# INF.30/Add.7 E

# ECONOMIC COMMISSION FOR EUROPE

# INLAND TRANSPORT COMMITTEE

# Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Safety Committee and the Working Party on the Transport of Dangerous Goods (Bern, 24-28 March 2003)

# HARMONIZATION WITH THE UNITED NATIONS MODEL REGULATIONS ON THE TRANSPORT OF DANGEROUS GOODS

# Draft proposal of amendments to Part 7, 8 and 9 of RID/ADR/ADN

# Prepared by the UNECE secretariat

NOTE: The proposal is based on ST/SG/AC.10/29/Add.1. Stricken out text means that the amendment does not seem relevant for RID/ADR/ADN. Text underlined means alternative wording proposed by the secretariat. Text in square brackets means that the relevance of the text for RID/ADR/ADN should be discussed by the Working Group of the Joint Meeting.

# Amend Chapter 7.3 to read as follows:

	"CHAPTER 4 <u>7</u> .3
	USE OF BULK CONTAINERS PROVISIONS CONCERNING CARRIAGE IN BULK
4 <u>7</u> .3.1	General provisions
7.3.1.1	Goods may not be carried in bulk in vehicles/wagons or containers unless:
	(a) either a special provision, identified by the code BK, explicitly authorizing this mode of carriage is indicated in column (10) of Table A of Chapter 3.2 in addition of those of this section 7.3.1 and the special provisions of 7.3.2 are satisfied; or
	(b) a special provision, identified by the code VW/VV, explicitly authorizing this mode of carriage is indicated in column (17) of Table A of Chapter 3.2 and the conditions of this special provision, as laid down in 7.3.3 are satisfied in addition of those of this section 7.3.1.
	Nevertheless, empty packagings, uncleaned, may be carried in bulk if his mode of carriage is not explicitly prohibited by other provisions of RID/ADR.
	NOTE: For carriage in tanks, see Chapters 4.2 and 4.3.
4.3.1.1	This section provides general requirements applicable to the use of containers for the transport of solid substances in bulk. Substances shall be transported in bulk containers conforming to the applicable bulk container instruction identified by the letters BK in column 10 of the Dangerous Goods List, with the following meaning:
	BK1: the transport in sheeted bulk containers is permitted BK2: the transport in closed bulk containers is permitted
The bulk cor	ntainer used shall conform to the requirements of Chapter 6.8.
4 <del>.3.1.2</del>	Except as provided in 4.3.1.3, bulk containers shall only be used when a substance is assigned to a bulk container code in Column 10 of the Dangerous Goods List in Chapter 3.2.
4.3.1.3	When a substance is not assigned a bulk container code in Column 10 of the Dangerous Goods List in Chapter 3.2, interim approval for transport may be issued by the competent authority of the country of origin. The approval shall be included in the documentation of the consignment and contain, as a minimum, the information normally provided in the bulk container instruction and the conditions under which the substance shall be transported. Appropriate measures should be initiated by the competent authority to include the assignment in the Dangerous Goods List.
7.3.1.2	The container used or the body of the vehicle/wagon shall conform to the requirements of Chapter 6.11.
4 <u>7</u> .3.1. <u>3</u> 4	Substances which may become liquid at temperatures likely to be encountered during transport carriage, are not permitted in bulk containers for carriage in bulk.

