

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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Item 4 of the provisional agenda:

Work of the RID/ADR/ADN Joint Meeting

Texts adopted by the Joint Meeting: Draft amendments to ADR for entry into force on 1 January 2023

Note by the Secretariat

(Reference document: ECE/TRANS/WP.15/AC.1/160)

Chapter 1.1

1.1.3.6.2 In the first indent, after “0500,” add “0511,”.

1.1.4 Insert the following new 1.1.4.6:

“1.1.4.6 *(Reserved)*”

1.1.4 Insert the following new 1.1.4.7:

“1.1.4.7 *Refillable pressure receptacles authorized by the United States of America Department of Transportation*

1.1.4.7.1 *Import of gases*

Refillable pressure receptacles authorised by the United States of America Department of Transportation and constructed and tested in accordance with standards listed in Part 178, Specifications for Packagings of Title 49, Transportation, of the Code of Federal Regulations accepted for carriage in a transport chain in accordance with 1.1.4.2 may be carried from the location of the temporary storage at the end point of the transport chain to the end user.

The consignor for the ADR carriage shall include the following entry in the transport document:

“CARRIAGE IN ACCORDANCE WITH 1.1.4.7.1”.

1.1.4.7.2 *Export of gases and empty uncleaned pressure receptacles*

Refillable pressure receptacles authorised by the United States of America Department of Transportation and constructed in accordance with standards listed in Part 178, Specifications for Packagings of Title 49, Transportation, of the Code of Federal Regulations may be filled and carried only for the purpose of exporting to countries which are not Contracting Parties to ADR provided the following provisions are met:

- (a) The filling of the pressure receptacle is in accordance with the relevant requirements of the Code of Federal Regulations of the United States of America.
- (b) The pressure receptacles shall be marked and labelled in accordance with Chapter 5.2.

- (c) The provisions of 4.1.6.12 and 4.1.6.13 shall apply to pressure receptacles. Pressure receptacles shall not be filled after they become due for periodic inspection but may be carried after the expiry of the time-limit for purposes of performing inspection, including the intermediate carriage operations.
- (d) The consignor for the ADR carriage shall include the following entry in the transport document:

“CARRIAGE IN ACCORDANCE WITH 1.1.4.7.2” ”

1.1.5 Add the following Note:

“NOTE: *A standard provides details on how to meet the provisions of ADR and may include requirements in addition to those set out in ADR.”*

Chapter 1.2

1.2 Amend the title to read “DEFINITIONS, UNITS OF MEASUREMENT AND ABBREVIATIONS”.

1.2.1 Delete the following definitions:

“ADN”, “ASTM”, “CGA”, “CIM”, “CMR”, “CSC”, “CTU”, “EN (standard)”, “IAEA”, “IBC”, “ICAO”, “IMDG”, “IMO”, “ISO (standard)”, “MEGC”, “MEMU”, “RID”, “SADT”, “SAPT”, “UIC”, “UNECE”.

In the definition of “Compressed Natural Gas”, delete: “(CNG)”.

In the definition of “Criticality safety index”, delete: “(CSI)”.

Amend the definition of “GHS” to read:

“*Globally Harmonized System of Classification and Labelling of Chemicals*” means the ninth revised edition of United Nations publication bearing this title (ST/SG/AC.10/30/Rev.9);”

In the definition of “Liquefied Natural Gas”, delete “(LNG)”.

In the definition of “Liquefied Petroleum Gas”, delete “(LPG)”.

In the definition of “Multiple-element gas container”, delete “(MEGC)”.

In the definition of “Mobile explosives manufacturing unit”, delete “(MEMU)”.

In the definition of “Net explosive mass”, delete “(NEM)”.

In the definition of “Self-accelerating decomposition temperature”, delete “(SADT)”.

In the definition of “Self-accelerating polymerization temperature”, delete “(SAPT)”.

In the definition of “Transport index”, delete “TI”.

