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**Joint Meeting of the RID Safety Committee  
and the Working Party on the Transport of  
Dangerous Goods  
(Geneva, 14-24 September 1999)**

**RESTRUCTURING OF RID/ADR**

**PART 1 -GENERAL PROVISIONS**

**Proposal by the secretariat \*/**

The Secretariat has received the following consolidated text from the Central Office for International Carriage by Rail.

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## **PART 1: GENERAL PROVISIONS**

### 1.1 SCOPE AND APPLICABILITY

#### 1.1.1 Scope

[RID] [1(1)] [from 2001 to 200X] Annex 1 constitutes the rules for the carrying out of article 4 (d) and article 5, paragraph 1 (a) of the Uniform Rules Concerning the Contract for Carriage of Goods by Rail (CIM). It is entitled “RID”, which is the abbreviation for “Règlement concernant le transport international ferroviaire des marchandises dangereuses” (Regulations concerning the International Carriage of Dangerous Goods by Rail).

[RID] [(from 200X) For the purposes of Article 1 of Appendix C], RID specifies:

ADR] For the purposes of Article 2 of ADR, this Annex specifies:

Dangerous goods which are barred from international carriage;

Dangerous goods which are authorized for international carriage and the conditions required for them (including exemptions) particularly with regard to:

- n classification of goods, including classification criteria and relevant test methods;
- n use of packagings (including mixed packing);
- n use of tanks (including filling);
- n use of means of transport (including loading, mixed loading and unloading);
- n consignment procedures (including marking and labelling of packagings and means of transport and documentation);
- n provisions concerning the construction, testing and approval of packagings and tanks.

[RID] [(from 200X) In addition to the requirements of Appendix C, carriage within the meaning of RID is also subject to the requirements of the other Appendices to COTIF which are applicable; in particular, those of Appendix B when carriage is performed on the basis of a transport contract.]

### 1.1.2 Structure

RID/ADR is divided into parts, with each part subdivided into chapters and each chapter into sections and subsections (see contents).

Within each part, the number of the part is included with the numbers of the chapters, sections and subsections; for example Part 4, Chapter 2, section 1 is numbered "4.2.1."

### 1.1.3 Exemptions

#### 1.1.3.1 Exemptions relating to the nature of the transport operation

[17 2009]The provisions laid down in RID/ADR do not apply to:

- (a) The carriage of dangerous goods by private individuals where the goods in question are packaged for retail sale and are intended for their personal or domestic use or for leisure or sporting activities;
- (b) The carriage of machinery or equipment not specified in RID/ADR and which happen to contain dangerous goods in their internal or operational equipment;
- (c) To carriage undertaken by enterprises which is ancillary to their main activity, such as deliveries to building or civil engineering sites, or in relation to surveying, repairs and maintenance, in quantities of not more than 450 litres per packaging and within the maximum quantities [RID] specified below [ADR] specified in [marginal 10 011]:

Transport category	Substances or articles Packing group or classification code/group or UN No.	Maximum total quantity per wagon
0	<p>Class 1: 1.1L/1.2L/1.3L/1.4L and No. 0190</p> <p>Class 4.2: Substances belonging to Packing Group I</p> <p>Class 4.3: 1183, 1242, 1295, 1340, 1390, 1403, 1928, 2813, 2965, 2968, 2988, 3129, 3130, 3131, 3134, 3148, 3207</p> <p>Class 6.1: 1051, 1613, 1614, 3294</p> <p>Class 6.2: 2814/2900 without packing group</p> <p>Class 7: Substances and articles [of marginal 704, schedules 5 to 13]</p> <p>Class 9: 2315, 3151, 3152 and equipment containing such substances or mixtures</p> <p>and empty uncleaned packagings having contained substances classified in this transport category</p>	0
1	<p>Substances and articles belonging to Packing Group I and not classified in transport category 0</p> <p>and substances and articles of the following classes:</p> <p>Class 1: 1.1B to 1.1J (a)/1.2B to 1.2J/1.3C/1.3G/1.3H/1.3J/1.5D (a)</p> <p>Class 2: groups T, TC (a), TO, TF, TOC and TFC</p> <p>Class 4.1: 3221 to 3224</p> <p>Class 5.2: 3101 to 3104</p>	20

Transport category	Substances or articles Packing group or classification code/group or UN No.	Maximum total quantity per wagon
2	Substances or articles belonging to packing group II and not classified in transport categories 0, 1 or 4  and substances of the following classes:  Class 1: 1.4B to 1.4G/1.6N  Class 2: group F  Class 6.1: substances and articles belonging to Packing Group III  Class 6.2: 2814/2900 Packing Group II	300
3	Substances and articles belonging to Packing Group III and not classified in transport categories 2 or 4  and substances and articles of the following classes:  Class 2: groups A and O  Class 9: 2990/3072	1 000
4	Class 1: 1.4S  Class 4.1: 1331/1345/1944/1945/2254/2623  Class 4.2: 1361/1362 Packing Group III  Class 7: substances and articles [of marginal 704, schedules 1 to 4]  Class 9: 3268  and empty, uncleaned packagings having contained dangerous goods, except for those classified in transport category 0	unlimited

a/ For identification numbers 0081, 0082, 0084, 0241, 0331, 0332, 0482, 1005 and 1017, the total maximum quantity per wagon shall be 50 kg.

In the above table, “maximum total quantity per wagon” means:

For articles, the gross mass in kg (for articles of Class 1, the net mass of explosive in kg);

For solids, liquefied gases, refrigerated liquefied gases and gases dissolved under pressure, the net mass in kg;

For liquids and compressed gases, the nominal capacity of the receptacle in litres.

When dangerous goods belonging to different transport categories, as defined in the table, are carried in the same wagon, the sum of

- the quantity of substances and articles of transport category 1 multiplied by 50,
- the quantity of substances and articles of transport category 2 multiplied by 3, and
- the quantity of substances and articles of transport category 3, shall not exceed 1,000.

For the purposes of these requirements, liquids and gases contained in the ordinary fixed tanks of means of transport for their propulsion or for the operation of their specialized equipment (refrigerating appliances, for example) or for ensuring their safety and referred to in [marginal 201a (1), Note (c), (d), (e), (h) and 301a (5)] shall not be taken into account.

[RID/ADR]

Carriage undertaken by enterprises for their supply or external or internal distribution does not fall within the scope of this exemption.

- (d) Carriage undertaken by, or under the supervision of, the intervention services; [ADR] in particular by breakdown vehicles carrying vehicles which have been involved in accidents or have broken down and contain dangerous goods.
- (e) Emergency transport intended to save human lives or protect the environment provided that all measures are taken to ensure that such transport is carried out in complete safety.

#### 1.1.3.2 Exemptions related to the carriage of gases

Neither the provisions of this Annex nor those of Annex B apply to/The requirements of RID do not apply to the transport of:

- (a) gases contained in the fuel tanks of vehicles transported; the fuel cock between gas tank and engine shall be closed and the electric contact open;
- (b) gases contained in the equipment used for the operation of the vehicles (e.g. fire extinguishers or inflated pneumatic tyres, even as spare parts or as a load)
- (c) gases contained in the special equipment of wagons/vehicles and necessary for the operation of this special equipment during transport (cooling systems, fish-tanks, heaters, etc.) as well as spare receptacles for such equipment or uncleaned empty exchange receptacles, transported in the same wagon/transport unit;

- (d) uncleaned empty fixed pressure tanks which are carried on condition that they are hermetically closed; and
- (e) gases contained in foodstuffs or beverages.

#### 1.1.3.3 Other exemptions

Certain special provisions of Chapter 3.3 exempt partially or totally the transport of specific dangerous goods from the requirements of RID/ADR. The exemption applies when the special provision is referred to in column [6] of Table A of Chapter 3.2 against the dangerous goods entry concerned. Certain dangerous goods packed in limited quantities may be subject to exemptions provided that the conditions of Chapter 3.4 are met.

#### 1.1.4 Applicability of other regulations

##### 1.1.4.1 General

- 1.1.4.1.1 The entry of dangerous goods into the territory of member States/Contracting Parties may be subject to regulations or prohibitions imposed for reasons other than safety during carriage [*ADR only*: in accordance with Article 4, paragraph 1 of ADR]. Such regulations or prohibitions shall be published in an appropriate form.

[RID] [(from 200X) International carriage on the territory of a member State may be subject to regulations or prohibitions imposed for reasons other than safety during carriage in accordance with Article 3 of Appendix C. Such regulations or prohibitions shall be published in an appropriate form.]

- 1.1.4.1.2 [RID (from 2001 to 200X)2(5)] For transport operations in terms of

Article 3, paragraph 3 of the Convention concerning International Carriage by Rail (COTIF), besides the requirements of RID any special national or international laws for the carriage of dangerous goods by road or waterway are equally applicable insofar as they do not conflict with the requirements of RID.

- 1.1.4.1.3 [RID (from 2001 to 200X)2(2)] The regulations for the completion of formalities required by the Customs or other administrative authorities should also be observed (see article 25, paragraph 1 of the CIM Uniform Rules).

In addition to the particulars and attestations required by RID, it is particularly necessary that the attestations called for by the administrative authorities should also be entered in the consignment note, to which any accompanying documents required by these authorities should be attached.

[ADR 2006(2)] In cases where a transport operation subject to the provisions of ADR is likewise subject over the whole or part of its road journey to the provisions of an international convention which regulates the carriage of dangerous goods by a mode of transport other than road carriage by virtue of clauses extending the applicability of the said convention to certain motor-vehicle services, then the provisions of that international convention shall apply, over the journey in question, concurrently with those of ADR which are not incompatible therewith; the other clauses of ADR shall not apply over the journey in question.

1.1.4.1.4 [RID (from 2001 to 200X)] [675/2674] Other requirements for substances of this Class which are enacted for reasons other than those of safety, are not affected (e.g. those concerning import and export, marketing or distribution, protection at work, veterinary purposes).

1.1.4.2 Carriage prior to or following maritime or air carriage

[14/2007] Packages, including intermediate bulk containers (IBCs), [RID: large and small] containers and tank containers, [RID: and full wagon loads made up of packages containing a single substance only] which do not entirely meet the requirements for packing, labelling, markings on the packages, mixed packing or [RID: marking], but are in conformity with the requirements of the IMDG Code or the ICAO Technical Instructions for the Transport of Dangerous Goods by Air shall be accepted for carriage prior to or following maritime or air carriage subject to the following conditions:

- (a) If the packages or intermediate bulk containers (IBCs) are not marked and labelled in accordance with RID/ADR, they shall bear markings and danger labels in accordance with the requirements of the IMDG Code or the ICAO Technical Instructions;
- (b) The requirements of the IMDG Code or the ICAO Technical Instructions shall be applicable to mixed packing within a package;
- (c) For carriage prior to or following maritime carriage only, if the [RID: large and small] containers or tank-containers [RID: and full wagon loads made up of packages containing a single dangerous substance] are not marked and labelled in accordance with RID/ADR, they shall be marked and labelled (placarded) in accordance with the requirements for maritime transport.<sup>1</sup>

[ADR: In such case, only [paragraph (1) of marginal 10 500] is applicable to the marking and labelling of the tank vehicle itself.] For empty, uncleaned tank-containers, this requirement shall apply up to and including the subsequent transfer to a cleaning station.

This derogation does not apply in the case of goods classified as dangerous goods in classes 1 to 8 of RID/ADR and considered as non-dangerous goods according to the applicable requirements of the IMDG Code or the ICAO Technical Instructions.

NOTE: For the information in the consignment note/transport document and the

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<sup>1</sup> These requirements are set out in the International Maritime Dangerous Goods (IMDG) Code published by the International Maritime Organisation (IMO), London



container packing certificate, see [5.4.2].

#### 1.1.4.3 Use of tank containers approved for maritime transport

- 1.1.4.3.1 [X 1.9 212 190] Tank containers which do not fully meet the requirements of Chapter 6.8, but which have been approved in accordance with the [transitional provisions of the 30/2001 amendment of the IMDG Code for maritime transport, as portable tanks, may be used under the following condition: [Only substances accepted for carriage in RID/ADR tank-containers in accordance with column [ ] of Table A of Chapter 3.2 may be carried.]

NOTE: For the information in the consignment note/transport document, see [5.4.2].

- 1.1.4.3.2 Tank-containers which do not fully meet the requirements of Chapter 6.8, but which have been approved as portable tanks in accordance with the UN Recommendations or the IMDG Code, may be used for carriage subject to the following condition: tanks [only substances accepted for carriage in RID/ADR tank-containers in accordance with column [ ] of Table A of Chapter 3.2 may be carried.]

NOTE: For the information in the consignment note/transport document, see [5.4.2].

#### 1.1.4.4 Piggyback transport

- 1.1.4.4.1 RID 15(1)] Dangerous goods may also be carried by piggyback transport in accordance with the following requirements.

- 1.1.4.4.2 [RID (15)2] Road vehicles handed over for carriage by piggyback transport, as well as their contents, shall comply with the requirements of ADR.

However, the following are not accepted:

Explosives of compatibility group A, Class 1 (Nos. 0074, 0113, 0114, 0129, 0130, 0135, 0224, 0473)

Self-reactive substances requiring temperature control (Class 4.1, Nos. 3231 to 3240)

Organic peroxides for which temperature control is required (Class 5.2, Nos. 3111 to 3120)

1829 sulphur trioxide, pure, of at least 99.95%, without inhibitor, carried in tanks (Class 8, No.1829).