- 4<u>7</u>.3.1.<u>4</u>5 Bulk Containers <u>or body of wagons/vehicles</u> shall be siftproof and shall be so closed that none of the contents can escape under normal conditions of <u>transport\_carriage</u> including the effect of vibration, or by changes of temperature, humidity or pressure.
- 4<u>7</u>.3.1.<u>56</u> Bulk solids shall be loaded <u>into bulk containers</u> and evenly distributed in a manner that minimises movement that could result in damage to the container <u>or wagon/vehicle</u> or leakage of the dangerous goods.
- 4<u>7</u>.3.1.<u>6</u><sup>7</sup> Where venting devices are fitted they shall be kept clear and operable.
- 47.3.1.78 Bulk solids shall not react dangerously with the material of the bulk container, wagon/vehicle, gaskets, equipment including lids and tarpaulins and with protective coatings which are in contact with the contents or significantly weaken them. Bulk containers or wagon/vehicle shall be so constructed or adapted that the goods cannot penetrate between wooden floor coverings or come into contact with those parts of the bulk containers or wagons/vehicles that may be affected by the materials or residues thereof.
- 4<u>7</u>.3.1.<u>8</u>9 Before being filled and offered for <u>transport</u>\_<u>carriage</u> each <u>bulk</u>\_container <u>or</u> <u>wagon/vehicle</u> shall be inspected and cleaned to ensure that it does not contain any residue on the interior or exterior of the <u>bulk</u>-container or wagon/vehicle that could
  - cause a dangerous reaction with the substance intended for transportcarriage;
  - detrimentally affect the structural integrity of the bulk-container or wagon/vehicle; or
  - affect the dangerous goods retention capabilities of the <u>bulk</u>\_container<u>or</u> <u>wagon/vehicle</u>.
- 4<u>7</u>.3.1.<u>910</u> During transport<u>carriage</u>, no dangerous residues shall adhere to the outer surfaces of bulk containers or of the body of wagons/vehicles.
- 4<u>7</u>.3.1.<u>10</u><sup>11</sup> If several closure systems are fitted in series, the system which is located nearest to the substance to be <u>transported carried</u> shall be closed first before filling.
- 4<u>7</u>.3.1.<u>11</u><sup>12</sup> Empty <u>bulk</u> containers <u>or wagons/vehicles which have carried a dangerous solid</u> <u>substance in bulk that have contained a dangerous substance</u> shall be treated in the same manner as is required by <u>these Regulations\_RID/ADR</u> for a filled <u>bulk</u>-container<u>or</u> <u>wagon/vehicle</u>, unless adequate measures have been taken to nullify any hazard.
- 4<u>7</u>.3.1.<u>12</u>13 If <u>bulk</u> containers<u>or wagons/vehicles</u> are used for the carriage <u>of-in</u> bulk <u>of</u> goods liable to cause a dust explosion, or evolve flammable vapours (e. g. for certain wastes) measures shall be taken to exclude sources of ignition and prevent dangerous electrostatic discharge during <u>transport\_carriage</u> filling or discharge of the substance.
- 4<u>7</u>.3.1.<u>13</u>14 Substances, for example wastes, which may react dangerously with one another and substances of different classes and goods not subject to these Regulations <u>RID/ADR</u>, which are liable to react dangerously with one another shall not be mixed together in the same <u>bulk</u>-container or wagon/vehicle. Dangerous reactions are:
  - (a) combustion and/or evolution of considerable heat;
  - (c) emission of flammable and/or toxic gases;

- (c) formation of corrosive liquids; or
- (d) formation of unstable substances.
- 47.3.1.1415 Before a bulk container or wagon/vehicle is filled it shall be visually examined to ensure it is structurally serviceable, its interior walls, ceiling and floors are free from protrusions or damage and that any inner liners or substance retaining equipment are free from rips, tears or any damage that would compromise its cargo retention capabilities. Structurally serviceable means the bulk container or wagon/vehicle does not have major defects in its structural components, such as top and bottom side rails, top and bottom end rails, door sill and header, floor cross members, corner posts, and corner fittings in a freight container. Major defects include:
  - (a) Bends, cracks or breaks in the structural or supporting members that affect the integrity of the container or of the body of the wagon/vehicle;
  - (b) More than one splice or an improper splice (such as a lapped splice) in top or bottom end rails or door headers;
  - (c) More than two splices in any one top or bottom side rail;
  - (d) Any splice in a door sill or corner post;
  - (e) Door hinges and hardware that are seized, twisted, broken, missing, or otherwise inoperative;
  - (f) Gaskets and seals that do not seal;
  - (g) Any distortion of the overall configuration <u>of a container</u> great enough to prevent proper alignment of handling equipment, mounting and securing chassis or vehicle, or insertion into ships' cells;
  - (h) Any damage to lifting attachments or handling equipment interface features; or
  - (i) Any damage to service or operational equipment.
- 4<u>7</u>.3.2 Additional provisions applicable to bulk goods for the carriage in bulk of goods of Divisions classes 4.2, 4.3, 5.1, 6.2, and Classes 7 and 8 when the provisions of 7.3.1.1 (a) are applied
- 7.3.2.1 The codes BK1 and BK2 in column (10) of Table A of Chapter 3.2 have the following meanings:
  - BK1: Carriage in bulk in sheeted containers or vehicles/wagons is permitted;

BK2: Carriage in bulk in closed containers or vehicles/wagons is permitted.