Add a new section 1.2.3 to read as follows:

“1.2.3 List of abbreviations

In ADR, abbreviations, acronyms and abbreviated designations of regulatory texts are used, with the following meaning:

A

“*ADN*” means the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways;

“*ASTM*” means the American Society for Testing and Materials (ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959, United States of America), www.astm.org;

C

“*CGA*” means the Compressed Gas Association, 14501 George Carter Way, Suite 103, Chantilly, VA 20151, United States of America, www.cganet.com;

“*CIM*” means the Uniform Rules Concerning the Contract of International Carriage of Goods by Rail (Appendix B to the Convention concerning International Carriage by Rail (COTIF)), as amended;

“*CMR*” means the Convention on the Contract for the International Carriage of Goods by Road (Geneva, 19 May 1956), as amended;

“*CNG*” means compressed natural gas (see 1.2.1);

“*CSC*” means the International Convention for Safe Containers (Geneva, 1972) as amended and published by the International Maritime Organization (IMO), London;

“*CSI*” means criticality safety index (see 1.2.1);

E

“*EIGA*” means European Industrial Gas Association, 30 Avenue de l’Astronomie, 1210 Brussels (Belgium), www.eiga.eu;

“*EN*” (standard) means a European standard published by the European Committee for Standardization (CEN) (CEN, Avenue Marnix 17, B-1000 Brussels, Belgium), www.cen.eu;

G

“*GHS*” means Globally Harmonized System of Classification and Labelling of Chemicals (see 1.2.1);

I

“*IAEA*” means the International Atomic Energy Agency, P.O. Box 100, 1400 Vienna, Austria, www.iaea.org;

“*IBC*” means intermediate bulk container (see 1.2.1);

“*ICAO*” means the International Civil Aviation Organization, 999 University Street, Montreal, Quebec H3C 5H7, Canada, www.icao.org;

“*IMDG*” means IMDG Code (see 1.2.1);

“*IMO*” means the International Maritime Organization, 4 Albert Embankment, London SE1 7SR, United Kingdom, www.imo.org;

“*ISO*” (standard) means an international standard published by the International Organization for Standardization, 1, rue de Varembe, 1204 Geneva 20, Switzerland, www.iso.org;

L

“*LNG*” means liquefied natural gas (see 1.2.1);

“*LPG*” means liquefied petroleum gas (see 1.2.1);

“*LSA*” (material) means low specific activity material (see 2.2.7.1.3);

M

“*MEGC*” means multiple-element gas container (see 1.2.1);

“*MEMU*” means mobile explosives manufacturing unit (see 1.2.1);

N

“*N.O.S.*” means not otherwise specified entry (see 1.2.1);

R

“RID” means Regulations concerning the International Carriage of Dangerous Goods by Rail (Appendix C of COTIF (Convention concerning international carriage by rail));

S

“SADT” means self-accelerating decomposition temperature (see 1.2.1);

“SAPT” means self-accelerating polymerization temperature (see 1.2.1);

“SCO” means surface contaminated object (see 2.2.7.1.3);

T

“TI” means transport index (see 1.2.1);

U

“UIC” means the International Union of Railways, 16 rue Jean Rey, 75015 Paris, France, www.uic.org;

“UNECE” means the United Nations Economic Commission for Europe, Palais des Nations, 8-14 avenue de la Paix, 1211 Geneva 10, Switzerland, www.unece.org;

Chapter 1.6

1.6.4 Insert the following new transitional provision:

“1.6.4.56 Tank-containers constructed before 1 July 2023 in accordance with the requirements in force up to 31 December 2022, but which do not conform to the requirements of 6.8.2.2.4 second paragraph applicable from 1 January 2023 may still be used.”

Chapter 1.10

1.10.4 In the first sentence, after “0500,” add: “0511,”.

Chapter 3.2, Table A

For all UN numbers to which special provision “386” is assigned in column (6), insert in column (6): “676”.

Amend the following entry:

UN No.	Column	Amendment
2426	(2)	Amend the name and description as follows: “AMMONIUM NITRATE, LIQUID (hot concentrated solution)”. (Reference document: ECE/TRANS/WP.15/AC.1/2021/13)

Chapter 3.2, Table B

Amend the following entry:

Name and description	UN No.	Amendment
AMMONIUM NITRATE, LIQUID, hot concentrated solution, in a concentration of more than 80% but not more than 93%	2426	Amend the name and description in column “Name and description” to read as follows: “AMMONIUM NITRATE, LIQUID (hot concentrated solution)”.

Chapter 3.3

SP 327 In the first sentence, replace “5.4.1.1.3” by: “5.4.1.1.3.1”.

SP 363 At the end of paragraph (j), insert the following Note:

“NOTE: On engines and machinery with a capacity of more than 450 l but containing 60 l of liquid fuel or less, labelling and placarding compliant with the above requirements is permitted.”