NOTE: For the labelling of carrying wagons in piggyback transport, see [5.2]. For the information in the consignment note and the instructions in writing, see [5.4.2].

#### 1.1.4.5 Carriage other than by rail/road

If the [wagon/vehicle] carrying out a transport operation subject to the requirements of RID/ADR is conveyed over a section of the journey otherwise than by rail/road haulage, then any national or international regulations which, on the said section, govern the carriage of dangerous goods by the mode of transport used [for conveying the wagon/road vehicle] shall alone be applicable to the said section of the journey.

Alternatively, unless this would contravene the international Conventions governing the carriage of dangerous goods by the mode of transport used [for conveying the road vehicle/wagon] on the said section of the journey, the ADR Contracting Parties/COTIF

Contracting Parties may agree to apply the requirements of RID/ADR to this section of the journey, supplemented, if they consider it necessary, by additional requirements. Any such agreements concluded between member States/Contracting Parties shall be published in Appendix XXX.

## 1.2 DEFINITIONS AND UNITS OF MEASUREMENT

### 1.2.1 Definitions

Note: This section contains all general or specific definitions.

Unless explicitly stated to the contrary, in RID/ADR:

#### A

[RID only] “ADR” means the European Agreement concerning the international Carriage of Dangerous Goods by Road including the special agreements signed by all countries concerned by such carriage.

Aerosols, see Aerosol dispensers.

[(2)201, 5°] “Aerosol dispensers” means any nonrefillable receptacles containing, under pressure, a gas or a mixture of gases, with or without a liquid, paste or powder, and fitted with a release device allowing the contents to be ejected as solid or liquid particles in suspension in a gas, as a foam, paste or powder or in a liquid state or in a gaseous state.

[ADR 10 014] “Auxiliary heating device” means appliances exclusively intended for raising the temperature in the driver’s cab, the load compartment or other vehicle assemblies. They shall not be operated by the waste heat of the vehicle engine.

#### B

[1510/3510 (1)] “Bags” means flexible packagings made of paper, plastics film, textiles, woven material or other suitable materials.

“Biological products” means products derived from living organisms, that are manufactured and distributed in accordance with the requirements of national governmental authorities which may have special licensing requirements, and are used either for prevention, treatment, or diagnosis of disease in humans or animals, or for development, experimental or investigational purposes related thereto. They include, but are not limited to, finished or unfinished products such as vaccines and diagnostic products

Note: For classification, see 2.2.62.1

[1610/3610 (2)] “Body” (for all categories of IBC other than composite IBCs) means the receptacle proper, including openings and closures, but does not include service equipment.

[1510/3510 (1)] “Boxes” means packagings with complete rectangular or polygonal faces, made of metal, wood, plywood, reconstituted wood, fibreboard, plastics or other suitable material. Small holes for purposes of ease of handling or opening or to meet classification requirements, are permitted as long as they do not compromise the

integrity of the packaging during carriage.

C

“Carriage” means the change of place of dangerous goods, including stops made necessary by transport conditions and including any period spent by the dangerous goods in wagons/vehicles, tanks and containers made necessary by traffic conditions before, during and after the change of place.

This definition also covers the intermediate temporary storage of dangerous goods in order to change the mode or means of transport (transshipment). This shall apply provided that transport documents showing the place of dispatch and the place of reception are presented on request and provided that packages and tanks are not opened during intermediate storage, except to be checked by the competent authorities.

“Carriage in bulk” means the carriage of unpackaged solids or articles in wagons/vehicles [ADR only] or containers. The term does not apply to packaged goods nor to substances carried in tanks.

“Carrier” means the enterprise which carries out the transport operation with or without a transport contract.

[1510/3510 (3)] “Closures” means devices which close an opening in a receptacle.

“Collective entry” means an entry for a well defined group of substances or articles (see 2.1.1.2, B, C and D).

[ADR 10 014] “Combustion heater” means a device directly using liquid or gaseous fuel and not using the waste heat from the engine used for propulsion of the vehicle.

“Competent authority” means the authority or authorities or any other body or bodies designated as such in each State and in each specific case in accordance with domestic law.

[IAEA] “Compliance assurance” means a systematic programme of measures applied by a competent authority which is aimed at ensuring that the requirements of RID/ADR are met in practice.

“Consignee” means the consignee according to the contract for carriage. If the consignee designates a third party in accordance with the provisions applicable to the contract for carriage, this person shall be deemed to be the consignee within the meaning of RID/ADR. If the transport operation takes place without a contract for carriage, the enterprise which takes charge of the dangerous goods on arrival shall be deemed to be the consignee.

“Consignor” means an enterprise which dispatches dangerous goods either on its own behalf or for a third party. If the transport operation is carried out under a contract for carriage, consignor means the consignor according to the contract for carriage.

“Container” means an article of transport equipment (lift van or other similar structure):

- of a permanent character and accordingly strong enough to be suitable for repeated use;

- specially designed to facilitate the carriage of goods, by one or more means of transport, without breakage of load;
- fitted with devices permitting its ready stowage and handling, particularly when being transloaded from one means of transport to another;
- so designed as to be easy to fill and empty.

Swap bodies are containers which, in accordance with European Standard EN 283 (1991 edition) have the following characteristics:

- from the point of view of strength, they are only built for carriage by rail and road by land and by ferry;
- they cannot be stacked;
- they can be removed from road vehicles by means of equipment on board the vehicle and on their own supports, and can be reloaded.

Note: The term “container” does not cover conventional packagings, IBCs, tank-containers [ADR: or vehicles]; for Class 7, the term “container” is defined in sub-section 2.7.2.

[UN] “Large packaging” means packagings consisting of an outer packaging which contains articles or inner packagings and which

- (a) are designed for mechanical handling;
- (b) exceed 400 kg net mass/450 litres capacity but have a volume of not more than 3 000 L/3 m<sup>3</sup>.

“Large container” means a container having an internal volume of more than [3m<sup>3</sup>]; in the meaning of the Convention for Safe Containers (CSC), a container the base of which covers an area not less than (a) 14m<sup>2</sup> (150 square feet) or (b) not less than 7m<sup>2</sup> (75 square feet) if fitted with top corner fittings.

“Small container” means a container having an internal volume of not less than [1m<sup>3</sup>]; and not more than [3m<sup>3</sup>]; Note. For radioactive material, see 2.7.2.

[ADR] “Control temperature” means the maximum temperature at which the organic peroxide or self-reactive substance can be safely carried.

[RID XI.1.1.4.1] “Controlled ventilation (auto-vent) valves” means venting devices on tanks with bottom discharge which are connected to the bottom valve and in normal operation are only opened during loading or unloading for the ventilation of tanks.

“Corrosive substances” [means substances which by chemical action attack epithelial tissue-of skin or mucous membranes - with which they are in contact and which in the event of leakage are capable of damaging or destroying other goods, or means of transport, and may also cause other hazards.

This term also covers other substances which form a corrosive liquid only in the presence of water or which produce corrosive vapour or mist in the presence of natural moisture of the air.]

Note. For classification, see 2.2.8.1.

“Crates” are outer packagings with incomplete surfaces.

[211(1)] “Cylinders” means transportable pressure receptacles/ADR: of a capacity not exceeding 150 litres.

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

[211(5)] “Bundles of cylinders (frames)” means transportable assemblies of cylinders which are interconnected by a manifold and held firmly together.

## D

“Dangerous goods” means those substances and articles the carriage of which is prohibited by RID [ADR annex A], or authorized only on certain conditions, (ADR only under the conditions prescribed in Annexes A and B).

“Dangerous reaction” means:

- (a) Combustion and/or evolution of considerable heat;
- (b) Evolution of flammable and/or toxic gases;
- (c) The formation of corrosive liquids;
- (d) The formation of unstable substances; or
- (e) Dangerous rise in pressure (for tanks only).

“Diagnostic specimen” means any human or animal material including, but not limited to, excreta, secreta, blood and its components, tissue and tissue fluids being transported for purposes of diagnosis or research, but excluding live infected animals.

Note: For classification, see 2.2.62.1.

[1510/3510 (1)] “Drums” means flatnended or convexnended cylindrical packagings made out of metal, fibreboard, plastics, plywood or other suitable materials. This definition also includes packagings of other shapes, e.g. round, tapernecked packagings or pailnshaped packagings. Wooden barrels and jerricans are not covered by this definition.

## E

“Elevated temperature substances” means substances which are carried or handed over for carriage in the liquid state at or above 100° C and, for substances with a flash-point, below their flash-point. This term also included solids which are carried or handed over

for carriage at or above 240° C.

Note. For classification, see 2.2.9.1.

[ADR] “Emergency temperature” means the temperature at which emergency procedures shall be implemented in the event of loss of temperature control.

Note. This definition does not apply to gases of Class 2.

“Enterprise” means any natural person, any legal person, whether profitmaking or not, any association or group of persons without legal personality, whether profitmaking or not, or any official body, whether it has legal personality itself or is dependent upon an authority that has such personality.

“Environmentally hazardous substances” means liquids or solids pollutant to the aquatic environment which cannot be classified under any other heading in Table A of Chapter 3.2. This term also includes micro-organisms and genetically modified organisms.

Note. For classification, see 2.2.9.1.

“Exothermic decomposition temperature”, see SADT.

“Explosive articles” means articles containing one or more explosive substances [and/or pyrotechnic substances].

Note. For classification, see 2.2.1.1.

“Explosive substances” means solid or liquid substances capable by chemical reaction of emitting gases at such a temperature and pressure and at such a speed as to cause damage in the surrounding area.

Note. For classification, see 2.2.1.1.

## F

“Filler” means any enterprise which loads dangerous goods into a tank (tank-wagon, wagon with movable tanks or tank-container) (tank-vehicle, demountable tank or tank-container) and/or into a wagon/vehicle, large container or small container for carriage in bulk, or into a battery-wagon/battery-vehicle or MEGC.]

“Flammable liquid” means a liquid in accordance with [paragraph (a) of] the definition in Section 1.2.1 which

- at 50° C has a vapour pressure of not more than 300 kPa (3 bar) and which is not completely gaseous at 20° C and at a standard pressure of 101.3 kPa, and which
- has a flash-point of not more than 61° C.

Note. For classification, see 2.2.3.1 and section 2.3.2 for the test for determining the flash-point.

“Flammable solid” means a readily flammable solid substance [which can be ignited through friction/which can cause fire through friction].

NOTE. For classification, see 2.2.41.1.

[IMDG] “Flash-point” means the lowest temperature of a liquid at which its vapours form a flammable mixture with air.

## G

[(2)200(2)] “Gas” means a substance which:

- (a) at 50° C has a vapour pressure greater than 300 kPa (3 bar); or
- (b) is completely gaseous at 20° C under standard pressure of 101.3 kPa.

[(2)201, 5°] “ Gas cartridges” means any non-refillable receptacles containing, under pressure, a gas or a mixture of gases. They may be fitted with a valve.

## H

[1610/3610(2)] “Handling device” (for flexible IBCs) means any sling, loop, eye or frame attached to the body of the IBC or formed from the continuation of the IBC body material.

[X Note 7, XI, Note 5/21X 135, Notes 7/8]

“Hermetically closed shell” means a shell whose openings are hermetically closed and which are not equipped with safety valves, frangible discs or other similar safety devices. Shells having safety valves preceded by a bursting disc shall be deemed to be hermetically closed. [RID] Valves to avoid an unacceptable negative pressure within the shell, without intervening bursting discs, shall however be permitted in shells not required to be hermetically closed during carriage under the special provisions [of Chapter 4.2] which apply.

## I

[1600/3600] “Intermediate bulk container (IBC)” means a rigid, or flexible portable packaging, other than those specified in Chapter 6.1, that:

- (a) has a capacity of:
  - (i) not more than 3.0m<sup>3</sup>; (3,000 litres) for solids and liquids of Packing Groups II and III;
  - (ii) not more than 1.5m<sup>3</sup>; for solids of Packing Group I when packed in flexible, rigid plastics, composite, fibreboard and wooden IBCs;
  - (iii) not more than 3.0m<sup>3</sup>; for solids of Packing Group I when packed in metal IBCs;
  - (iv) not more than 3.0 m<sup>3</sup>/(3 000 litres) for radioactive material of Class 7.
- (b) is designed for mechanical handling;
- (c) is resistant to the stresses produced in handling and transport as determined by the tests specified in Chapter 6.5.

NOTE 1. Tank containers that meet the requirements of Chapter 6.7 are not considered to be intermediate bulk containers (IBCs).

NOTE 2. Intermediate bulk containers (IBCs) which meet the requirements of Chapter 6.8 are not considered to be containers for the purposes of RID/ADR.

[1610/3610 (1)] “Composite IBCs with plastics inner receptacle” means an IBC comprising structural equipment in the form of a rigid outer casing encasing a plastics inner receptacle together with any service or other structural equipment. They are so constructed that the inner receptacle and outer casing once assembled form, and are used as, an integrated single unit to be filled, stored, transported or emptied as such.

[1610/3610 (1)] “Fibreboard IBCs” means a fibreboard body with or without separate top and bottom caps, if necessary an inner liner (but no inner packagings), and appropriate service and structural equipment.

