or S							X
	All substances of Division 1.5, compatibility group D ⁽²⁾			X				
	All substances and articles of Division 1.6, compatibility group N ⁽³⁾						X	
	Empty packaging, uncleaned							X
	<i>Note:</i>							
	<i>(1) In not less than three batches of a maximum of 30 kg each, distance between batches not less than 10.00 m.</i>							
	<i>(2) In not less than three batches of a maximum of 5,000 kg each, distance between batches not less than 10.00 m.</i>							
	<i>(3) Not more than 100,000 kg per hold. A wooden partition is permitted for subdividing a hold.</i>							
2	All goods for which label No. 2.1 is required in column (5) of Table A of Chapter 3.2: total						X	
	All goods for which label No. 2.3 is required in column (5) of Table A of Chapter 3.2: total					X		
	Other goods							X
3	All goods of packing groups I or II for which, in addition to a label of model No. 3, a label of model No. 6.1 is required in column (5) of Table A of Chapter 3.2: total					X		
	Other goods						X	
4.1	UN Nos. 3221, 3222, 3231 and 3232: total			X				
	All goods of packing group I;							
	All goods of packing group II for which, in addition to a label of model No. 4.1, a label of model No. 6.1 is required in column (5) of Table A of Chapter 3.2;							

<i>Class</i>	<i>Description</i>	0 kg	90 kg	15,000 kg	50,000 kg	120,000 kg	300,000 kg	1,100,000 kg
	Self-reactive substances of types C, D, E and F (UN Nos. 3223 to 3230 and 3233 to 3240); All other substances of classification code SR1 or SR2 (UN Nos. 2956, 3241, 3242 and 3251); and desensitized explosive substances of packing group II (UN Nos. 2907, 3319 and 3344): total					X		
	Other goods							X
4.2	All goods of packing groups I or II for which, in addition to a label of model No. 4.2, a label of model No. 6.1 is required in column (5) of Table A of Chapter 3.2: total						X	
	Other goods							X
4.3	All goods of packing groups I or II for which, in addition to a label of model No. 4.3, a label of model No. 3, 4.1 or 6.1 is required in column (5) of Table A of Chapter 3.2: total						X	
	Other goods							X
5.1	All goods of packing groups I or II for which, in addition to a label of model No. 5.1, a label of model No. 6.1 is required in column (5) of Table A of Chapter 3.2: total						X	
	Other goods							X
5.2	UN Nos. 3101, 3102, 3111 and 3112: total			X				
	Other goods					X		
6.1	All goods of packing group I: total					X		
	All goods of packing group II: total						X	
	All goods carried in bulk	X						
	Other goods							X
7	UN Nos. 2912, 2913, 2915, 2916, 2917, 2919, 2977, 2978 and 3321 to 3333	X						
	Other goods							X
8	All goods of packing group I; All goods of packing group II for which, in addition to a label of model No. 8, a label of model No. 3 or 6.1 is required in column (5) of Table A of Chapter 3.2: total						X	

<i>Class</i>	<i>Description</i>	<i>0 kg</i>	<i>90 kg</i>	<i>15,000 kg</i>	<i>50,000 kg</i>	<i>120,000 kg</i>	<i>300,000 kg</i>	<i>1,100,000 kg</i>
	Other goods							X
9	All goods of packing group II: total						X	
	UN No. 3077, goods carried in bulk and classified as hazardous to the aquatic environment, categories Acute 1 or Chronic 1, in accordance with 2.4.3	X						
	Other goods							X

”

(Reference document: ECE/TRANS/WP.15/AC.2/2020/13 and informal document INF.27 as amended)

7.1.2.0.1 Replace “7.1.4.1.1” by “7.1.4.1.4” and “7.1.4.1.2” by “7.1.4.1.1.2 or 7.1.4.1.1.3”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/13, consequential amendment)

7.1.2.0.2 Replace “7.1.4.1.1 and 7.1.4.1.2” by “7.1.4.1.1.2, 7.1.4.1.1.3 and 7.1.4.1.4”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/13, consequential amendment)

7.1.2.19.2 Replace “7.1.4.1.1 and 7.1.4.1.2” by “7.1.4.1.1.2, 7.1.4.1.1.3 and 7.1.4.1.4”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/13, consequential amendment)

Chapter 7.2

7.2.2.19.3 Replace “9.3.3.0.3 (d)” by “9.3.3.0.3.1”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/17, proposal I as amended)