SP 593 Amend to read as follows:

“593 This gas, when used for cooling goods not fulfilling the criteria of any class, e.g. medical or biological specimens, if contained in double wall receptacles which comply with the provisions of packing instruction P203, paragraph (6) for open cryogenic receptacles of 4.1.4.1, is not subject to the requirements of ADR except as specified in 5.5.3.”

SP 644 Insert the following new second indent:

“– The solution does not contain more than 93% ammonium nitrate;”

SP 650 In paragraph (e), replace “5.4.1.1.3” by: “5.4.1.1.3.1”.

SP 654 In the first sentence, replace “5.4.1.1.3” by: “5.4.1.1.3.1”.

Add the following new special provision:

“676 For the carriage of packages containing polymerizing substances the provisions of special provision 386, in conjunction with 7.1.7.3, 7.1.7.4, 5.4.1.1.15 and 5.4.1.2.3.1, need not be applied, when carried for disposal or recycling provided the following conditions are met:

- (a) Before loading an examination has shown that there is no significant deviation between the outside temperature of the package and the ambient temperature;
- (b) The carriage is effected within a period of not more than 24 hours from that examination;
- (c) The packages are protected from direct sunlight and from the impact of other sources of heat (e.g. additional loads that are being carried above ambient temperature) during carriage;
- (d) The ambient temperatures during the carriage are below 45 °C;
- (e) Vehicles and containers are adequately ventilated;
- (f) The substances are packed in packages with a maximum capacity of 1000 litres.

In assessing the substances for carriage under the conditions of this special provision, additional measures to prevent dangerous polymerization may be considered, for example the addition of inhibitors.”

Chapter 4.1

4.1.6.8 In paragraph (b), in the first sentence, after “caps”, insert: “or guards”.

In paragraph (c), replace “guards” by: “permanent protection attachments”.

4.1.6.15 In ECE/TRANS/WP.15/251, Annex I, amend Table 1 to read as follows:

“Table 1: Standards for UN and non-UN pressure receptacles

Applicable paragraphs	Reference	Title of document
4.1.6.2	EN ISO 11114-1:2020	Gas cylinders – Compatibility of cylinder and valve materials with gas contents – Part 1: Metallic materials

Applicable paragraphs	Reference	Title of document
	EN ISO 11114-2:2013	Gas cylinders – Compatibility of cylinder and valve materials with gas contents – Part 2: Non-metallic materials
4.1.6.4	ISO 11621:1997 or EN ISO 11621:2005	Gas cylinders – Procedures for change of gas service
4.1.6.8 Valves with inherent protection	Clause 4.6.2 of EN ISO 10297:2006 or clause 5.5.2 of EN ISO 10297:2014 or clause 5.5.2 of EN ISO 10297:2014 + A1:2017	Gas cylinders – Cylinder valves – Specification and type testing
	Clause 5.3.8 of EN 13152:2001 + A1:2003	Testing and specifications of LPG cylinder valves – Self-closing
	Clause 5.3.7 of EN 13153:2001 + A1:2003	Specifications and testing of LPG cylinder valves – Manually operated
	Clause 5.9 of EN ISO 14245:2010 or clause 5.9 of EN ISO 14245:2019	Gas cylinders – Specifications and testing of LPG cylinder valves – Self-closing
	Clause 5.10 of EN ISO 15995:2010 or clause 5.10 of EN ISO 15995:2019	Gas cylinders – Specifications and testing of LPG cylinder valves – Manually operated
	Clause 5.4.2 of EN ISO 17879:2017	Gas cylinders – Self-closing cylinder valves – Specification and type testing
	Clause 7.4 of EN 12205:2001 or clause 9.2.5 of EN ISO 11118:2015 or clause 9.2.5 of EN ISO 11118:2015 + A1:2020	Gas cylinders – Non-refillable metallic gas cylinders – Specification and test methods
	4.1.6.8 (b)	ISO 11117:1998 or EN ISO 11117:2008 + Cor 1:2009 or EN ISO 11117:2019
EN 962:1996 + A2:2000		Transportable gas cylinders – Valve protection caps and valve guards for industrial and medical gas cylinders – Design, construction and tests
4.1.6.8 (c)	Requirements for shrouds and permanent protection attachments used as valve protection under 4.1.6.8 (c) are given in the relevant pressure receptacle shell design standards (see 6.2.2.3 for UN pressure receptacles and 6.2.4.1 for non-UN pressure receptacles).	
4.1.6.8 (b) and (c)	ISO 16111:2008 or ISO 16111:2018	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride

”

Chapter 4.3

- 4.3.4.1.3 In the Table, under class 5.1, amend the name and description for UN number 2426 to read as follows: “AMMONIUM NITRATE, LIQUID (hot concentrated solution)”.