[1610/3610 (1)] “Flexible IBCs” means a body constituted of film, woven fabric or any other flexible material or combinations thereof, and if necessary, an inner coating or liner, together with any appropriate service equipment and handling devices.

[1610/3610 (1)] “Metal IBCs means a metal body together with appropriate service and structural equipment.

[1610/3610 (1)] “Rigid plastics IBCs” means a rigid plastics body, which may have structural equipment together with appropriate service equipment.

[1610/3610 (1)] “Wooden IBCs” means a rigid or collapsible wooden body, together with an inner liner (but no inner packaging) and appropriate service and structural equipment.

“ICAO Technical Instructions” means the Technical Instructions for the Safe Transport of Dangerous Goods by Air, Annex 18 to the Chicago Convention on International Civil Aviation (Chicago 1944), published by the International Civil Aviation Organization (ICAO) in Montreal.

[4(8)] “IMDG Code” means the International Maritime Dangerous Goods Code, for the implementation of chapter VII, part A, of the International Convention for the Safety of Life at Sea, 1974 (SOLAS Convention), published by the International Maritime Organization (IMO, London).

“Infectious substances” means substances which are known or are reasonably expected to contain pathogens. Pathogens are defined as micro-organisms (including bacteria, viruses, rickettsia, parasites and fungi) or recombinant micro-organisms (hybrid or mutant) that are known or are reasonably expected to cause infectious diseases in animals or humans.

Note. For classification, see 2.2.62.1.



J

[1510 (1)] "Jerricans" means metal or plastics packagings of rectangular or polygonal cross-section with one or more orifices.

L

[1.1.4.3/21X 102(3)] "Leakproofness test" (tank) means the test which consists of subjecting the tank to an effective internal pressure equal to the maximum working pressure, but not less than 20 kPa (0.2 bar) (gauge pressure), using a method approved by the competent authority. For tanks equipped with venting systems and a safety device to prevent the contents spilling out if the tank overturns, the pressure for the leakproofness test shall be equal to the static pressure of the filling substance.

[1610/3610(2) + UN] "Liner" means a tube or bag inserted into a packaging, large packaging or IBC but not forming an integral part of it, including the closures of its openings.

[4(7)/2000(6)] "Liquid" means

(a) For the purpose of classification]

- a substance with a melting point or initial melting point of 20° C or less at a pressure of 101.3 kPa, or
- a substance which is liquid according to the ASTM D 4359-90 test method or which is not pasty according to the criteria applicable to the test for determining fluidity (penetrometer test) described in sub-section 2.3.4.

[and is not a gas] shall be considered to be a liquid.

(b) For the purpose of packaging, a substance with a melting point or initial melting point of 45° C or less at a pressure of 101.3 kPa] shall be considered to be a liquid.

[1.1.1/21X 100 Note] "Liquid state", for the purpose of tank requirements, means:

- (a) Substances which are liquid according to the definition in this section,  
or
- (b) Solids offered for carriage in the molten state.

"Full load" [ADR 10 014(3)] means any load originating from one sender for which the use of a vehicle or of a large container is exclusively reserved and all operations for the loading and unloading of which are carried out in conformity with the instructions of the sender or of the consignee.

"Loader" means any enterprise which loads dangerous goods into a wagon/vehicle or large container.

## M

“Manual of Tests and Criteria” means the second revised edition of the United Nations Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, published by the United Nations Organization (ST/SG/AC.10/11/Rev.2).

[4(2)/2001 (3)] “Mass” of packages means gross mass unless otherwise stated. ADR: The mass of containers and tanks used for the carriage of goods is not included in the gross mass.

[1510/3510 (3)] “Maximum capacity” means the maximum inner volume of receptacles or packagings or intermediate bulk containers (IBCs) expressed in litres.

[1510/3510 (3)] “Maximum net mass” means the maximum net mass of contents in a single packaging or maximum combined mass of inner packagings and the contents thereof expressed in kilograms.

[1610/3610 (2)] “Maximum permissible gross mass”

- (a) (for all categories of IBCs other than flexible IBCs) means the mass of the body, its service equipment and structural equipment and the maximum permissible load.
- (b) [UN] (for tanks), the tare of the tank and the heaviest load authorized for transport.

“Maximum permissible gross mass” means the sum of the tare mass of the portable tank and the heaviest load authorized for transport.

[1610/3610 (2)] “Maximum permissible load” (for flexible IBCs) means the maximum net mass for which the IBC is intended and which it is authorized to carry.

“MEGC”, see under T (Multiple-element gas container).

[IAEA] [“Means of transport” (radioactive material) means any wagon/vehicle for carriage by road or rail.]

“Micro-organisms and genetically modified micro-organisms” means micro-organisms and organisms in which the genetic material has been deliberately altered by technical means or by such means that cannot occur naturally. Genetically modified micro-organisms within the meaning of Class 9 are those which are not dangerous for humans and animals, but which could alter animals, plants, microbiological substances and ecosystems in such a way as cannot occur naturally.

Note. For classification, see 2.2.62.1 and 2.2.9.1.

## N

[17/10 011] “Nominal capacity of the receptacle” means the nominal volume of the dangerous substance contained in the receptacle expressed in litres. For compressed gas cylinders the nominal capacity shall be the water capacity of the cylinder.

[4(4)/2000(4)] “N.O.S. entry (not otherwise specified entry)” means a collective entry to which substances, mixtures, solutions or articles may be assigned if they:

- (a) are not mentioned by name in Table A of Chapter 3.2, and

- (b) exhibit chemical, physical and/or dangerous properties corresponding to the Class, [classification code], packing group and the name of the n.o.s. entry.

## O

“Organic peroxides” are organic substances which contain the bivalent -O-O-structure and may be considered derivatives of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals. Organic peroxides are thermally unstable substances liable to self-accelerating exothermic decomposition.

Note. For classification, see 2.2.52.1

[9(1)/2002(5)] “Overpack” means an enclosure used by a single consignor to contain one or more packages, consolidated into a single unit easier to handle and stow during carriage.

Examples of overpacks:

- (a) a loading tray such as a pallet, on which several packages are placed or stacked and secured by a plastic strip, shrink or stretch wrapping or other appropriate means; or
- (b) an outer protective packaging such as a box or a crate.

“Oxidizing substances” means substances which, while in themselves not necessarily combustible may, generally by yielding oxygen, cause or contribute to the combustion of other material.

Note: For classification, see 2.2.51.1.

## P

[ADR 2000(1)/10 014(1)] “Package” means the complete product of the packing operation, consisting of the packaging or IBC and its contents prepared for dispatch. The term includes receptacles for gases as defined in [marg.(2)211] as well as articles which, because of their size, weight or configuration may be carried unpackaged or carried in cradles, crates or handling devices. The term does not apply to substances which are carried in bulk, nor to substances carried in tanks. Note: For radioactive material, see 2.7.2.

[3510/1510 (3)] “Packaging” means the receptacle and any other components or materials necessary for the receptacle to perform its containment function.

Note: For radioactive material, see 2.7.2.

[1510/3510 (1)] “Combination packagings” means a combination of packagings for transport purposes, consisting of one or more inner packagings secured in an outer packing in accordance with [4.1.3.1].

Note: The “inners” of “combination packagings” are always termed “inner packagings” and not “inner receptacles”. A glass bottle is an example of such an “inner packaging”.

[1510/3510 (1)] “Composite packagings” (plastics material) are packagings consisting of an inner plastics receptacle and an outer packaging (made of metal, fibreboard, plywood, etc.). Once assembled such a packaging remains thereafter an inseparable unit;

it is filled, stored, despatched and emptied as such.

[1510/3510 (1)] "Composite packagings" (glass, porcelain or stoneware): packagings consisting of an inner glass, porcelain or stoneware receptacle and an outer packaging (made of metal, wood, fibreboard, plastics material, expanded plastics material, etc.). Once assembled, such a packaging remains thereafter an inseparable unit; it is filled, stored, despatched and emptied as such.

Note: The "inners" of "composite packagings" are normally termed "inner receptacles". For example, the "inner" of a 6HA1 (composite packaging, plastics material) is such an "inner receptacle" since it is normally not designed to perform a containment function without its "outer packaging" and is not therefore an "inner packaging".

[1510/3510 (3)] "Inner packagings" means packagings for which an outer packaging is required for carriage.

[1510/3510 (3)] "Intermediate packagings" means packagings placed between inner packagings or articles, and an outer packaging.

[UN] "Large packaging" means packagings consisting of an outer packaging which contains articles or inner packagings and which

- (a) are designed for mechanical handling;
- (b) exceed 400 kg net mass/450 litres capacity but have a volume of not more than 3 000 L/3m<sup>3</sup>.

[1510/3510 (2)] "Light gauge metal packagings" means packagings of circular, elliptical, rectangular or polygonal cross-section (also conical) and tapered and pail-shaped packagings made of tinplate or light metal, having a wall thickness of less than 0.5 mm, flat or convex bottomed and with one or more orifices, which are not covered by the definitions for drums or jerricans.

[1510/3510 (3)] "Outer packaging" means the outer protection of the composite or combination packaging together with any absorbent materials, cushioning and any other components necessary to contain and protect inner receptacles or inner packagings.

[1510/3510 (1)] "Reconditioned packagings" means packagings that include:

- (a) Metal drums that are:
  - (i) Cleaned to original materials of construction, with all former contents, internal and external corrosion, and external coatings and labels removed;
  - (ii) Restored to original shape and contour, with chimes (if any) straightened and sealed and all non-integral gaskets replaced; and

- (iii) Inspected after cleaning but before painting, with rejection of packagings with visible pitting, significant reduction in the material thickness, metal fatigue, damaged threads or closures or other significant defects.
- (b) Plastics drums and jerricans that:
  - (i) Are cleaned to original materials of construction, with all former contents, external coatings and labels removed;
  - (ii) Have all nonintegral gaskets replaced; and
  - (iii) Are inspected after cleaning with rejection of packagings with visible damage such as tears, creases or cracks, or damaged threads or closures or other significant defects.

[1510/3510 (1)] “Remanufactured packaging” means the packaging which includes

- (a) Metal drums that:
  - (i) are produced as a UN type complying with the requirements of Chapter 6.1 from a nonUN type;
  - (ii) are converted from one UN type complying with the requirements of Chapter 6.1 to another UN type; or
  - (iii) undergo the replacement of integral structural components (such as nonremovable heads). Remanufactured drums are subject to the same requirements of Chapter 6.1 as apply to new drums of the same type.
- (b) Plastics drums that:
  - (i) are converted from one UN type to another UN type (e.g. 1H1 to 1H2); or
  - (ii) undergo the replacement of integral structural components.

Remanufactured drums are subject to the requirements of Chapter 6.1 which apply to new drums of the same type.

[1510/3510 (1)] “Reused packagings” means packagings which have been examined and found free of defects affecting the ability to withstand the performance tests. The term includes those which are refilled with the same or similar compatible contents and are carried within distribution chains controlled by the consignor of the product.

[1510/3510 (1)] “Salvage packagings” means special packagings conforming to the applicable requirements of Chapter 6.1 into which damaged, defective or leaking dangerous goods packages, or dangerous goods that have spilled or leaked are placed for purposes of carriage for recovery or disposal.

[1510/3510 (3)] “Siftproof packagings” means packagings impermeable to dry contents, including fine solid material produced during carriage.

“Packer” means any enterprise which puts dangerous goods into packagings, including intermediate bulk containers (IBCs) and, where necessary, prepares packages for carriage.

“Packing group”: For packing purposes, certain substances or articles may be assigned to packing groups in accordance with their degree of danger. The packing groups have the following meanings which are explained more fully in Part 2:

Packing group I: Highly dangerous substances

Packing group II: Moderately dangerous substances

Packing group III: Slightly dangerous substances

“Phlegmatised explosive liquid substance” means an explosive substance in solution or suspended in water or another liquid in such a way as to form a homogenous liquid solution without explosive properties.

NOTE. For classification, see 2.2.3.1

“Phlegmatised explosive solid substance” means an explosive substance wetted with water or alcohol or diluted with other substances in such a way as to form a homogenous solid mixture without explosive properties.

NOTE. For classification, see 2.2.41.1

[15(1) Note 1] For the purposes of RID, “piggyback transport” means the carriage on rail wagons of road vehicles.

[1610/3610 (2)] “Plastics” (for composite IBCs with plastics inner receptacle), when used in connection with inner receptacles for composite IBCs, is taken to include other polymeric materials such as rubber, etc.

“Pollutant to the aquatic environment” means substances, solutions and mixtures (such as preparations and wastes) which cannot be assigned to classes 1 to 8 but which may be assigned to the two specific n.o.s. entries UN 3082 or UN 3077 of Class 9 on the basis of the test methods and criteria of section 2.3.5.

Note. For classification, see 2.1.3.8 and 2.2.9.1.

[(2)211 (3)] “Pressure drums” portable pressure receptacle/ADR welded, transportable pressure receptacles of a capacity exceeding 150 litres and of not more than 1,000 litres (e.g. cylindrical receptacles equipped with rolling hoops, receptacles on skids and receptacles in frames).

[1.1.4.2/21X 102(2)] “Calculation pressure” means a theoretical pressure at least equal to the test pressure which, according to the degree of danger exhibited by the substance being carried, may to a greater or lesser degree exceed the working pressure. It is used solely to determine the thickness of the walls of the shell, independently of any external or internal reinforcing device.