## 4<u>7</u>.3.2.<u>2</u>1 Bulk-Goods of Division Class 4.2

Only closed bulk containers (code BK2) may be used. The total mass carried in a bulk container or wagon/vehicle shall be such that its spontaneous ignition temperature is greater than 55 °C.

#### 47.3.2.32 Bulk-Goods of Class Division 4.3

Only closed bulk containers (code BK2) may be used. These goods shall be transported in bulk containers or wagons/vehicles which are watertight.

#### 47.3.2.43 Bulk-Goods of Class Division-5.1

Bulk Containers or wagons/vehicles shall be so constructed or adapted that the goods cannot come into contact with wood or any other incompatible material.

#### 47.3.2.54 Bulk Wastes goods of <u>Class Division 6.2</u> (UN <u>No.</u> 2900)

- (a) For wastes<u>-goods</u> of UN <u>No.</u> 2900, sheeted <u>bulk</u>-containers <u>or wagons/vehicles</u> BK1 are permitted provided that they are not filled to maximum capacity to avoid substances coming into contact with the sheeting. Closed <u>bulk</u>-containers <u>or</u> <u>wagons/vehicles</u> BK2 are also permitted;
- (b) Closed and sheeted <u>bulk</u>-containers<u>or wagons/vehicles</u>, and their openings, shall be leak-proof by design or by the fitting of a suitable liner;
- (c) Waste<u>s</u>-goods of UN <u>No.</u> 2900 shall be thoroughly treated with an appropriate disinfectant before loading prior to <u>transportcarriage</u>;
- (d) Waste<u>s goods</u> of UN <u>No.</u> 2900 in a sheeted <u>bulk</u>-container <u>or wagon/vehicle</u> shall be covered by an additional top liner weighted down by absorbent material treated with an appropriate disinfectant;
- (e) Closed or sheeted <u>bulk</u>-containers <u>or wagons/vehicles</u> used for the <u>transport</u> <u>carriage</u> of wastes <u>goods</u> of UN <u>No.</u> 2900 shall not be re-used until after they have been thoroughly cleaned and disinfected.

#### 47.3.2.65 Bulk-Material of Class 7

For the transport-carriage of unpackaged radioactive material, see 4.1.9.2.3.

47.3.2.76 Bulk Goods of Class 8

Only closed bulk containers (code BK2) may be used .. These goods shall be transported carried in bulk containers or wagons/vehicles which are watertight.

7.3.3 Special provisions for the carriage in bulk when the provisions of 7.3.1.1 (b) are applied

[Existing text of 7.3.3]".

7.1.6.2.3 Add a new paragraph to read as follows:

[7.5.11 CW13/CV13 (RID/ADR) Amend CW13/CV13 to read as follows: [7.1.4.15.3] (ADN) Add a new paragraph as follows:

"7.1.6.2.3 Decontamination of transport units

A railway wagon, road vehicle, cargo space of a ship, compartment of an aircraft or other transport unit wagon/vehicle or container (ADN: transport unit or hold space) which has been used to transport carry infectious substances shall be inspected for release of the substance before re-use. If the infectious substances were released during transport

<u>carriage</u>, the <u>transport\_unit\_wagon/vehicle or container (ADN: transport\_unit or hold space)</u> shall be decontaminated before it is re-used. Decontamination may be achieved by any means which effectively inactivates the released infectious substance.".] [Already covered by CW13/CV13 and no change needed in RID/ADR?]

### <del>7.1.7.1.1 (b)</del> (RID/ADR) 7.5.11 CW/CV33 (1.1) (a) (ii)

(ADN) 7.1.4.14.7.1.1 (a) (ii) Amend the end of this sub-paragraph to read: "...to the critical group1 mSv per year, taking account of the exposures expected to be delivered by all other relevant sources and practices under control.".