Chapter 5.4

- 5.4.1.1.3 Becomes 5.4.1.1.3.1.

Insert a new 5.4.1.1.3.2 to read as follows:

“5.4.1.1.3.2 If there is no possibility to measure the exact quantity of the waste at the place of loading, the quantity according to 5.4.1.1.1 (f) may be estimated for the following cases under the following conditions:

- (a) For packagings, a list of packagings including the type and the nominal volume will be added to the transport document;
- (b) For containers, the estimation will be based on their nominal volume and other available information (e.g. type of waste, average density, degree of filling);
- (c) For vacuum operated waste tanks, the estimation shall be justified (e.g. by means of an estimation provided by the consigner or by vehicle equipment).

Such estimation of the quantity is not allowed for:

- Exemptions for which the exact quantity is essential (e.g. 1.1.3.6);
- Waste containing substances mentioned in 2.1.3.5.3 or substances of Class 4.3;
- Tanks other than vacuum operated waste tanks.

[A statement shall be included in the transport document, as follows:

“QUANTITY ESTIMATED IN ACCORDANCE WITH 5.4.1.1.3.2”.]

- 5.4.2 In the first sub-paragraph, replace “with the transport document” by: “to the maritime carrier by those responsible for packing the container”.

In the second sub-paragraph, in the first sentence, replace “; if not, these documents shall be attached” by: “(see for example 5.4.5)”.

Delete the Note after the second sub-paragraph.

In the third sub-paragraph, after “may”, insert: “also”.

Chapter 6.2

- 6.2.3.1.5 **Amend to read as follows:**

“6.2.3.1.5 Acetylene cylinders shall not be fitted with fusible plugs or any other pressure relief devices.”

- 6.2.4.1 Amend the Table, under “for design and construction” as follows:

For “EN ISO 7866:2012 + AC:2014”, in column (4), replace “Until further notice” by: “Between 1 January 2015 and 31 December 2024”.

After the row for “EN ISO 7866:2012 + AC:2014”, insert the following new row:

(1)	(2)	(3)	(4)	(5)
EN ISO 7866:2012 + A1:2020	Gas cylinders – Refillable seamless aluminium alloy gas cylinders – Design, construction and testing	6.2.3.1 and 6.2.3.4	Until further notice	

”

[For “EN 12245:2002”, in column (2), insert the following Note:

“**NOTE:** *This standard shall not be used for gases classified as LPG.*”]

[For “EN 12245:2002”, in column (5), insert the following text:

“31 December 2023, for cylinders for LPG”.]

[For “EN 12245:2009 + A1:2011”, in column (2), number the existing Note to be “NOTE 1” and insert a new Note as follows:

“**NOTE 2:** *This standard shall not be used for gases classified as LPG.*”]

[For “EN 12245:2009 + A1:2011”, in column (5), insert:

“31 December 2023, for cylinders for LPG”.]

For “EN ISO 11118:2015”, in column (4), replace “Until further notice” by:

“Between 1 January 2017 and 31 December 2024”.

After the row for “EN ISO 11118:2015”, insert the following new row:

“

(1)	(2)	(3)	(4)	(5)
EN ISO 11118:2015 + A1:2020	Gas cylinders – Non-refillable metallic gas cylinders – Specification and test methods	6.2.3.1, 6.2.3.3 and 6.2.3.4	Until further notice	

”

For “EN 14427:2004 + A1:2005”, in column (5), insert the following text:

“31 December 2023, for cylinders without a liner, manufactured from two parts joined together”.

For “EN 14427:2014”, in column (2), add a new Note as follows:

“**NOTE:** *This standard shall not be used for cylinders without a liner, manufactured from two parts joined together.*”

For “EN 14427:2014”, in column (5), insert the following text:

“31 December 2023, for cylinders without a liner, manufactured from two parts joined together”.

6.2.5.4.2 Modify the amendment in ECE/TRANS/WP.15/251, Annex I, to read as follows:

6.2.5.4.2 At the end of the sentence, replace “(see also EN 1975:1999 + A1:2003)” by “(see also EN ISO 7866:2012 + A1:2020)”.