[1.1.4.2/21X 102(2)] “Discharge pressure” means the maximum pressure actually built up in the tank when it is being discharged under pressure.

[1.1.4.2/21X 102(2)] “Filling pressure” means the maximum pressure actually built up in the tank when it is being filled under pressure.

[1.1.4.2/21X 102(2)] “Maximum working pressure (gauge pressure)” means the highest of the following three pressures:

- (a) the highest effective pressure allowed in the tank during filling (“maximum filling pressure allowed”);
- (b) the highest effective pressure allowed in the tank during discharge (“maximum discharge pressure allowed”); and
- (c) the effective gauge pressure to which the tank is subjected by its contents (including such extraneous gases as it may contain) at the maximum working temperature.

Unless the special requirements prescribed [in Chapter 4.3] provide otherwise, the numerical value of this working pressure (gauge pressure) shall not be lower than the vapour pressure (absolute pressure) of the filling substance at 50° C.

For tanks equipped with safety valves (with or without bursting disc), the maximum working pressure (gauge pressure) shall however be equal to the prescribed opening pressure of such safety valves.

[1.1.4.2/21X 102 (2)] “Test pressure” means the highest effective pressure which arises in the tank during the pressure test.

“Pressurized gas cartridges”, see Aerosol dispensers

[1610/3610 (2)] “Protected” (for metal IBCs) means provided with additional protection against impact, the protection taking the form of, for example, a multilayer (sandwich) or doublewall construction, or a frame with a metal latticework casing.

“Pyrophoric substances” are substances (liquid or solid), which even in small quantities ignite on contact with air within five minutes.

For classification, see 2.2.42.1.

“Pyrotechnic substances” means substances designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonating self-sustaining exothermic chemical reactions.

Note. For classification, see 2.2.1.1.

## Q

[IAEA] “Quality assurance” means a systematic programme of controls and inspections applied by any organization or body which is aimed at providing adequate confidence that the standard of safety prescribed in RID/ADR achieved in practice.

## R

“Radioactive material”, see 2.7.

“[RID] Railway infrastructure” means all the railway lines and fixed installations in so far as these are necessary for the circulation of railway vehicles and the safety of traffic.

“Readily combustible solid” means a powdered, granular or pasty substance which is dangerous if it can be easily ignited by brief contact with an ignition source, such as a burning match, and if the flame spreads rapidly. The danger may come not only from the fire but also from toxic combustion products. Metal powders are especially dangerous because of the difficulty of extinguishing a fire since normal extinguishing agents such as carbon dioxide or water can increase the hazard.

NOTE. For classification, see 2.2.41.1.

[2)103(3)] “Receptacles” includes boxes, bottles, cans, drums, jars and tubes, including any means of closure used in the inner or intermediate packaging (Class 1).

[1510/3510 (3)] “Receptacles” means containment vessels for receiving and holding substances or articles, including any means of closing. This definition does not apply to shells.

Note. Receptacles for gases of Class 2 are cylinders, tubes, pressure drums, cryogenic receptacles and bundles of cylinders (frames).

[(2)211(4)] “Cryogenic receptacles” means transportable thermally insulated pressure receptacles/ADR for deeply refrigerated liquefied gases of a capacity of not more than 1,000 litres.

[1510/3510 (3)] “Inner receptacles” means receptacles which require an outer packaging in order to perform their containment function.

[1610/3610 (2)] “Rigid inner receptacle” (for composite IBCs) means a receptacle which retains its general shape when empty without its closures in place and without benefit of the outer casing. Any inner receptacle that is not “rigid” is considered to be “flexible”.

“Small receptacles containing gas”: see “gas cartridge”.

“Recommendations on the Transport of Dangerous Goods” means the eleventh revised edition of the United Nations Recommendations on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rev.11).

[1510/3510 (1)] “Recycled plastics material” means material recovered from used industrial packagings that has been cleaned and prepared for processing into new packagings.

“Reels” (Class 1) means devices made of plastics, wood, fibreboard, metal or other suitable material comprising a central spindle with, or without, side walls at each end of the spindle. [Articles and substances can be wound onto the spindle and may be retained by side walls.]

“RID [ADR only] (from 2001 to 200X) means Regulations concerning the International Carriage of Dangerous Goods by Rail, Annex 1 to Appendix B (Uniform Rules Concerning the Contract for International Carriage of Goods by Rail) (CIM) of COTIF (Convention concerning international carriage by rail).

“RID (from 200X)” means Regulations concerning the International Carriage of Dangerous Goods by Rail [(Appendix C of the Convention concerning International Carriage by Rail (COTIF)].



S

“Safety valve” means a self-closing, spring-loaded device the purpose of which is to protect the tank against unacceptable excess internal pressure.

“SADT” [exothermic decomposition temperature] Self-accelerating decomposition temperature means the lowest temperature at which self-accelerating decomposition may occur with substance in the packaging as used during carriage. [Provisions for determining the SADT and the effects of heating under confinement are contained in Part II of the Manual of Tests and Criteria

“Self-accelerating decomposition temperature”, see SADT

“Self-heating substances” are substances which, on contact with air, without energy supply, are liable to self-heating. These substances will ignite only in large amounts (kilogrammes) and after long periods of time (hours or days).

Note. For classification, see 2.2.42.1.

“Self-reactive substances” are thermally unstable substances liable to undergo a violent exothermic decomposition even without participation of atmospheric oxygen

Note: For classification, see 2.2.41.1.

“Service equipment”

- (a) [1.1.4.1/21X 102(1) of the tank means filling and emptying, venting/ADR, venting, safety, heating and heat insulating devices and measuring instruments;
- (b) of the elements of a battery-wagon/battery-vehicle or of a MEGC means filling and emptying and safety devices, the manifold and measuring instruments;
- (c) [1610/3610 (2)] (for all categories of IBC) means the filling and discharge devices and according to the category of IBC, pressure relief or venting, safety, heating and heatinsulating devices and measuring instruments.

[1.1.4.1/21X 102(1)] “Shell” means the sheathing containing the substance (including the openings and their closures).

NOTE. This definition does not apply to receptacles.

“Hermetically closed tanks” means tanks whose openings are hermetically closed and which are not equipped with safety valves, bursting discs or other similar safety devices. Tanks having safety valves preceded by a bursting disc shall be deemed to be hermetically closed. [RID] Valves to avoid an unacceptable drop in pressure inside the tank, and not preceded by a bursting disc, shall, however, be authorized if the tanks are not hermetically closed during carriage in accordance with the applicable special requirements [of Chapter 4.2].

Solid means:

[(a) For the purpose of classification]

- a substance with a melting point or initial melting point of 20/C or more at a pressure of 101.3 kPa, or
- a substance which is not liquid according to the ASTM D 4359-90 test method

or which is pasty according to the criteria applicable to the test for determining fluidity (penetrometer test) described in sub-section 2.3.4 shall be considered to be a solid.

- (b) For the purpose of packaging, a substance with a melting point or initial melting point of more than 45° C at a pressure of 101.3 kPa shall be considered to be a solid.]

“Shipper” means the enterprise which loads dangerous goods into the wagon/large container/the vehicle/large container.

“Structural equipment”

- (a) [1.1.4.1/211 102(1)] for shells of a tank-wagon/tank vehicle means the external reinforcing, fastening or protective members of the shell;
- (b) [1.1.4.1/212 102(1)] for shells of a tank-container means the external reinforcing, fastening, protective or stabilizing members of the shell;
- (c) for elements of a battery-wagon/battery-vehicle or an MEGC means the external reinforcing, fastening or protective members of the shell or receptacle;
- (d) [1610/3610 (2) (for all categories of IBC other than flexible IBCs) means the reinforcing, fastening, handling, protective or stabilizing members of the body (including the base pallet for composite IBCs with plastics inner receptacle).

“Substances” means single substances and also mixtures and solutions, such as preparations and wastes.

[1.2.8.3 Note 2/21X 127 (3) Note 3] “Mild steel” means a steel having a minimum breaking strength between 360 N/mm<sup>2</sup> and 440 N/mm<sup>2</sup>.

[UN] “Reference steel” means a steel with a tensile strength of 370 N/mm<sup>2</sup> and an elongation at fracture of 27%.

“Swap-bodies”, see Containers

[7(1) Note 2] “Tank swap bodies” are considered to be tank containers.

T

[RID/ADR] [“Tank” means a shell, including its service and structural equipment.

[ADR only] “Tank” when used alone, means a tank-container, [portable tank,] demountable tank or fixed tank as defined in this Part, including tanks forming elements of battery vehicles-or MEGCs.

[ADR 10 014] “Demountable tank” [ADR] means a tank, other than a fixed tank, a tank container or an element of a battery-vehicle which has a capacity of more than 450 litres, is not designed for the carriage of goods without breakage of load, and normally can only be handled when it is empty.

[RID] “Fixed tank” means a tank having a capacity of more than 1 000 litres which is permanently fixed to a wagon (which then becomes a tank-wagon) or is an integral part of the frame of such wagon.

[ADR] “Fixed tank” means a tank having a capacity of more than 1 000 litres which is structurally attached to a vehicle (which then becomes a tank vehicle) or is an integral part of the frame of such vehicle.

[XI, Note 10] “Movable tanks” [RID] means tanks designed to fit the special apparatus of the wagon but which can only be removed from it after the dismantling of their means of attachment.

[UN] “Portable tank” means a multimodal tank having a capacity of more than 450 litres in accordance with the definition in the UN Recommendations or the [XXXX] edition of the IMDG Code and indicated by a tank code (T-Code) in column [ ] of Table A of Chapter 3.2.

[XI.1.1 1. 1.1.3/212 100 212 101] “Tank container” means an article of equipment meeting the definition of a container, and comprising a shell and items of equipment, including the equipment to facilitate movement of the tank container without significant change of attitude, used for the carriage of gases, liquid, powdery or granular substances and having a capacity of more than 0.45 m<sup>3</sup>.

NOTE: IBCs which meet the requirements of Chapter 6.5 are not considered to be tank-containers.

[X2.3.5/212 235] “Multi-element gas container” (MEGC) means a unit containing elements which are linked to each other by a manifold and mounted on the frame of a multi-element tank container. The following elements are considered to be elements of a multi-element tank container: cylinders, tubes, pressure drums, bundles of cylinders and shells for the carriage of gases of Class 2 having a capacity of more than 450 litres.

*[English editorial note: should this not be under “M”?]*

“Tank container operator” (RID only) or “tank wagon operator” means any enterprise in whose name the tank container or tank wagon is registered or permitted for carriage.

“Technical/biological name” means a name currently used in scientific and technical handbooks, journals and texts. Trade names shall not be used for this purpose.

“Toxic substances” means substances [of which it is known by experience or regarding which it is presumed from experiments on animals that in relatively small quantity they are able by a single action or by action of short duration] to cause damage to human health, or death, by inhalation, by cutaneous absorption or by ingestion.

Note. For classification, see 2.2.61.1.

“Transport unit” [ADR 10 014] means a motor vehicle without an attached trailer, or a

combination consisting of a motor vehicle and an attached trailer.

["Trays" (Class 1) are sheets of metal, plastics, fibreboard or other suitable material which are placed in the inner, intermediate or outer packaging and achieve a close-fit in such packaging. The surface of the tray may be shaped so that packagings or articles can be inserted, held secure and separated from each other.]

(2)211(2)] "Tubes" means large transportable pressure receptacles/ADR seamless transportable pressure receptacles of a capacity exceeding 150 litres and of not more than 5,000 litres.

U

"United Nations number" means the four-figure identification number of the substance or article taken from the United Nations Recommendations.

V

"Vacuum valve" means a self-closing, spring-loaded device the purpose of which is to protect the tank against unacceptable negative internal pressure.

"Vehicle" [ADR 220 200] (within the meaning of the uniform construction provisions) means a chassis-cab vehicle, a tractor for semi-trailer or a trailer chassis or a trailer with a self-supporting body intended for the transport of dangerous goods.

"Vehicle type" [ADR 220 200] (within the meaning of the uniform construction provisions) means vehicles which do not differ essentially with regard to the constructional features.

"Base vehicle" [ADR 10 014] means any incomplete motor vehicle or its trailer corresponding to a type approved in accordance with Chapter 13.3.

"Battery vehicle" [ADR 10 014] means a vehicle containing elements which are linked to each other by a manifold and permanently fixed to a transport unit. The following elements are considered to be elements of a battery-vehicle cylinders, tubes, bundles of cylinders (also known as frames), pressure drums and tanks destined for the carriage of gases of Class 2 with a capacity greater than 450 litres.

"Closed vehicle" [ADR 10 014] means a vehicle having a body capable of being closed.

"Open vehicle" [ADR 10 014] means a vehicle the platform of which has no superstructure or is merely provided with side boards and a tailboard.

"Sheeted vehicle" [ADR 10 014] means an open vehicle provided with a sheet to protect the load.

"Tank-vehicle" [ADR 10 014] means a vehicle built to carry liquids, gases or powdery or granular substances and comprising one or more fixed tanks. In addition to the vehicle proper, or the units of running gear used in its stead, a tank-vehicle comprises one or more [shells], their items of equipment and the fittings for attaching them to the vehicle or to the running-gear units.

