European Commission for Europe
Inland Transport Committee
Working Party on the Transport of Dangerous Goods

European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)

Draft amendments to annexes A and B of ADR

Corrigendum

1. Chapter 1.1, amendment to 1.1.3.2 (a)

For the existing text substitute

1.1.3.2 (a) Amend to read as follows:

“(a) Gases contained in the fuel tanks or cylinders of a vehicle, performing a transport operation and destined for its propulsion or for the operation of any of its equipment used or intended for use during carriage (e.g. refrigerating equipment).

The gases may be carried in fixed fuel tanks or cylinders, directly connected to the vehicle’s engine and/or auxiliary equipment or transportable pressure receptacles, which comply with the pertinent legal provisions.

The total capacity of the fuel tanks or cylinders for a transport unit, including those allowed in accordance with 1.1.3.3 (a), shall not exceed the amount of energy (MJ) or mass (kg) corresponding to 54 000 MJ energy-equivalent.

NOTE: The value of 54 000 MJ energy-equivalent corresponds to the fuel limit of 1.1.3.3 (a) (1500 litres). For the energy content of fuels see the following Table:

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Energy content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel</td>
<td>36 MJ/litre</td>
</tr>
<tr>
<td>Petrol</td>
<td>32 MJ/litre</td>
</tr>
<tr>
<td>Natural Gas/Biogas</td>
<td>35 MJ/Nm³</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas (LPG)</td>
<td>24 MJ/litre</td>
</tr>
<tr>
<td>Ethanol</td>
<td>21 MJ/litre</td>
</tr>
<tr>
<td>Biodiesel</td>
<td>33 MJ/litre</td>
</tr>
<tr>
<td>Emulsion fuel</td>
<td>32 MJ/litre</td>
</tr>
<tr>
<td>Fuel</td>
<td>Energy content</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>11 MJ/Nm³</td>
</tr>
</tbody>
</table>

The total capacity shall not exceed:
- 1 080 kg for LNG and CNG;
- 2 250 litres for LPG.”.

2. **Amendment to Part 1, Chapter 1.1, 1.1.3.3 (a)**

*Delete*

At the end of the first sentence of the third paragraph, insert: “, irrespective of whether the trailer is towed or carried on another vehicle.”.

3. **Amendment to Part 1, Chapter 1.2, 1.2.1, definition of “Manual of tests and criteria”**

Not applicable to English

4. **Amendment to Part 1, Chapter 1.2, 1.2.1, new definition for “Holding time”**

Not applicable to English

5. **Chapter 1.4, amendment to 1.4.2.2.1 (g)**

For the existing text, *substitute*

1.4.2.2.1 (g) Amend to read as follows:

“(g) ascertain that the equipment prescribed in ADR for the transport unit, vehicle crew and certain classes is on board the transport unit.”.

6. **Amendments to Part 1, Chapter 1.6, 1.6.1.20, 1.6.1.28, 1.6.1.30, 1.6.1.31, 1.6.1.32**

*Delete* 1.6.1.30

7. **Amendments to Part 1, Chapter 1.6, new transitional measures 1.6.1.37 to 1.6.1.41**

*Renumber* as transitional measures 1.6.1.38 to 1.6.1.42.

8. **Chapter 1.6, new transitional measure 1.6.5.16**

For the existing text, *substitute*

“1.6.5.16 EX/II, EX/III, FL and OX vehicles registered before 1 April 2018, fitted with fuel tanks not approved according to ECE Regulation No. 34 may still be used.”.

9. **Amendments to Part 1, Chapter 1.8, 1.8.3.12.4 (a)**

For the existing text, *substitute*

1.8.3.12.4 (a) Amend the fourth indent to read as follows: “- danger marking, labelling and placarding.”.
10. Amendment to Part 2, Chapter 2.2, new 2.2.41.1.21

Not applicable to English

11. Amendment to Part 2, Chapter 2.2, 2.2.9.1.14, first amendment

For “Engines and machinery, internal combustion.” read “Vehicles, engines and machinery, internal combustion.”

12. Amendment to Part 3, Chapter 3.2, Table A, new entries 0015, 0016 and 0303, column (18)

Insert CV28

13. Amendment to Part 3, Chapter 3.3, special provision 363, in the Note after paragraph (a)

For 1.1.3.3 read 1.1.3.2 (a), (d) and (e), 1.1.3.3 and 1.1.3.7

14. Amendment to Part 3, Chapter 3.3, new special provision 378, in the Note under sub-paragraph e)

For ISO 9001:2008 read ISO 9001

15. Amendment to Part 3, Chapter 3.3, new special provision 666 sub-paragraph (a)

Not applicable to English

16. Amendment to Part 3, Chapter 3.3, new special provision 666 sub-paragraph (b), at the end

Insert unless it is essential for the equipment to remain operational

17. Amendment to Part 3, Chapter 3.3, new special provision 666 sub-paragraph (d)

Not applicable to English

18. Amendment to Part 4, Chapter 4.1, 4.1.1.19.1

For the existing text, substitute

4.1.1.19.1 Amend the second sentence to read as follows: “This does not prevent the use of a larger size packaging, an IBC of type 11A or a large packaging of appropriate type and performance level and under the conditions of 4.1.1.19.2 and 4.1.1.19.3.”.
19. Amendment to Part 4, Chapter 4.1, 4.1.4.1, P200 (5), sub-paragraph (e), first paragraph