Chapter 6.8

6.8.2.1.23 Move the last sentence of the first sub-paragraph to the end of the second sub-paragraph, replacing the colon at the end of the second sub-paragraph with a full stop.

Insert the following new sub-paragraph immediately before the final sub-paragraph:

- “Welds made during repairs or alterations shall be assessed as above and in accordance with the non-destructive tests specified in the relevant standard(s) referenced in 6.8.2.6.2.”
- 6.8.2.2.2 At the end of the seventh sub-paragraph, insert a reference 9 to the following footnote:
“⁹ The mode of operation of dry break couplings is self-closing. Consequently, an open/closed indicator is not necessary. This type of closure shall only be used as a second or third closure.”
- 6.8.2.2.4 After the first sentence, insert in the right-hand column:
 [“These openings for tank-containers with [a capacity of more than 40 000 litres / a gross weight of more than 36 000 kg] intended for the carriage of [liquids] / [substances in the liquid state] which are not divided by partitions or surge plates into sections of not more than 7 500 litres capacity shall be provided with closures designed for a test pressure of at least 0.4 MPa (4 bar). Hinged dome covers for these tank-containers with a test pressure of more than 0.6 MPa (6 bar) shall not be permitted.”]
- 6.8.2.4.3 In the first sub-paragraph, in the first sentence, replace “at least every” by: “no later than”.
 In the third sub-paragraph, replace “the due date” by: “the specified date”. Replace “at the latest every” by: “no later than”. Replace “after this date” by: “after this earlier date”.
- [6.8.2.6.2 In the table, for “EN 12972:2018”, in column (3) before “6.8.2.4” insert “6.8.2.1.23”.]
- 6.8.3.4.6 In ECE/TRANS/WP.15/251, Annex I, replace the amendment to 6.8.3.4.6 with the following amendment:
 “6.8.3.4.6 Amend to read as follows:
 “6.8.3.4.6 For tanks intended for the carriage of refrigerated liquefied gases:
 (a) By derogation from the requirements of 6.8.2.4.2, the periodic inspections shall be performed no later than
 six years | eight years
 after the initial inspection and thereafter no later than every 12 years;
 (b) By derogation from the requirements of 6.8.2.4.3, the intermediate inspections shall be performed no later than six years after each periodic inspection.””
- 6.8.4 (d)
- TT 3 In the first sentence, replace “shall take place at least” by: “shall be performed no later than”.
 In the second sentence, replace “shall be carried out at least” by: “shall be performed no later than”.
- TT 5 Replace “shall take place at least” by: “shall be performed no later than”.
- TT 6 In the left-hand column, replace “shall be carried out at least” by: “shall be performed no later than”.
- TT 10 Replace “shall take place at least” by: “shall be performed no later than”.
- TT 11 In the list of standards after the second sentence:

Replace “EN ISO 17640:2010” by “EN ISO 17640:2018”.

Replace “EN ISO 17638:2009” by “EN ISO 17638:2016”.

Replace “EN ISO 23278:2009 – Magnetic particle testing of welds. Acceptance levels” by “EN ISO 23278:2015 – Non-destructive testing of welds – Magnetic particle testing. Acceptance levels”.

Replace “EN 1711:2000” by “EN ISO 17643:2015”.

Replace “EN 14127:2011” by “EN ISO 16809:2019”.

In the paragraph after the table, replace EN ISO 23278:2009 – Magnetic particle testing of welds. Acceptance levels” by “EN ISO 23278:2015 – Non-destructive testing of welds – Magnetic particle testing. Acceptance levels”.

Chapter 6.10

6.10.4 Before “every three years”, insert: “no later than”.

6.10.4 Before “every two and a half years”, replace “at least” by: “no later than”.

Chapter 6.12

6.12.3.2.6 Replace “at least” by: “no later than”.

Chapter 7.4

7.4.1 Amend the first sentence to read as follows: “Dangerous goods may only be carried in tanks when a portable tank instruction is shown in column (10) or when a tank code is shown in column (12) of Table A of Chapter 3.2, or when a competent authority has issued an authorisation in accordance with the conditions specified in 6.7.1.3.”

Chapter 8.1

8.1.2.1 In paragraph (a), delete: “and, when appropriate, the container/vehicle packing certificate prescribed in 5.4.2”.