W

["Wagon" [RID] means a railway vehicle without means of traction, able to run on its own wheels on rails, and intended for the carriage of goods.]

[RID XI 2.3.5] “Battery wagon” means a wagon with an assembly of elements interconnected by a manifold, permanently fixed to the wagon. The following are considered to be elements of a battery wagon: cylinders, tubes, bundles of cylinders (frames), pressure drums and tanks destined for the carriage of gases of Class 2 with a capacity greater than 450 litres.

[RID] “Covered wagon” means a wagon with fixed or movable walls and roof.

[RID] “Full wagon” means the exclusive use of a wagon whether its load capacity is used to the full or not.

[RID] “Open wagon” means a wagon with or without front or side walls, the loading surface of which is open.

[RID] “Sheeted open wagon” means an open wagon provided with a sheet to protect the load.

[RID XI 1.1.3] “Tank wagon”: A wagon used for the carriage of liquids, gases, powdery or granular substances, comprising a superstructure, consisting of one or more [shells] and their items of equipment, and an underframe fitted with its own items of equipment (running gear, suspension, buffing, traction, braking gear and inscriptions).

[NOTE. Wagons with movable tanks are also considered to be tank wagons.]

[3(4) 2000(5)] “Wastes” means substances, solutions, mixtures or articles for which no direct use is envisaged but which are transported for reprocessing, dumping, elimination by incineration or other methods of disposal.

“(Hospital) wastes” means wastes resulting from the medical treatment of humans or animals or from biological research and for which there is a relatively low probability that they contain infectious substances.

Note: For classification, see 2.2.62.1.

“Water reactive substance” means a substance which, in contact with water, emits flammable gases which in contact with air can form an explosive mixture.

[1510/3510 (1)] “Wooden barrels” means packagings made of natural wood, of round cross-section, having convex walls, consisting of staves and heads and fitted with hoops.

[1610/3610 (2)] “Woven plastics” (for flexible IBCs) means a material made from stretch tapes or monofilaments of suitable plastics material.

## 1.2.2 Units of measurement

1.2.2.1 The following units of measurement <sup>1/</sup> are applicable in RID/ADR:

Measurement of	SI Unit <sup>2/</sup>	Acceptable alternative unit	Relationship between units
Length	m (metre)	<b>n</b>	<b>n</b>
Area	m <sup>2</sup> (square metre)	<b>n</b>	<b>n</b>
Volume	m <sup>3</sup> (cubic metre)	l <sup>3/</sup> (litre)	1 l = 10 <sup>-3</sup> m <sup>3</sup>
Time	s (second)	min. (minute) h (hour) d (day)	1 min. = 60 s 1 h = 3,600 s 1 d = 86,400 s
Mass	kg (kilogram)	g (gramme) t (ton)	1 g = 10 <sup>-3</sup> kg 1 t = 10 <sup>3</sup> kg
Mass density	kg/m <sup>3</sup>	kg/l	1 kg/l = 10 <sup>3</sup> kg/m <sup>3</sup>
Temperature	K (kelvin)	°C (degree Celsius)	0°C = 273.15 K
Temperature difference	K (kelvin)	°C (degree Celsius)	1°C = 1 K
Force	N (newton)	<b>n</b>	1 N = 1 kg.m/s <sup>2</sup>
Pressure	Pa (pascal)	bar (bar)	1 Pa = 1 N/m <sup>2</sup> 1 bar = 10 <sup>5</sup> Pa
Stress	N/m <sup>2</sup>	N/mm <sup>2</sup>	1 N/mm <sup>2</sup> = 1 MPa
Work		kWh (kilowatt hours)	1 kWh = 3.6 MJ
Energy	J (joule)		1 J = 1 N.m = 1 W.s
Quantity of heat		eV (electronvolt)	1 eV = 0.1602x10 <sup>-18</sup> J
Power	W (watt)		1 W = 1 J/s = 1 N.m/s
Kinematic viscosity	m <sup>2</sup> /s	<b>n</b> mm <sup>2</sup> /s	1 mm <sup>2</sup> /s = 10 <sup>-6</sup> m <sup>2</sup> /s
Dynamic viscosity	Pa.s	mPa.s	1 mPa.s = 10 <sup>-3</sup> Pa.s
Activity <sup>4/</sup>	Bq (becquerel)		
Dose equivalent <sup>5/</sup>	Sv (sievert)		

<sup>1/</sup> The following round figures are applicable for the conversion of the units hitherto used into SI Units.

Force

1 kg = 9.807 N

1 N = 0.102 kg

Stress

1 kg/mm<sup>2</sup> = 9.807 N/mm<sup>2</sup>

1 N/mm<sup>2</sup> = 0.102 kg/mm<sup>2</sup>

Pressure

1 Pa = 1N/m<sup>2</sup> = 10<sup>-5</sup> bar = 1.02 X 10<sup>-5</sup> kg/cm<sup>2</sup> = 0.75 X 10<sup>-2</sup> torr

1 bar = 10<sup>5</sup> Pa = 1.02 kg/cm<sup>2</sup> = 750 torr

1 kg/cm<sup>2</sup> = 9.807 X 10<sup>4</sup> Pa = 0.9807 bar = 736 torr

1 torr = 1.33 X 10<sup>2</sup> Pa = 1.33 X 10<sup>-3</sup> bar = 1.33 X 10<sup>-3</sup> kg/cm<sup>2</sup>

Energy, Work, Quantity of heat

1 J	= 1 Nm	= 0.278 X 10 <sup>n6</sup> kWh	= 0.102 kgm = 0.239 X 10 <sup>n3</sup> kcal
1 kWh	= 3.6 X 10 <sup>6</sup> J	= 367 X 10 <sup>3</sup> kgm	= 860 kcal
1 kgm	= 9.807 J	= 2.72 X 10 <sup>n6</sup> kWh	= 2.34 X 10 <sup>n3</sup> kcal
1 kcal	= 4.19 X 10 <sup>3</sup> J	= 1.16 X 10 <sup>n3</sup> kWh	= 427 kgm

<u>Power</u>	<u>Kinematic viscosity</u>		
1 W	= 0.102 kgm/s	= 0.86 kcal/h	1 m <sup>2</sup> /s = 10 <sup>4</sup> St (Stokes)
1 kgm/s	= 9.807 W = 8.43 kcal/h	1 St	= 10 <sup>n4</sup> m <sup>2</sup> /s
1 kcal/h	= 1.16 W = 0.119 kgm/s		

<u>Dynamic viscosity</u>			
1 Pa.s	= 1 Ns/m <sup>2</sup>	= 10 P (poise)	= 0.102 kgs/m <sup>2</sup>
1 P	= 0.1 Pa.s	= 0.1 Ns/m <sup>2</sup>	= 1.02 X 10 <sup>n2</sup> kgs/m <sup>2</sup>
1 kgs/m <sup>2</sup>	= 9.807 Pa.s	= 9.807 Ns/m <sup>2</sup>	= 98.07 P

2/ The International System of Units (SI) is the result of decisions taken at the General Conference on Weights and Measures (Address: Pavillon de Breteuil, Parc de StnCloud, Frn92 310 Sdvres).

3/ The abbreviation "L" for litre may also be used in place of the abbreviation "l" when a typewriter cannot distinguish between figure "1" and letter "l".

4/ For the sake of clarity, activity may also be indicated, in parentheses, in Ci (curie) (relationship between the units: 1 Ci = 3.7 x 10<sup>10</sup> Bq). By derogation from the conversion formula, rounded values may be given.

5/ For the sake of clarity, the dose equivalent max also be indicated, in parentheses, in rem (relationship between the units: 1 rem = 0.01 Sv).]

The decimal multiples and submultiples of a unit may be formed by prefixes or symbols, having the following meanings, placed before the name or symbol of the unit:

<u>Factor</u>			<u>Prefix</u>	<u>Symbol</u>
1 000 000 000 000 000 000	= 10 <sup>18</sup>	quintillion	exa	E
1 000 000 000 000 000	= 10 <sup>15</sup>	quadrillion	peta	P
1 000 000 000 000	= 10 <sup>12</sup>	trillion	tera	T
1 000 000 000	= 10 <sup>9</sup>	billion	giga	G
1 000 000	= 10 <sup>6</sup>	million	mega	M
1 000	= 10 <sup>3</sup>	thousand	kilo	k
100	= 10 <sup>2</sup>	hundred	hecto	h
10	= 10 <sup>1</sup>	ten	deca	da
0.1	= 10 <sup>n1</sup>	tenth	deci	d
0.01	= 10 <sup>n2</sup>	hundredth	centi	c
0.001	= 10 <sup>n3</sup>	thousandth	milli	m
0.000 001	= 10 <sup>n6</sup>	millionth	micro	μ
0.000 000 001	= 10 <sup>n9</sup>	billionth	nano	n
0.000 000 000 001	= 10 <sup>n12</sup>	trillionth	pico	p
0.000 000 000 000 001	= 10 <sup>n15</sup>	quadrillionth	femto	f
0.000 000 000 000 000 001	= 10 <sup>n18</sup>	quintillionth	atto	a

Note: 10<sup>9</sup> = 1 billion is United Nations usage in English. By analogy, so is 10<sup>n9</sup> = 1 billionth.

1.2.2.2 [4(2)/2001(3)] Whenever the weight of a package is mentioned in RID/ADR, the gross mass is meant unless otherwise stated. (ADR: The mass of containers or tanks used for the carriage of goods is not included in the gross mass.)

1.2.2.3 [4(3)/2001 (4)] Unless expressly stated otherwise, the sign “%” in RID/ADR represents:

(a) In the case of mixtures of solids or of liquids, and also in the case of solutions and of solids wetted by a liquid: a percentage mass based on the total mass of the mixture, the solution or the wetted solid;

(b) In the case of mixtures of compressed gases: when filled by pressure, the proportion of the volume indicated as a percentage of the total volume of the gaseous mixture, or, when filled by mass, the proportion of the mass indicated as a percentage of the total mass of the mixture.

In the case of mixtures of liquefied gases and gases dissolved under pressure: the proportion of the mass indicated as a percentage of the total mass of the mixture.

1.2.2.4 [4(5)/2001(5)] Pressures of all kinds relating to receptacles (such as test pressure, internal pressure, safety valve opening pressure) are always indicated in gauge pressure (pressure in excess of atmospheric pressure); however, the vapour pressure of substances is always expressed in absolute pressure.

1.2.2.5 [4(6)/2001(6)] Where RID/ADR specifies a degree of filling for receptacles, this is always related to a reference temperature of the substances of 15 °C, unless some other temperature is indicated.



### 1.3 TRAINING OF PERSONS (ADR: OTHER THAN DRIVERS) INVOLVED IN THE CARRIAGE OF DANGEROUS GOODS

#### 1.3.1 Training of Persons

Persons employed by the participants referred to in Chapter 1.4, whose duties concern the carriage of dangerous goods, shall receive training in the requirements governing the carriage of such goods appropriate to their responsibilities and duties.

Note 1. With regard to training for the safety adviser, see 1.8.3.

Note 2. With regard to the training of drivers, see [...]

#### 1.3.2 Type/Nature of the training

The training shall take the following form, appropriate to the responsibility and duties of the individual concerned:

##### 1.3.2.1 Initiation

Personnel shall be familiar with the general requirements of the requirements for the carriage of dangerous goods.

##### 1.3.2.2 Function-specific training

Personnel shall receive detailed training, commensurate directly with their duties and responsibilities in the requirements of the regulations concerning the carriage of dangerous goods.

Where the carriage of dangerous goods involves a multimodal transport operation, the personnel shall be made aware of the requirements concerning other transport modes.

##### 1.3.2.3 Safety training

Commensurate with the degree of risk of injury or exposure arising from an incident involving the carriage of dangerous goods, including loading and unloading, personnel shall receive training covering the hazards and dangers presented by dangerous goods.

The training provided shall aim to make personnel aware of the safe handling and emergency response procedures.

### 1.3.3 Documentation

Details of all the training undertaken shall be kept by both the employer and the employee and shall be verified upon commencing a new employment. The training shall be periodically supplemented with refresher training to take account of changes in regulations.

## 1.4 SAFETY OBLIGATIONS OF THE PARTICIPANTS

### 1.4.1 General safety measures

1.4.1.1 The participants in the carriage of dangerous goods shall take appropriate measures according to the nature and the extent of foreseeable dangers, so as to avoid damage and, if necessary, to minimize its effects. They shall, in all events, comply with the requirements of RID/ADR in their respective fields.

1.4.1.2 When there is an immediate risk that public safety may be jeopardized, the participants shall immediately notify the emergency services and shall make available to them the information they require to act.

1.4.1.3 RID/ADR may specify certain of the obligations devolving on the various participants.

If a member State/Contracting Party considers that no lessening of safety is entailed, it may in its domestic legislation transfer the obligations devolving on a specific participant to one or several other participants, provided that the obligations of 1.4.2 and 1.4.3 are met.

These derogations shall be communicated by the member State/Contracting Party to the Central Office/competent United Nations secretariat which will bring them to the attention of the member States/Contracting Parties.

The requirements of paragraphs 1.2.1, 1.4.2 and 1.4.3 concerning the definitions of participants and their respective obligations shall not affect the provisions of domestic law concerning the legal consequences (criminal nature, liability, etc.) stemming from the fact that the participant in question is e.g. a legal entity, an own-account worker, an employer or an employee.