7.2.2.19.3 Replace “9.3.3.10.2” by “9.3.3.10.4”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/17, proposal II)

7.2.2.19.3 In the second paragraph, delete “9.3.3.10.5”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/17, consequential amendment)

7.2.2.19.3 In the last paragraph, replace “9.3.3.10.5” by “9.3.3.10.4”. (twice).

(Reference document: ECE/TRANS/WP.15/AC.2/2020/17, consequential amendment)

7.2.3.28 Amend to read as follows:

“7.2.3.28 *Instruction on maximum loading temperature*

For the carriage of refrigerated substances, an instruction shall be on board mentioning the permissible maximum loading temperature, in relation to the insulation design of the cargo tanks and, if on board, the capacity of the refrigeration system.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/11)

7.2.4.2.1 Amend to read as follows:

“7.2.4.2.1 The reception from inland navigation vessels of unpackaged liquid oily and greasy wastes resulting from the operation of vessels shall be ensured by suction; the reception from seagoing vessels may also be ensured by pressurization provided that:

- the quantity to be transferred and the maximum loading rate is determined and agreed between the seagoing vessel and the inland navigation vessel;
- if feasible, the pressure pump on the seagoing vessel can be switched off from the receiving inland navigation vessel;
- there is permanent and continuous supervision on the operation from both vessels; and
- communication between both vessels is ensured at all times during the operation.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/7, as amended by INF.30)

7.2.4.16.11 Amend to read as follows:

“7.2.4.16.11 The shut-off device referred to in 9.3.1.21.1 (g), 9.3.2.21.1 (g) or 9.3.3.21.1 (g) shall be opened only after a gastight connection for a sampling device has been made to the closed or partly closed sampling device.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/2)

Chapter 8.1

8.1.2.1 Add a new subparagraph (k) to read as follows:

“8.1.2.1 (k) For vessels which carry hose assemblies used for loading, unloading or delivering liquefied natural gas for the operation of the vessel, the inspection certificate and the documentation of the calculated maximum load stress prescribed in 8.1.6.2.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/21)

8.1.2.2 Amend the last sentence to read as follows: “The documents listed in paragraphs (e) to (h) shall bear the stamp of the competent authority issuing the certificate of approval.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/10)

8.1.6.2 Amend the beginning to read “Hose assemblies used for loading, unloading or delivering products for the operation of the vessel (other than liquefied natural gas) and residual cargo...”. Remainder unchanged.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/21)

8.1.6.2 Add a new second paragraph to read as follows:

“Hose assemblies used for loading, unloading or delivering liquefied natural gas for the operation of the vessel shall comply with part 5.5.2 of ISO 20519:2017 (Ships and marine technology – Specification for bunkering of liquefied natural gas fuelled vessels) and shall be checked and inspected at least once a year according to the manufacturer’s instructions. A certificate concerning this inspection and the documentation of the calculated maximum load stress shall be carried on board.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/21)

Chapter 8.2

8.2.1.4 In the last sentence, replace “after two times” by “after it is retaken two times”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/8)

Chapter 8.6

8.6.1.3 and 8.6.1.4 First amendment not applicable to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/19)

8.6.1.3 and 8.6.1.4 In “6. Types of cargo tanks”, amend point 3 to read as follows: “3 Cargo tank with walls distinct from the outer hull ¹⁾²⁾”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/19)

8.6.1.3 and 8.6.1.4 In “6. Types of cargo tanks”, add a new entry 4 to read as follows: “4. Membrane tanks¹⁾²⁾”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/11)

8.6.1.3 and 8.6.1.4 First amendment does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/19)

8.6.1.3 Replace the table at the end by the following:

If the cargo tanks of the vessel are not all of the same type or the same design or the equipment is not the same, their type, their design and their equipment shall be indicated below:

1	Cargo tank number	1	2	3	4	5	6	7	8	9	10	11	12
2	Pressure cargo tank												
3	Closed cargo tank												
4	Open cargo tank with flame arrester												
5	Open cargo tank												
6	Independent cargo tank												
7	Integral cargo tank												
8	Cargo tank with walls distinct from the outer hull												
9	Membrane tank												
10	Opening pressure of the pressure relief device/high velocity vent valve/safety valve in kPa												
11	Connection for a sampling device												
12	Sampling opening												
13	Water-spray system												
14	Internal pressure alarm 40 kPa												
15	Possibility of cargo heating from shore												
16	Cargo heating installation on board												
17	Cargo refrigeration installation												
18	Inerting facilities												
19	Venting piping and heated installation												
20	Conforms to the rules of construction resulting from the remark(s) of column (20) of Table C of Chapter 3.2												

