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Working Party on the Transport
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(Sixty-seventh session,
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**REPORT OF THE WORKING PARTY ON ITS SIXTY-SEVENTH SESSION
(8-12 November 1999)**

Restructuring of ADR

Part 5 -Consignment procedures

The secretariat reproduces below the text of Part 5 of the restructured ADR as adopted by the Working Party at its sixty-seventh session, as editorially revised by the ad hoc drafting group set up but the RID/ADR/ADN Joint Meeting at its session held in Paris from 10 to 14 January 2000.

PART 5

CONSIGNMENT PROCEDURES

CHAPTER 5.1

GENERAL PROVISIONS

5.1.1 Application and general provisions

This Part sets forth the provisions for dangerous goods consignments relative to marking, labelling, and documentation, and, where appropriate, authorization of consignments and advance notifications.

5.1.2 Use of overpacks

5.1.2.1 An overpack shall be marked and labelled, as required for packages by Chapter 5.2, for each item of dangerous goods contained in the overpack, unless markings and labels representative of all dangerous goods contained in the overpack are visible. If a specific label is required for different packages, it only needs to be applied once.

5.1.2.2 Each package of dangerous goods contained in an overpack shall comply with all applicable provisions of ADR. The intended function of each package shall not be impaired by the overpack.

5.1.2.3 The prohibitions on mixed loading also apply to these overpacks.

5.1.3 Empty uncleaned packagings (including IBCs and large packagings), tanks, vehicles and containers for carriage in bulk

5.1.3.1 Empty uncleaned packagings (including IBCs and large packagings), tanks (including tank-vehicles, battery-vehicles, demountable tanks, portable tanks, tank-containers, MEGCs), vehicles and containers for carriage in bulk having contained dangerous goods of the different classes other than Class 7, shall be marked and labelled as if they were full.

NOTE: For documentation, see chapter 5.4.

5.1.3.2 Tanks and IBCs used for the carriage of radioactive material shall not be used for the storage or transport of other goods unless decontaminated below the level of 0.4 Bq/cm² for beta and gamma emitters and low toxicity alpha emitters and 0.04 Bq/cm² for all other alpha emitters

5.1.4 Mixed packing

When two or more dangerous goods are packed within the same outer packaging, the package shall be labelled and marked as required for each substance or article. If the same label is required for different goods, it only needs to be applied once.

5.1.5 General provisions for Class 7

5.1.5.1 Requirements before shipments

5.1.5.1.1 Requirements before the first shipment of a package

Before the first shipment of any package, the following requirements shall be fulfilled:

- (a) If the design pressure of the containment system exceeds 35 kPa (gauge), it shall be ensured that the containment system of each package conforms to the approved

design requirements relating to the capability of that system to maintain its integrity under that pressure;

- (b) For each Type B(U), Type B(M) and Type C package and for each package containing fissile material, it shall be ensured that the effectiveness of its shielding and containment and, where necessary, the heat transfer characteristics and the effectiveness of the confinement system, are within the limits applicable to or specified for the approved design;
- (c) For packages containing fissile material, where, in order to comply with the requirements of 6.4.11.1, neutron poisons are specifically included as components of the package, checks shall be performed to confirm the presence and distribution of those neutron poisons.

5.1.5.1.2 *Requirements before each shipment of a package*

Before each shipment of any package, the following requirements shall be fulfilled:

- (a) For any package it shall be ensured that all the requirements specified in the relevant provisions of ADR have been satisfied;
- (b) It shall be ensured that lifting attachments which do not meet the requirements of 6.4.2.2 have been removed or otherwise rendered incapable of being used for lifting the package, in accordance with 6.4.2.3;
- (c) For each Type B(U), Type B(M) and Type C package and for each package containing fissile material, it shall be ensured that all the requirements specified in the approval certificates have been satisfied;
- (d) Each Type B(U), Type B(M) and Type C package shall be held until equilibrium conditions have been approached closely enough to demonstrate compliance with the requirements for temperature and pressure unless an exemption from these requirements has received unilateral approval;
- (e) For each Type B(U), Type B(M) and Type C package, it shall be ensured by inspection and/or appropriate tests that all closures, valves, and other openings of the containment system through which the radioactive contents might escape are properly closed and, where appropriate, sealed in the manner for which the demonstrations of compliance with the requirements of 6.4.8.7 were made;
- (f) For each special form radioactive material, it shall be ensured that all the requirements specified in the special form approval certificate and the relevant provisions of ADR have been satisfied;
- (g) For packages containing fissile material the measurement specified in 6.4.11.4(b) and the tests to demonstrate closure of each package as specified in 6.4.11.7 shall be performed where applicable;
- (h) For each low dispersible radioactive material, it shall be ensured that all the requirements specified in the approval certificate and the relevant provisions of ADR have been satisfied.

5.1.5.2 *Approval of shipments and notification*

5.1.5.2.1 *General*

In addition to the approval for package designs described in Chapter 6.4, multilateral shipment approval is also required in certain circumstances (5.1.5.2.2 and 5.1.5.2.3). In some circumstances it is also necessary to notify competent authorities of a shipment (5.1.5.2.4).