### 1.4.2 Obligations of the main participants

#### 1.4.2.1 Consignor

1.4.2.1.1 The consignor of dangerous goods is required to hand over for carriage a consignment which conforms to the requirements of RID/ADR. In the context of paragraph 1.4.1, he shall:

1. ascertain that the dangerous goods are classified and accepted for carriage in accordance with RID/ADR;

2. furnish the carrier with information and data and, if necessary, the required transport documents/consignment notes and accompanying documents (authorizations, approvals, notifications, certificates, etc.), taking into account in particular the requirements of Chapter 5.4 and of the tables in Part 3.
3. use only packagings, intermediate bulk containers (IBCs) and shells (tankwagons, battery wagons, wagons with movable tanks/tank-vehicles, demountable tanks, battery vehicles and tank-containers) approved for and suited to the carriage of the substances concerned and bearing the markings prescribed by RID/ADR;
4. comply with the requirements on the means of dispatch and on forwarding restrictions;
5. ensure that even empty tankwagons/empty tank-vehicles, empty demountable tanks and empty tank-containers, uncleaned and not degassed, or empty, uncleaned wagons/vehicles and large and small bulk containers are appropriately marked and labelled and that empty uncleaned shells are closed and present the same degree of leakproofness as if they were full.

1.4.2.1.2 If the consignor uses the services of other participants (packer, shipper, filler, etc.), he shall take appropriate measures to guarantee that the consignment meets the requirements of RID/ADR. He may, however, in the case of 1.4.2.1.1., Nos. 1, 2, 3 and 5, rely on the information and data made available to him by other participants.

1.4.2.1.3 When the consignor acts on behalf of a third party, the latter shall inform the consignor in writing that dangerous goods are involved and make available to him all the information and documents he needs to perform his obligations.

#### 1.4.2.2 Carrier

##### 1.4.2.2.1 The carrier

(RID: who accepts the dangerous goods for carriage at the place of departure and, in accordance with section 1.4.1, by means of representative sampling) (ADR:, where necessary,) on the basis of the transport documents and accompanying documents, by a visual inspection of the wagon/vehicle or the containers and, where appropriate, the load, shall

1. ascertain that the dangerous goods to be carried are accepted for carriage;

2. ascertain that the prescribed documentation (RID: is attached to the consignment note and forwarded) (ADR: is on board the transport unit);
3. ascertain visually that the wagons/vehicles and loads have no obvious defects, leakages or cracks, missing equipment, etc.;
4. ascertain that the date of the next test for tankwagons, battery wagons, wagons with movable tanks/tank vehicles, battery vehicles, fixed tanks, demountable tanks and tankcontainers has not expired;
5. verify that the wagons/vehicles are not overloaded;
6. ascertain that the danger labels and markings prescribed for the wagons/vehicles have been affixed;
7. ADR: ascertain that the equipment prescribed in the written instructions for the driver is on board the vehicle.

[RID] [The requirements of this paragraph are deemed to have been met if UIC schedule ... has been applied.]

1.4.2.2.2 The carrier may, however, in the case of 1.4.2.2.1, Nos.1, 2, 5 and 6, rely on information and data made available to him.

1.4.2.2.3 If the carrier observes in accordance with 1.4.2.2.1 an infringement of the requirements of RID/ADR, he shall not forward the consignment until the matter has been rectified.

1.4.2.2.4 If, during the journey, an infringement which could jeopardize the safety of the operation is observed, the consignment shall be halted as soon as possible bearing in mind the requirements of traffic safety and the parking of the consignment, and of public safety. The transport operation may only be continued once the consignment complies with applicable regulations. The competent Authority(ies) concerned by the rest of the journey may grant an authorization to pursue the transport operation.

In case the required compliance cannot be achieved or no authorization is granted for the rest of the journey, the Authority(ies) shall provide the carrier with the necessary administrative assistance. The same shall apply in case the carrier informs this/these Authority(ies) that the dangerous nature of the goods carried was not communicated to him by the consignor and that he wishes, by virtue of the law applicable in particular to the contract of carriage, to unload, destroy or render the goods harmless.

#### 1.4.2.3 Consignee

1.4.2.3.1 The consignee has the obligation

1. not to defer acceptance of the goods without compelling reasons;

2. to verify, after unloading, that the requirements of RID/ADR concerning him have been complied with.

In the context of 1.4.1, he shall:

1. Carry out in the cases provided for by RID/ADR the prescribed cleaning and decontamination of the (ADR) vehicles and large containers/(RID) wagons and containers;

2. Ensure that the

(ADR) vehicles and large containers  
(RID) wagons and containers,  
once completely unloaded and cleaned, degassed and decontaminated, no longer bear danger markings.

1.4.2.3.2 If the consignee makes use of the services of other participants (unloader, cleaner, decontamination facility, etc.) he shall take appropriate measures to guarantee that the requirements of RID/ADR have been complied with.

1.4.2.3.3 If these verifications bring to light an infringement of the requirements of RID/ADR, the consignee shall return the container/large container or the wagon to the carrier only after the infringement has been remedied.

#### 1.4.3 Obligations of the other participants

A non-exhaustive list of the other participants and their respective obligations is given below. The obligations of the other participants flow from paragraph 1.4.1 above insofar as they know or should have known that their duties are performed as part of a transport operation subject to RID/ADR.

##### 1.4.3.1 Shipper

1.4.3.1.1 In the context of section 1.4.1, the shipper has the following obligations:

1. he shall have the right to hand the dangerous goods over to the carrier only if they are authorized for carriage in accordance with RID/ADR;

2. he shall, when handing over packed dangerous goods or uncleaned empty packagings, verify whether the packaging is damaged. He shall not hand over for carriage a package the packaging of which is damaged, especially if it is not leakproof and there may therefore be leakages or the possibility of leakages of the dangerous substance, until the damage has been repaired; this obligation is also valid for empty uncleaned packagings;

3. he shall, when loading dangerous goods in a wagon/vehicle, or a large or small container, comply with (RID) the conditions concerning wagons and loading; (ADR) the special requirements concerning loading and handling;

4. he shall, when he hands dangerous goods over for carriage directly, comply with the requirements concerning labelling and the orange plates;

5. he shall, when loading packages, comply with the prohibitions on mixed loading and also take into account dangerous goods already in the wagon or container/vehicle or large container and requirements concerning the separation of foodstuffs, other articles of consumption or animal feedstuffs.

1.4.3.1.2 The shipper may, however, in the case of 1.4.3.1.1 Nos. 4 and 5, rely on information and data made available to him by other participants.

#### 1.4.3.2 Packer

In the context of section 1.4.1, the packer shall comply with:

1. the requirements concerning packing conditions, or mixed packing conditions and,

2. when he prepares packages for carriage, the requirements concerning marking and danger labels on the packages.

#### 1.4.3.3 Filler

In the context of section 1.4.1, a filler has the following obligations:

1. he shall ensure prior to the filling of shells that both they and their equipment are technically in a satisfactory condition;

2. he shall ensure that the date of the next test for tankwagons, battery wagons, wagons with movable tanks/tank vehicles, battery vehicles, demountable tanks and tankcontainers has not expired;

3. he shall have the right to fill shells only with the dangerous goods authorized for carriage in those shells;

4. he shall, in filling the shell, comply with the requirements concerning dangerous goods in adjoining compartments;

5. he shall, during the filling of the shell, observe the maximum permissible degree of filling or the maximum permissible mass of load per litre of capacity for the substance being filled;

6. he shall, after filling the shell, check the leakproofness of the closing devices;

7. he shall ensure that no dangerous residue of the filling substance adheres to the outside of the shells filled by him;

8. he shall, in preparing the dangerous goods for carriage, affix the prescribed orange plates on each occasion on the shells and on the wagons/vehicles and the large and small bulk containers filled by him;
9. he shall, in preparing the dangerous goods for carriage, affix the prescribed danger labels each time on the shells and on the wagons/vehicles and the large and small bulk containers filled by him;
10. (RID) he shall, before and after filling tankwagons with liquefied gases, comply with the specific monitoring requirements concerning them.

#### 1.4.3.4 Tankcontainer operator

In the context of section 1.4.1, a tankcontainer operator shall:

1. ensure compliance with the requirements for construction, equipment, tests and marking;
2. ensure that the maintenance of shells and their equipment is carried out in such a way as to guarantee that, under normal operating conditions, the tankcontainer satisfies the conditions of RID/ADR until the next inspection;
3. have a special check made when the safety of the shell or its equipment is liable to be compromised by a repair, an alteration or an accident.

#### 1.4.3.5 (RID) Tank-wagon operator

In the context of section 1.4.1, a tankwagon operator shall:

1. ensure compliance with the requirements concerning construction, equipment, tests and marking;
2. ensure that the maintenance of shells and their equipment is carried out in such a way as to guarantee that, under normal operating conditions, the tankwagon satisfies the conditions of RID until the next inspection;
3. have a special check made when the safety of the shell or its equipment is liable to be compromised by a repair, an alteration or an accident.

### 1.5 DEROGATIONS

#### 1.5.1 Temporary derogations

1.5.1.1 For the purpose of adapting the requirements of RID/ADR to technological and industrial developments, the competent authorities of the member States/Contracting Parties may agree directly among themselves to authorize certain transport operations in their territories by temporary derogation from the requirements of RID/ADR, provided that safety is not compromised thereby. The authority which

has taken the initiative with respect to the particular derogation shall notify such derogations to the Central Office/competent secretariat of the UN which shall bring them to the attention of the member States/Contracting Parties.

1.5.1.2 The period of validity of the temporary derogation shall not be more than five years from the date of its entry into force. The temporary derogation shall automatically cease as from the date of the entry into force of a relevant amendment to RID/ADR.

1.5.1.3 [RID (from 2001 to 200X)1(6)] Temporary derogations are transport operations in accordance with Article 5, para 2 of the CIM Uniform Rules. Transport operations performed on the basis of temporary derogations are transport operations in accordance with RID.

NOTE. Article 5, para. 2 of the CIM Uniform Rules reads as follows:

“Para 2. Two or more States, by agreement, or two or more railways, by tariff clauses, may jointly determine the conditions with which certain substances or articles not acceptable for carriage under RID must comply if they are nevertheless to be accepted.

States or railways may, in the same manner, make the conditions for acceptance laid down in RID less rigorous.

Such agreements and tariff clauses must be published and notified to the Central Office which will bring them to the notice of the States.”

[RID (from 200X)][ADR]Transport operations on the basis of temporary derogations shall constitute transport operations in the sense of Appendix C to COTIF/ADR.

#### 1.5.2 (RID)Military consignments

[143] Exceptions are applicable to military consignments, namely consignments of substances or articles of Class 1 belonging to the armed forces or for which the armed forces are responsible [(see also Parts 4 and 5)].

### 1.6TRANSITIONAL MEASURES

#### 1.6.1General

1.6.1.1[18/2011] [Unless the various classes contain an indication to the contrary, the substances and articles of RID/ADR may be carried until 30 June 1999 in accordance with the requirements of RID/ADR applicable until 31 December 1998. The consignment note/transport document shall in such cases bear the inscription “Carriage in accordance with RID/ADR in force before 1 January 1999”.]

1.6.1.2 [1903/3903] The danger labels which until 31 December 1998 conformed to the models prescribed up to that date may be used until stocks are



exhausted.

1.6.1.3[142(1)/2116(1)] Substances and articles of Class 1, belonging to the armed forces of a member State/Contracting Party, that were packaged prior to 1 January 1990 in accordance with the requirements of RID/ADR in effect at that time may be carried after 31 December 1989 provided the packagings maintain their integrity and are declared in the consignment note/transport document as military goods packaged prior to 1 January 1990. The other requirements applicable as from 1 January 1990 for this class shall be complied with.

1.6.1.4 [142(2)/2116 (2)] Substances and articles of Class 1 that were packaged between 1 January 1990 and 31 December 1996 in accordance with the requirements of RID/ADR in effect at that time may be carried after 31 December 1996, provided the packagings maintain their integrity and are declared in the consignment note/transport document as goods of Class 1 packaged between 1 January 1990 and 31 December 1996.

1.6.1.5 [RID 405(5), 555(3)] IBCs constructed in accordance with the requirements [of this paragraph] in force before 1 January 1999, but which do not conform with the requirements [of this paragraph] in force from 1 January 1999 are still permitted for use.

#### 1.6.2 Receptacles for Class 2

1.6.2.1[239(1)/2239(1)] Receptacles built before 1 January 1997 and which do not conform to the requirements of RID/ADR applicable as from 1 January 1997, but the transport of which was permitted under the requirements of RID/ADR applicable until 31 December 1996, may continue to be transported after that date if the periodic test requirements in 4.1.4.5 are complied with.

1.6.2.2 [239(2)/2239(2)] Cylinders in accordance with the definition in 1.2.1 which were submitted to an initial inspection or periodic inspection before 1 January 1997 may be transported empty and uncleaned without a label until the date of the next refilling or the next periodic inspection.