(Reference documents: ECE/TRANS/WP.15/AC.2/2020/19 and ECE/TRANS/WP.15/AC.2/2020/11)

8.6.1.4 Replace the table at the end by the following:

If the cargo tanks of the vessel are not all of the same type or the same design or the equipment is not the same, their type, their design and their equipment shall be indicated below:													
1	Cargo tank number	1	2	3	4	5	6	7	8	9	10	11	12
2	Pressure cargo tank												
3	Closed cargo tank												
4	Open cargo tank with flame arrester												
5	Open cargo tank												
6	Independent cargo tank												
7	Integral cargo tank												
8	Cargo tank with walls distinct from the outer hull												
9	Membrane tank												
10	Opening pressure of the pressure relief device/high velocity vent valve/safety valve in kPa												
11	Connection for a sampling device												
12	Sampling opening												
13	Water-spray system												
14	Internal pressure alarm 40 kPa												
15	Possibility of cargo heating from shore												
16	Cargo heating installation on board												
17	Cargo refrigeration installation												
18	Inerting facilities												
19	Venting piping and heated installation												
20	Conforms to the rules of construction resulting from the remark(s) of column (20) of Table C of Chapter 3.2												

(Reference documents: ECE/TRANS/WP.15/AC.2/2020/19 and ECE/TRANS/WP.15/AC.2/2020/11)

8.6.3, ADN Checklist Amend the Table on page 3 as follows:

Item 8 Renumber existing text as 8.1. Add a new 8.2 to read as follows:

8.2	Is a water film as mentioned in 9.3.1.21.11 activated?	O	O
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Add a new Item 20 to read as follows:

20	Is the loading temperature within the range of the maximum permissible temperature as prescribed in 7.2.3.28?	O**	O**
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(Reference document: ECE/TRANS/WP.15/AC.2/2020/11)

Chapter 9.1

9.1.0.80 Replace “7.1.4.1.1” by “7.1.4.1.4”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/13, consequential amendment)

9.1.0.88.1 Replace “7.1.4.1.1” by “7.1.4.1.4”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/13, consequential amendment)

Chapter 9.2

9.2.0.80 Replace “7.1.4.1.1” by “7.1.4.1.4”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/13, consequential amendment)

9.2.0.88.1 Replace “7.1.4.1” by “7.1.4.1.4”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/13, consequential amendment)

Chapter 9.3

9.3.1.0.1 (a) Amend to read as follows:

“9.3.1.0.1 a) The vessel’s hull and cargo tanks shall be constructed of shipbuilding steel or other at least equivalent metal.

Independent cargo tanks and membrane tanks may also be constructed of other materials, provided these have at least equivalent mechanical strength and resistance against the effects of temperature and fire.

For membrane tanks the equivalence for resistance against the effect of temperature and fire is deemed to be proven where the materials of the membrane tanks fulfil the following requirements:

- They withstand the range between the maximum temperature in service and 5 °C below the minimum design temperature, but not lower than -196 °C; and
- They are fire-resistant or protected by a suitable system such as a permanent inert gas environment or provided with a fire-retardant barrier.”

(Reference document: ECE/TRANS/WP.15/AC.2/2020/11 as amended)

9.3.x.0.5 In the first paragraph, delete the second sentence.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/14)

9.3.1.18 Amend as follows:

Amend the title to read “Inerting facilities”.

Renumber existing text as 9.3.1.18.1. Modify the first sentence of the second paragraph to read “The system shall be capable of keeping permanently a minimum pressure of 7 kPa (0.07 bar) in the spaces to be inerted.”.

Add a new 9.3.1.18.2 to read as follows:

“9.3.1.18.2 Vessels equipped with membrane tanks shall have an inerting system capable of inerting all insulation spaces of the tanks.

The system shall be capable of keeping permanently a minimum pressure above atmospheric pressure in the spaces to be inerted.

The inert gas shall be produced on board or carried in a quantity that is sufficient for the entire holding time as determined in accordance with 7.2.4.16.16 and 7.2.4.16.17. The circulation of inert gas throughout the spaces to be inerted shall be sufficient to allow for effective means of gas detection.