For liquid phase read liquefied gas

20. Amendment to Part 4, Chapter 4.1, 4.1.4.1, P200 (5), sub-paragraph (e), in (i), (iv) and (v)

For liquid component read liquefied gas

21. Amendment to Part 4, Chapter 4.1, 4.1.4.1, P200 (5), sub-paragraph (e), last paragraph

For liquid component read liquid phase

22. Amendment to Part 4, Chapter 4.1, 4.1.4.1, P206 (3), first sub-paragraph of the added text

For the liquid phase read the liquid

23. Amendment to Part 4, Chapter 4.1, 4.1.4.1, P206 (3), sub-paragraphs (a), (d) and (e) of the added text

For the liquid component read the liquid

24. Amendment to Part 4, Chapter 4.1, 4.1.4.1, P206 (3), last sub-paragraph of the added text

For the liquid component read the liquid phase

25. Amendment to Part 4, Chapter 4.1, 4.1.4.1, new packing instruction P910 (3), first sentence

For the existing text, substitute

The equipment or the batteries may be carried unpackaged under conditions specified by the competent authority of any Contracting Party to ADR, which may also recognize an approval granted by the competent authority of a country which is not a Contracting Party to ADR, provided that this approval has been granted in accordance with the procedures applicable according to RID, ADR, ADN, the IMDG Code or the ICAO Technical Instructions.

26. Amendment to Part 4, Chapter 4.1, 4.1.6.1.15

Not applicable to English
27. Amendments to Part 4, Chapter 4.3, TU16 and TU21

For the existing text, substitute

4.3.5 Amend TU16 and TU21 to read as follows:

“TU16  When handed over for carriage, uncleaned empty tanks shall be filled with a protective agent fulfilling one of the following measures:

<table>
<thead>
<tr>
<th>Protective agent</th>
<th>Degree of filling of water</th>
<th>Additional requirements for carriage at low ambient temperatures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Water and nitrogen*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>not less than 96 % and not more than 98%</td>
<td>The water shall contain sufficient anti-freeze agent to prevent it from freezing. The anti-freeze agent shall be free from corrosive action and not liable to react with the substance.</td>
</tr>
</tbody>
</table>

* The tank shall be filled with nitrogen in such a way that, even after cooling, the pressure at no time falls below atmospheric pressure. The tank shall be closed in such a way that no leakage of gas occurs.”.

“TU21  The substance shall be protected by a protective agent in the following ways:

<table>
<thead>
<tr>
<th>Protective agent</th>
<th>A layer of water in the tank</th>
<th>Degree of filling of the substance (including water if any) at a temperature of 60° C shall not exceed</th>
<th>Additional requirements for carriage at low ambient temperatures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen*</td>
<td>-</td>
<td>96 %</td>
<td></td>
</tr>
<tr>
<td>Water and nitrogen*</td>
<td>-</td>
<td>98 %</td>
<td>The water shall contain sufficient anti-freeze agent to prevent it from freezing. The anti-freeze agent shall be free from corrosive action and not liable to react with the substance.</td>
</tr>
<tr>
<td>Water</td>
<td>not less than 12 cm</td>
<td>98 %</td>
<td></td>
</tr>
</tbody>
</table>

* The remaining space of the tank shall be filled with nitrogen in such a way that, even after cooling, the pressure at no time falls below atmospheric pressure. The tank shall be closed in such a way that no leakage of gas occurs.”.

28. Amendment to Part 5, Chapter 5.4, 5.4.2

For the existing text, substitute

5.4.2 Amend as follows:

In the title, replace “Large container” by “Container”.

In the first paragraph, replace “large container” by “container” and replace “container packing certificate” by “container/vehicle packing certificate”.”
In the second paragraph, replace “container packing certificate” by ““container/vehicle packing certificate”” (twice) and replace “loading of the container” by “loading of the container or vehicle”.

In the NOTE, replace “container packing certificate” by ““container/vehicle packing certificate””.

29. Amendment to Part 5, Chapter 5.5, 5.5.2.3.2

Not applicable to English

30. Chapter 5.5, 5.5.3.3.3, first indent

For cabin read cab

31. Amendment to Part 5, Chapter 5.5, 5.5.3.3.3, at the end of the second indent of the amended text

For where this requirement is fulfilled read and separated from the driver’s cab

32. Amendment to Part 6, Chapter 6.2, 6.2.1.6.1 a)

Not applicable to English

33. Amendment to Part 6, Chapter 6.2, table in 6.2.2.3, in the new row for “ISO 10297:2014”, in the second column

Delete the NOTE.

34. Amendment to Part 6, Chapter 6.2, 6.2.2.6.5

Not applicable to English


Insert (except over-moulded cylinders)

36. Chapter 6.4, amendments to 6.4.23.12 (a) and 6.4.23.16 (b)

Not applicable to English

37. Amendment to Part 6, Chapter 6.8, 6.8.2.6.1, table, under “For design and construction of tanks”, new entry for standard EN 12493:2013 + A1:2014, first column

38. Amendment to Part 6, Chapter 6.8, 6.8.4, special provision TT11


39. Amendment to Part 7, Chapter 7.5, new 7.5.7.6.1, in the Note

For IMO/ILO/UNECE Guidelines for Packing Cargo Transport Units (CTUs) read IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code)