#### 1.6.3 Tank-wagons

1.6.3.1[1.8.2/211 181] Tankwagons/fixed tanks (tank-vehicles), demountable tanks and battery-vehicles built before the entry into force of the requirements applicable as from 1 October 1978 may be kept in service if the equipment of the shell meets the requirements of Chapter 6.8. The thickness of the shell wall, except in the case of shells intended for the carriage of liquefied, refrigerated gases of Class 2, shall be appropriate to a calculation pressure of not less than 0.4 MPa (4bar) (gauge pressure) in the case of mild steel or of not less than 200 kPa (2 bar) (gauge pressure) in the case of aluminium and aluminium alloys. [ADR] For other than circular crosssections of tanks, the diameter to be used as a basis for calculation shall be that of a circle whose area is equal to that of the actual crosssection of the tank.

1.6.3.2 [1.8.3/211 182] The periodic tests for tank-wagons/ fixed tanks (tank-vehicles), demountable tanks and battery-vehicles kept in service under these transitional requirements shall be conducted in accordance with the requirements [of 6.8.1.4.1] and with the pertinent special requirements for the various classes. Unless the earlier requirements prescribed a higher test pressure, a test pressure of 200 kPa (2 bar) (gauge pressure) shall suffice for aluminium shells and aluminium alloy shells.

1.6.3.3 [1.8.4/211 183] Tanks-wagons/ fixed tanks (tank-vehicles), demountable tanks and battery-vehicles which meet these transitional requirements may be used until 30 September 1998 (RID)/1993 (ADR) for the carriage of the dangerous goods for which they have been approved. This transitional period shall not apply to tankwagons/ fixed tanks (tank-vehicles), demountable tanks and battery-vehicles intended for the carriage of substances of Class 2, or to tankwagons/ fixed tanks (tank-vehicles), demountable tanks and battery-vehicles whose wall thickness and items of equipment meet the requirements of Chapter 6.8.

1.6.3.4 [1.8.5] Tankwagons constructed before the entry into force of the requirements applicable from 1 January 1988 and which do not conform to those requirements but were constructed according to the requirements of RID/ADR in force until that date may still be used. This requirement shall also apply to tank wagons which do not indicate the material of the shell prescribed in [6.8.1.5.1] from 1 January 1988.

[211 184] Fixed tanks (tank-vehicles), demountable tanks and battery-vehicles constructed before 1 May 1985 in accordance with the requirements of ADR in force between 1 October 1978 and 30 April 1985 but not conforming to the requirements applicable from 1 May 1985 may continue to be used after that date.

[211 185] Fixed tanks (tank-vehicles), demountable tanks and battery-vehicles, constructed between 1 May 1985 and the entry into force of the requirements applicable from 1 January 1988 which do not conform to those requirements but were constructed according to the requirements of ADR in force until that date, may still be used.

1.6.3.5[1.8.6/211 186] Tankwagons/fixed tanks (tank-vehicles), demountable tanks and battery-vehicles, constructed before the entry into force of the requirements applicable from 1 January 1993 which do not conform to those requirements but were constructed according to the requirements of RID/ADR in force until that date may still be used.

1.6.3.6[1.8.7]Tankwagons constructed according to the requirements applicable prior to 1 January 1995, but which do not conform to the requirements applicable from 1 January 1995, may still be used.

[211 187] (1)Fixed tanks (tank-vehicles), demountable tanks and battery-vehicles constructed between 1 January 1978 and 31 December 1984, if used after 31 December 2004, shall conform to the requirements of [marginal 211 127 (5)], applicable as from 1 January 1990, concerning wall thickness and protection against damage.

(2)Fixed tanks (tank-vehicles), demountable tanks and battery-vehicles constructed between 1 January 1985 and 31 December 1989, if used after 31 December 2010, shall conform to the requirements [of marginal 211 127(5)], applicable as from 1 January 1990, concerning wall thickness and protection against damage.

1.6.3.7[1.8.8] Tank-wagons intended for the carriage of flammable liquids having a flash point of not less than 55/ C and not more than 61 °C, which were constructed before the entry into force of the requirements set out in [marginals 1.2.7, 1.3.8 and 3.3.3] applicable from 1 January 1997, and which do not conform to those requirements but were constructed according to the requirements [of these marginals] in force up to that date, may still be used.

[211 188] Fixed tanks (tank-vehicles), demountable tanks and battery-vehicles constructed before the entry into force of the requirements applicable from 1 January 1999 which do not conform to those requirements but were constructed according to the requirements of ADR in force until that date may still be used.

1.6.3.8 [2.8/211 280] Tankwagons, battery wagons and wagons with movable tanks/fixed tanks (tank-vehicles) demountable tanks and battery-vehicles intended for the carriage of substances of Class 2, which were built prior to 1 January 1997, may carry markings conforming to the requirements applicable prior to 1 January 1997, until the next periodic test.

1.6.3.9Tank-wagons intended for the carriage of substances with the following UN numbers:

[3.8.1/211 380] 1106, 1198, 1228, 1289, 1297, 1986, 1988, 1992, 2260, 2276, 2310,

2361, 2478, 2526, 2529, 2530, 2610, 2684, 2733, 2841, 2924 and 3248;

[6.8.1/211 680] 1092, 1098, 1135, 1143, 1181, 1182, 1199, 1238, 1239, 1251, 1545, 1569, 1591, 1593, 1595, 1601, 1602, 1603, 1605, 1647, 1669, 1693, 1695, 1701, 1702, 1710, 1737, 1738, 1750, 1751, 1752, 1809, 1846, 1886, 1887, 1888, 1889, 1891, 1897, 1916, 2016, 2017, 2022, 2023, 2076, 2267, 2279, 2285, 2295, 2321, 2322, 2337, 2407, 2438, 2477, 2482, 2484, 2485, 2487, 2488, 2504, 2515, 2516, 2518, 2521, 2558, 2589, 2606, 2611, 2644, 2646, 2653, 2664, 2667, 2688, 2729, 2745, 2746, 2748, 2810, 2811, 2831, 2872, 2927, 2928, 2929, 3023, 3071, 3080, 3142, 3143, 3246, 3277 and 3279;

[8.8.1/211 880] 1604, 1730, 1731, 1742, 1743, 1754, 1758, 1792, 1796, 1808, 1810, 1817, 1818, 1826, 1827, 1828, 1834, 1836, 1837, 1838, 2051, 2248, 2258, 2264, 2357, 2443, 2444, 2604, 2619, 2685, 2686, 2692, 2734, 2879, 3145 and 3265

built according to the requirements applicable prior to 1 January 1995, but which do not, however, conform to the requirements applicable as from 1 January 1995, may still be used up to 31 December 2002(RID).

1.6.3.10[3.8.1/211 381] Tank-wagons/fixed tanks (tank-vehicles) and demountable tanks which were intended for the carriage of substances of UN 3256, but which do not, however, conform to the requirements applicable as from 1 January 1995, may still be used until 31 December 2004.

1.6.3.11[3.8.2/211 382] Tankwagons/fixed tanks (tank-vehicles) and demountable tanks built according to the requirements of [marginals 3.3.3 and 3.3.4, 211 332 and 211 333] applicable prior to 1 January 1997, but which do not, however, conform to the requirements applicable as from 1 January 1997, may still be used.

1.6.3.12 [8.8.3/211 882] Tank-wagons/fixed tanks (tank-vehicles) and demountable tanks intended for the carriage of 2401 piperadine built in accordance with the requirements of [3.2.3/211 322] in force before 1 January 1999, but which do not conform to the requirements in force from 1 January 1999, may continue to be used until 31 December 2009 (RID)/2004 (ADR).

1.6.3.13[9.8/211 980] Tank-wagons/fixed tanks (tank-vehicles) and demountable tanks intended for the carriage of substances with UN number 3257 which do not however conform to the requirements in force as from 1 January 1997, may continue to be used until 31 January 2006.

1.6.3.14[RID 5.8] Tank-wagons which were constructed in accordance with the requirements of [marginal 5.3.6.3] in force before 1 January 1999, but not in accordance with the requirements of [5.3.6.3] in force after 1 January 1999, are still permitted for use.

1.6.3.15[211 681 211 881] [6.8.2/8.8.2]Tank-wagons/fixed tanks (tank-vehicles) and demountable tanks intended for the carriage of substances with the following UN numbers:

1092, 1098, 1135, 1143, 1182, 1199, 1238, 1251, 1605, 1647, 1695, 1809, 2295, 2337, 2407, 2438, 2477, 2487, 2488, 2558, 2606, 2644, 2646, 2686, 3023, 3289 and 3290 built in accordance with the requirements in force before 1 January 1997, but which do not conform with the requirements in force from 1 January 1997 may continue to be used until 31 December 2002 (ADR)/2004 (RID).

1.6.3.16[(ADR) Battery-vehicles first registered before 1 July 1997 which do not meet the requirements of [Appendix B2-marginals 220 510 to 220 517], may continue to be used until 31 December 2004].

1.6.3.17[RID 1.8.9] Tank-wagons which do not meet the requirements of the last sentence of [1.2.8.5] applicable as from 1 July 2000 may continue to be used to the date of the next test, but not beyond 30 June [2004???].

#### 1.6.4 Tankncontainers

1.6.4.1 [1.8.1/212 180] Tankncontainers built prior to the entry into force of the requirements applicable as from 1 January 1988, which do not conform to those requirements but were built according to the requirements of RID/ADR in force until that date, may still be used.

1.6.4.2 [1.8.2/212 181]Tankncontainers built prior to the entry into force of the requirements applicable as from 1 January 1993 which do not conform to those requirements but which were built according to the requirements of RID/ADR in force until that date, may still be used.

1.6.4.3 [1.8.3] Tankncontainers built prior to the entry into force of the requirements applicable from 1 January 1995 which do not conform to those requirements but which were built according to the requirements of RID/ADR in force until that date, may still be used.

[212 182] Tank-containers constructed before the entry into force of the requirements applicable from 1 January 1999 which do not conform to those requirements but were constructed according to the requirements in force until that date may still be used.

1.6.4.4. [1.8.4] Tank-containers intended for the carriage of flammable liquids having a flashpoint of not less than 55/ C and not more than 61/ C, built prior to the entry into force of the requirements [of marginals 1.2.7, 1.3.8 and 3.3.3] applicable as from 1 January 1997, which do not conform to those requirements, but which were built according to the requirements of these marginals in force until that date, may still be used.

1.6.4.5 [2.8/212 280] Tank containers intended for the carriage of substances of Class 2, built prior to 1 January 1997, may bear markings conforming to the requirements applicable prior to 1 January 1997 until the next periodic test.

1.6.4.6 [3.8.1/212 381] Tank-containers which were intended for the carriage of substances of UN No.3256, built before 1 January 1995, but which do not conform with the requirements applicable as from 1 January 1995, may still be used until 31 December 2002(RID)/2004 (ADR).

1.6.4.7 [3.8.2/212 382] Tank-containers constructed before 1 January 1997 which do not conform to the requirements of [marginals 3.3.3 and 3.3.4/212 332 and 212 333] but were constructed according to the requirements in force until that date, may still be used.

1.6.4.9 [5.8] Tank-containers built according to the requirements of [5.3.6.3] applicable prior to 1 January 1999, which do not, however, conform to the requirements of [5.3.6.3] applicable as from 1 January 1999, may still be used.

1.6.4.9 [8.8.2/212 882] Tank-containers intended for the carriage of 2401 piperadine, built before 1 January 1999 in accordance with the requirements of [3.2.3/212 322] applicable until 31 December 1998, but which do not, however, conform to the requirements applicable as from 1 January 1999, may continue to be used until 31 December 2003.

1.6.4.10 [9.8/212 980] Tank-containers which were intended for the carriage of substances of UN No.3257, built before 1 January 1997, but which do not conform with the requirements applicable as from 1 January 1997, may still be used until 31 December 2004(RID)/2006(ADR).

1.6.4.11 [6.8.2, 8.8.2/211 681, 211 881] Tank-containers intended for the carriage of substances with the following UN Nos.:

1092, 1098, 1135, 1143, 1182, 1199, 1238, 1251, 1605, 1647, 1695, 1809, 2295, 2337, 2407, 2438, 2477, 2487, 2488, 2558, 2606, 2644, 2646, 2686, 3023, 3289 and 3290, built in accordance with the requirements in force before 1 January 1997, but which do not conform to the requirements in force after 1 January 1997 may continue to be used until 31 December 2001.

1.6.5. Transitional provisions for Class 7 [reserved]

1.7 GENERAL REQUIREMENTS CONCERNING CLASS 7

[RESERVED]

1.8 CHECKING MEASURES AND OTHER MEASURES OF SUPPORT  
WITH A VIEW TO COMPLIANCE WITH SAFETY  
REQUIREMENTS

1.8.1 Administrative checks of dangerous goods

1.8.1.1 The competent authorities of member States/Contracting Parties may at any time or place on their national territory check whether the requirements concerning the carriage of dangerous goods have been met.

These checks shall, however, be made without endangering persons, property or the environment and without major disturbance of rail/road services.

1.8.1.2 Persons responsible for the carriage of dangerous goods (Chapter 1.4) shall, without delay, in the context of their respective obligations, provide the competent authorities and their agents with the necessary information for carrying out the checks.

1.8.1.3 The competent authorities may also, for the purposes of carrying out checks in the enterprises of persons responsible for the carriage of dangerous goods (Chapter 1.4), make inspections, consult the necessary documents and remove samples of dangerous goods or packagings for examination, provided that safety is not jeopardized thereby. The persons responsible for the carriage of dangerous goods (Chapter 1.4) shall also make the wagons/vehicles or parts of wagons/vehicles and the equipment and installations accessible for the purpose of checking where this is possible and reasonable. They may, if they deem necessary, designate a person from the enterprise to accompany the representative of the competent authority.