The spaces to be inerted shall be equipped with connections for introducing the inert gas and monitoring systems so as to ensure the required atmosphere on a permanent basis.

When the pressure, the temperature or the concentration of the inert gas falls below a given value, this monitoring system shall activate an audible and visible alarm in the wheelhouse. When the wheelhouse is unoccupied, the alarm shall also be perceptible in a location occupied by a crew member.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/11 as amended)

9.3.x.21.1 (g) Add a new second sentence to read as follows: “The connection shall be fitted with a shut-off device resistant to the internal pressure at the connection.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/2 as amended by informal document INF.29)

9.3.3.0.3.1 Number the paragraph after the Table, that begins with “All permanently fitted materials in the accommodation or wheelhouse...” as 9.3.3.0.3.1.

(Reference document: ECE/TRANS/WP.15/AC.2/2020/17, proposal I, consequential amendment)

Annex II

Modifications to the model standardized vessel checklists

Document ECE/TRANS/WP.15/AC.2/2020/20 adopted with the following modifications:

Remove the underline formatting everywhere it appears in the document.

In Annex 1a:

Item 34 In the last column, delete “[7.1.4.14.7.1.3]”.

Renumber second item 44 as 45.

In Annex 2a:

Item 22 Remove the square brackets around 5.4.5.

Item 34 Replace “engine room room” by “engine room”. German text should be aligned with the French and English texts.

Item 35 Delete “[, spring-loaded non-return valve, quality of drinking water]”.

Item 36 Replace “(e.g. xxxxx)” by “(e.g. differentiation of piping, presence of a closing device, manometer (overpressure/underpressure))”.

Item 38 Replace “[Self-contained] [Autonomous] protection systems” by “Autonomous protection systems”.

Item 45 Delete and insert “Deleted”.

Item 47 Delete “[, all screws fixed]”.

Item 54 Delete and insert “Deleted”.

Item 57 Replace “Gas or vapour water-spray” by “Water-spray”.

In Annex 2b:

Item 25.5 Replace “of the fire-extinguishing hoses the special equipment” by “of the fire-extinguishing hoses and the special equipment”.

Item 25.24 Replace “[self-contained] [autonomous] protection systems” by “autonomous protection systems”.

Item 25.25 Replace “self-contained protection systems” by “autonomous protection systems”.

In Annex 3:

In the second paragraph, replace “The information should be provided” by “These checklists should be provided”

Annex III

Corrections to ECE/TRANS/276 (ADN 2019 publication) (Corrections not requiring acceptance by Contracting Parties)

1. **Chapter 1.6, 1.6.7.2.2.2, Transitional provision for 8.1.2.3 (r), (s), (t), (v), third column subparagraph (c)**
For gas-freeing read degassing
(Reference document: informal document INF.6)
2. **Chapter 1.6, 1.6.7.2.2.2, Transitional provision for 9.3.1.12.4 and 9.3.3.12.4, second column**
For gas-freeing read degassing
(Reference document: informal document INF.6)
3. **Chapter 1.6, 1.6.7.2.2.2, Transitional provision for 9.3.1.52.1, 9.3.2.52.1 and 9.3.3.52.1, third column**
For gas-freeing read degassing
(Reference document: informal document INF.6)
4. **Chapter 1.6, 1.6.7.2.2.2, Transitional provision for 9.3.1.52.1 and 9.3.3.52.1, third column**
For gas-freeing read degassing
(Reference document: informal document INF.6)
5. **Chapter 1.6, 1.6.7.2.2.2, Transitional provision for 9.3.1.53.1, 9.3.2.53.1 and 9.3.3.53.1, third column, second to last paragraph**
For gas-freeing read degassing
(Reference document: informal document INF.6)
6. **Chapter 7.2, 7.2.3.51.4, second paragraph**
For gas-freeing read degassing
(Reference document: informal document INF.6)
7. **Chapter 7.2, 7.2.3.51.7, first paragraph**
For gas-freeing read degassing
(Reference document: informal document INF.6)
8. **Chapter 8.1, 8.1.2.3 (s)**
For gas-freeing read degassing
(Reference document: informal document INF.6)
9. **Chapter 8.1, 8.1.2.3 (v)**
For gas-freeing read degassing
(Reference document: informal document INF.6)

10. Chapter 8.3, 8.3.5, second indent

For gas-freed read degassed

(Reference document: informal document INF.6)