## 7.1.7.3.3 (c) (RID/ADR) 7.5.11 CW/CV33 (3.3) (c)

(ADN) 7.1.4.14.7.3.3 (c) Amend the end to read: "...of the <u>wagon/vehicle/conveyance</u>, except for consignments transported <u>carried</u> under exclusive use by road or rail, for which the radiation limits around the vehicle are set forth in <u>7.2.3.1.2 (RID/ADR) CW33/CV33</u> (3.5) (ADN) 7.1.4.14.7.3.5 (b) and (c)".

#### 7.1.7.4.1 (RID/ADR) 7.5.11 CW/CV33 (4.1)

(ADN) 7.1.4.14.7.4.1 Amend to read as follows:

"7.1.7.4.1 7.5.11 CW/CV33 (4.1) / 7.1.4.14.7.4.1 Any group of packages, overpacks, and freight containers containing fissile material stored in transit in any one storage area shall be so limited that the total sum of the criticality safety indexes in the group does not exceed 50. Each group shall be stored so as to maintain a spacing of at least 6 m from other such groups."

# 7.1.7.5.5 (RID/ADR) 7.5.11 CW/CV33 (5.5)

(ADN) 7.1.4.14.7.5.5 Amend the beginning to read as follows: "A freight container, tank, intermediate bulk container or wagon/vehicle/conveyance dedicated to the transport carriage of unpackaged radioactive material under exclusive use...".

# <u> Part 8</u>

#### Chapter 7.2

7.2.4 Add a new section 7.2.4 as to read as follows:

**<u>"7.2.4 Security provisions for transport by road, rail and inland waterway</u>** 

**NOTE:** These provisions are in addition to those applicable to all modes of transport as provided in Chapter 1.4.

- 8.3.1 (ADR) Amend to read:
- <u>"8.3.1 Persons authorized on board</u>

7.2.4.1 8.3.1.1 Each crew member of road-vehicles, trains and inland waterway craft transporting carrying dangerous goods shall carry with them means of identification, which includes their photograph, during transport.".

- 8.3.1.2 [Existing text of 8.3.1]
- <u>8.3.1.(ADN)</u> Insert a new 8.3.1.3 to read:
- "8.3.1.3 When dangerous goods are carried on board the vessel, each person authorized to be on board shall carry with them means of identification, which includes their photograph [, during transport].".

<u>RID</u> "Each crew member of trains carrying dangerous goods shall carry with them means of identification, which includes their photograph, during transport.".

To be determined (RID) Add a new paragraph to read as follows:

- 8.4 (ADR)Existing text becomes 8.4.1. Add a new 8.4.2 to read as follows:8.4 (ADN)Amend the heading of Chapter to read "REQUIREMENTS CONCERNING THE<br/>SUPERVISION OF VESSELS" and add "8.4.1 (Reserved)" and 8.4.2 to read as follows:
- "<u>8.4.2</u> When appropriate and already fitted, the use of transport telemetry or other tracking methods or devices shall be used to monitor the movement of high consequence dangerous goods [(see Table 1.4.1 in Chapter 1.4.)]".

Add new paragraphs 8.4.3 and 8.4.4 (ADR/ADN)/to be determined for RID to read as follows:

- <u>"7.2.4.38.4.3</u> The carrier shall ensure the application to vehicles/wagons/vessels-and inland waterway eraft transporting carrying high consequence dangerous goods [(see Table 1.4.1 in Chapter 1.4)] of devices, equipment or arrangements to prevent the theft of the vehicle/wagon/vessel or inland waterway craft or its cargo and shall ensure that these are operational and effective at all times.
- [7.2.4.4<u>8.4.4</u> Safety inspections <u>on in wagons/vehicles/ hold spaces transport units</u> shall cover appropriate security measures.] [covered by 1.8.1.1?]".
- Part 9 (ADR only)
- 9.5.3 Amend to read as follows:
- <u>"9.5.3</u> The bodies of vehicles intended for the carriage of dangerous solids in bulk shall meet the requirements of Chapters 6.11 and 7.3, as appropriate, including those of 7.3.2 or 7.3.3 which may be applicable in accordance with the indications in columns (10) or (17) respectively of Table A of Chapter 3.2 for a given substance."