1.8.1.4 If the competent authorities observe that the requirements of RID/ADR have not been met, they may prohibit a consignment or interrupt a transport operation until the defects observed are rectified, or they may prescribe other appropriate measures. Immobilization may take place on the spot or at another place selected by the authorities for safety reasons. These measures shall not cause a major disturbance in rail/road services.

1.8.2 Mutual administrative support

1.8.2.1 The member States/Contracting Parties shall agree on mutual administrative support for the implementation of RID/ADR.

1.8.2.2 When a member State/Contracting Party has reason to observe that the safety of the carriage of dangerous goods on its territory is compromised as a result of very serious or repeated infringements by an enterprise which has its headquarters on the territory of another member State/Contracting Party, it shall notify the competent authorities of this member State/Contracting Party of such infringements. The competent authorities of the member State/Contracting Party on the territory of which the very serious or repeated infringements were observed may request the competent authorities of the member State/Contracting Party on the territory of which the enterprise has its headquarters to take appropriate measures vis-à-vis the offender(s). The transmission of data referring to persons shall not be permitted unless it is necessary for the prosecution of very serious or repeated infringements.

1.8.2.3 The authorities notified shall communicate to the competent authorities of the member State/Contracting Party on the territory of which the infringements were observed, the measures which have, if necessary, been taken vis-à-vis the enterprise.

### 1.8.3 Safety adviser

1.8.3.1 [96/35/EC] [Art.I] Each undertaking, the activities of which include the transport, or the related loading or unloading, of dangerous goods by road or rail shall appoint one or more safety advisers for the transport of dangerous goods, responsible for helping to prevent the risks inherent in such activities with regard to persons, property and the environment.

1.8.3.2 [Art. 3] The competent authorities of the Member States/Contracting Parties may provide that these requirements shall not apply to undertakings:

- (a) [RID] the activities of which concern the transport of dangerous goods in means of transport that belong to the armed forces or are under their responsibility,
- (b) the activities of which concern quantities in each wagon/transport unit smaller than those defined in [sub-sections 1.1.3.1 and 1.1.3.2], or
- (c) the main or secondary activities of which are not the transport or the related loading or unloading of dangerous goods but which occasionally engage in the national transport or the related loading or unloading of dangerous goods posing little danger or risk of pollution.

1.8.3.3 [Art.4 (1)] The main task of the adviser shall be, under the responsibility of the head [of the undertaking, to seek by all appropriate means and by all appropriate action, within the limits of the relevant activities of that undertaking, to facilitate the conduct of those activities in accordance with the rules applicable and in the safest possible way. He shall perform the duties relevant to the undertaking's activities, as follows:



The adviser has the following duties in particular:

[Annex 1]

- monitoring compliance with the rules governing the transport of dangerous goods,
- advising his undertaking on the transport of dangerous goods,
- preparing an annual report to the management of his undertaking or a local public authority, as appropriate, on the undertaking's activities in the transport of dangerous goods. Such annual reports shall be preserved for five years and made available to the national authorities at their request.

The adviser's duties also include monitoring the following practices and procedures relating to the relevant activities of the undertaking:

- the procedures for compliance with the rules governing the identification of dangerous goods being transported,
- the undertaking's practice in taking account, when purchasing means of transport, of any special requirements in connection with the dangerous goods being transported,
- the procedures for checking the equipment used in connection with the transport, loading or unloading of dangerous goods,
- the proper training of the undertaking's employees and the maintenance of records of such training,
- the implementation of proper emergency procedures in the event of any accident or incident that may affect safety during the transport, loading or unloading of dangerous goods,
- investigating and, where appropriate, preparing reports on serious accidents, incidents or serious infringements recorded during the transport, loading or unloading of dangerous goods
- the implementation of appropriate measures to avoid the recurrence of accidents, incidents or serious infringements,
- the account taken of the legal prescriptions and special requirements associated with the transport of dangerous goods in the choice and use of sub-contractors or third parties,
- verification that employees involved in the transport, loading or unloading of dangerous goods have detailed operational procedures and

instructions,

- the introduction of measures to increase awareness of the risks inherent in the transport, loading and unloading of dangerous goods,
- the implementation of verification procedures to ensure the presence on board means of transport of the documents and safety equipment which must accompany transport and the compliance of such documents and equipment with the regulations,
- the implementation of verification procedures to ensure compliance with the rules governing loading and unloading.

1.8.3.4[Art.4(2)] The adviser may also be the head of the undertaking, a person with other duties in the undertaking, or a person not directly employed by that undertaking, provided that that person is capable of performing the duties of adviser.

1.8.3.5 [Art.4(3)] Each undertaking concerned shall, on request, inform the competent authority or the body designated for that purpose by each Contracting Party/Member State of the identity of its adviser.

1.8.3.6 [Art.7] Whenever an accident affects persons, property or the environment or results in damage to property or the environment during transport, loading or unloading carried out by the undertaking concerned, the adviser shall, after collecting all the relevant information, prepare an accident report to the management of the undertaking or to a local public authority, as appropriate. That report shall not replace any report by the management of the undertaking which might be required under any other international or national legislation.

1.8.3.7[Art.5 (1)] An adviser shall hold a vocational training certificate, valid for transport by road/rail. That certificate shall be issued by the competent authority or the body designated for that purpose by each Contracting Party/Member State.

1.8.3.8[Art.5(2)] To obtain a certificate, a candidate shall undergo training and pass an examination approved by the competent authority of the Contracting Party/Member State.

1.8.3.9 [Art.5(3)] The main aims of the training shall be to provide candidates with sufficient knowledge of the risks inherent in the transport of dangerous goods, of the laws, regulations and administrative provisions applicable to the modes of transport concerned and of the duties listed in sub-section 1.8.3.3.

1.8.3.10 [Art.3(1)] [99/XX/EC] [The examination shall be organized by the competent authority or by an examining body designated by the competent authority.

The examining body shall be designated in writing. This approval may be of limited duration and shall be based on the following criteria:

- competence of the examining body;
- specifications of the form of the examinations the examining body is proposing;
- measures intended to ensure that examinations are impartial;
- independence of the body from all natural or legal persons employing safety advisers.]

1.8.3.11[Art.3(1)] [The aim of the examination is to ascertain whether candidates possess the necessary level of knowledge to carry out the duties incumbent upon a safety adviser as listed in sub-section 1.8.3.3, for the purpose of obtaining the certificate prescribed in sub-section 1.8.3.7], and it shall cover at least the following subjects:

(Annex II)

1. knowledge of the types of consequences which may be caused by an accident involving dangerous goods and knowledge of the main causes of accidents

2. Requirements under national law, international conventions and agreements, with regard to the following in particular:

- the classification of dangerous goods:
- the procedure for classifying solutions and mixtures,
- the structure of the description of substances,
- the classes of dangerous goods and the principles of their classification,
- the nature of the dangerous substances and articles transported,
- their physical, chemical and toxicological properties;
- general packaging requirements, to include tanks, tank-containers, etc.:
- types of packaging, codification and marking,
- packaging requirements and requirements for testing packaging,
- the state of packaging and periodic checks;
- danger markings and labels:
- the markings on danger labels,
- the placing and removal of danger labels,

- placarding and labelling;
- information in transport documents:
- information in the transport document,
- the consignor's declaration of conformity;
- the method of consignment and restrictions on dispatch:
- full load,
- bulk transport,
- transport in large bulk containers,
- container transport,
- transport in fixed and removable tanks;
- the transport of passengers;
- prohibitions and precautions relating to mixed loading;
- the segregation of substances;
- limits on the quantities carried and quantities exempt;
- handling and stowage:
- loading and unloading (filling ratios),
- stowage and segregation;
- cleaning and/or degassing before loading and after unloading;
- crews:vocational training;
- vehicle papers:
- the transport document,
- written instructions,
- the vehicle-approval certificate,
- the vehicle driver's training certificate (ADR),

- copies of any derogations,
- other documents;
- instructions in writings implementation of the instructions and driver-protection equipment;
- supervision requirements: parking,
- traffic regulations and restrictions (ADR);
- operational and accidental discharges of pollutants;
- requirements relating to transport equipment.

1.8.3.12 [Art.3(1)] [The examination shall consist of a written test which may be supplemented by an oral examination.]

[Art.3, 3(a) and (b)] The written examination shall consist of two parts:

1. The candidate shall receive a questionnaire. It shall include at least 20 open questions covering at least the subjects mentioned in the list in paragraph (8). However, multiple choice questions may be used. In this case, two multiple choice questions count as one open question. Amongst these subjects particular attention [appropriate to the mode of transport concerned] shall be paid to the following subjects:

- [- general preventive and safety measures,
- classification of dangerous goods,
- general packing conditions, including tanks, tank-containers, tank-wagons, tank-vehicles, etc.,
- markings and danger labels,
- information in the transport document/consignment note,
- handling and stowage,
- crew; vocational training,
- vehicle documents and transport certificates/consignment notes,
- instructions in writing,
- requirements concerning transport equipment.]

2. Candidates shall undertake a case study in keeping with the duties of the

adviser referred to in sub-section 1.8.3.3, in order to demonstrate that they have the necessary qualifications to fulfil the task of adviser.]

1.8.3.13 [Art.3 (3) (c)] [The Contracting Parties/Member States may decide that candidates who intend working for undertakings specializing in the carriage of certain types of dangerous goods need only be questioned on the substances relating to their activities. These types of goods are:

- Class 1,
- Class 2,
- Class 7,
- Classes 3, 4.1, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2, 8 and 9.
- UN numbers 1202, 1203 and 1223.

The certificate prescribed in sub-section 1.8.3.7 shall clearly indicate that it is only valid for one type of the dangerous goods referred to in this sub-section and on which the adviser has been questioned under the conditions defined in sub-section 1.8.3.12.]

1.8.3.14 [Art. 3 (4)] [The competent authority or the examining body shall keep a running list of the questions that have been included in the examination.]

1.8.3.15 [Art.5 (5) and 6] The certificate prescribed in sub-section 1.8.3.7 shall take the form laid down in sub-section 1.8.3.18 and shall be recognized by all Contracting Parties/Member States.

1.8.3.16 [Art.6] The certificate shall be valid for five years. The period of validity of a certificate shall be extended automatically for five years at a time where, during the final year before its expiry, its holder has followed refresher courses or passed an examination both of which shall be approved by the competent authority.

1.8.3.17 The requirements set out in sub-sections 1.8.3.1 to 1.8.3.16 shall be considered to have been fulfilled if the relevant conditions of Council Directive 96/35/EC of 3 June 1996 on the appointment and vocational qualification of safety advisers for the transport of dangerous goods by road, rail and inland waterway<sup>2</sup> and of [Council Directive .../.../EC of ..... on the minimum requirements applicable to the examination for safety advisers for the transport of dangerous goods by road, rail or inland waterway<sup>3</sup>] are applied.

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<sup>2</sup> Official Journal of the European Communities, No. L145 of 19 June 1996, page 10.

<sup>3</sup> [Official Journal of the European Communities, No. L .... of .... .]

1.8.3.18 [Annex III]

**FORM OF CERTIFICATE**

**certificate of training as safety adviser for the transport of dangerous goods**

Certificate No:.....

Distinctive sign of the State issuing the certificate:.....

Surname:.....

Forename(s):.....

Date and place of birth:.....

Nationality:.....

Signature of holder:.....

Valid until ..... for undertakings which transport dangerous goods and for undertakings which carry out related loading or unloading:

>by road

>by rail

>by inland waterway

Issued by:.....

Date.....

Signature:.....

Extended until:.....

By.....

Date.....

Signature:.....

\_\_\_\_\_



1.8.4 List of competent authorities and bodies designated by them

The member States/Contracting Parties shall communicate to the Central Office/the competent UN secretariat the addresses of the authorities and bodies designated by them which are competent in accordance with national law to implement RID/ADR, referring in each case to the relevant requirement of RID/ADR and giving the addresses to which the relevant applications should be made.

The Central Office/competent UN secretariat shall establish a list on the basis of the information received and shall keep it up to date. It shall communicate this list and the amendments thereto to the member States/Contracting Parties.

1.8.5 Transport restrictions by the competent authorities

1.8.5.1 The competent authorities of the member States/Contracting Parties may forbid, or subject to special conditions, the carriage of certain dangerous goods on routes where special and localized risks exist. The competent authorities shall, as far as possible, establish alternative routes to be used in the place of routes which are prohibited or subject to special conditions.

1.8.5.2 The member States/Contracting Parties shall, if necessary, establish standard conditions for the measures set out in 1.8.5.1 and conditions concerning communication to States/Parties, and to carriers and (RID only: infrastructure managers).

1.8.6 Reports on accidents or incidents

1.8.6.1 If a serious accident or incident takes place during the carriage of dangerous goods on the territory of a member State/Contracting Party, the carrier (RID only: and possibly the infrastructure manager) are required to make a report to the competent authority of the member State/Contracting Party concerned, which shall in turn, if necessary, make a report to the Central Office/competent UN secretariat with a view to informing the other member States/Contracting Parties.

1.8.6.2 The member States/Contracting Parties may draw up a standard model for the report.

## Remarks by the secretariat (OCTI)

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