5.1.5.2.2 *Shipment approvals*

Multilateral approval shall be required for:

- (a) the shipment of Type B(M) packages not conforming with the requirements of 6.4.7.5 or designed to allow controlled intermittent venting;
- (b) the shipment of Type B(M) packages containing radioactive material with an activity greater than 3000 A₁ or 3000 A₂, as appropriate, or 1000 TBq, whichever is the lower;
- (c) the shipment of packages containing fissile materials if the sum of the criticality safety indexes of the packages exceeds 50;

except that a competent authority may authorize transport into or through its country without shipment approval, by a specific provision in its design approval (see 5.1.5.3.1).

5.1.5.2.3 *Shipment approval by special arrangement*

Provisions may be approved by a competent authority under which a consignment, which does not satisfy all of the applicable requirements of ADR may be transported under special arrangement (see 1.7.4).

5.1.5.2.4 *Notifications*

Notification to competent authorities is required as follows:

- (a) Before the first shipment of any package requiring competent authority approval, the consignor shall ensure that copies of each applicable competent authority certificate applying to that package design have been submitted to the competent authority of each country through or into which the consignment is to be transported. The consignor is not required to await an acknowledgement from the competent authority, nor is the competent authority required to make such acknowledgement of receipt of the certificate;
- (b) For each of the following types of shipments:
 - (i) Type C packages containing radioactive material with an activity greater than 3000 A₁ or 3000 A₂, as appropriate, or 1000 TBq, whichever is the lower;
 - (ii) Type B(U) packages containing radioactive material with an activity greater than 3000 A₁ or 3000 A₂, as appropriate, or 1000 TBq, whichever is the lower;
 - (iii) Type B(M) packages;

- (iv) Shipment under special arrangement;

the consignor shall notify the competent authority of each country through or into which the consignment is to be transported. This notification shall be in the hands of each competent authority prior to the commencement of the shipment, and preferably at least 7 days in advance;

- (c) The consignor is not required to send a separate notification if the required information has been included in the application for shipment approval;
- (d) The consignment notification shall include:
 - (i) sufficient information to enable the identification of the package or packages including all applicable certificate numbers and identification marks;
 - (ii) information on the date of shipment, the expected date of arrival and proposed routing;
 - (iii) the names of the radioactive material or nuclides;
 - (iv) descriptions of the physical and chemical forms of the radioactive material, or whether it is special form radioactive material or low dispersible radioactive material; and
 - (v) the maximum activity of the radioactive contents during transport expressed in becquerels (Bq) with an appropriate SI prefix (see 1.2.2.1). For fissile material, the mass of fissile material in grams (g), or multiples thereof, may be used in place of activity.

5.1.5.3 *Certificates issued by the competent authority*

5.1.5.3.1 Certificates issued by the competent authority are required for the following:

- (a) Designs for
 - (i) special form radioactive material;
 - (ii) low dispersible radioactive material;
 - (iii) packages containing 0.1 kg or more of uranium hexafluoride;
 - (iv) all packages containing fissile material unless excepted by 6.4.11.2;
 - (v) Type B(U) packages and Type B(M) packages;
 - (vi) Type C packages;
- (b) Special arrangements;
- (c) Certain shipments (see 5.1.5.2.2).

The certificates shall confirm that the applicable requirements are met, and for design approvals shall attribute to the design an identification mark.

The package design and shipment approval certificates may be combined into a single certificate.

Certificates and applications for these certificates shall be in accordance with the requirements in 6.4.23.

5.1.5.3.2 The consignor shall be in possession of a copy of each applicable certificate. The consignor shall also have a copy of any instructions with regard to the proper closing of the package and any preparation for shipment before making any shipment under the terms of the certificates.

5.1.5.3.3 For package designs where a competent authority issued certificate is not required, the consignor shall, on request, make available for inspection by the competent authority, documentary evidence of the compliance of the package design with all the applicable requirements.

5.1.5.4. Summary of approval and prior notification provisions

NOTE 1: Before first shipment of any package requiring competent authority approval of the design, the consignor shall ensure that a copy of the approval certificate for that design has been submitted to the competent authority of each country en route (see 5.1.5.2.4 a).

NOTE 2: Notification required if contents exceed $3 \times 10^3 A_1$, or $3 \times 10^3 A_2$, or 1000 TBq; (see 5.1.5.2.4 b).

NOTE 3: Multilateral approval of shipment required if contents exceed $3 \times 10^3 A_1$, or $3 \times 10^3 A_2$, or 1000 TBq, or if controlled intermittent venting is allowed (see 5.1.5.2).

NOTE 4: See approval of the material and prior notification provisions for the applicable package for carrying this material.

Subject	UN Number	Competent Authority approval required		Consignor required to notify the competent authorities of the country of origin and of the countries en route ^{a/} before each shipment	Reference
		Country of origin	Countries en route ^{a/}		
Calculation of unlisted A ₁ and A ₂ values	-	Yes	Yes	No	---
Excepted packages - package design - shipment	2908, 2909, 2910, 2911	No No	No No	No No	---
LSA material ^{b/} and SCO ^{b/} / Industrial packages types 1, 2 or 3, non fissile and fissile excepted - package design - shipment	2912, 2913, 3321, 3322	No No	No No	No No	---
Type A packages ^{b/} , non fissile and fissile excepted - package design - shipment	2915, 3332	No No	No No	No No	--
Type B(U) packages ^{b/} , non fissile and fissile excepted - package design - shipment	2916	Yes No	No No	See Note 1 See Note 2	5.1.5.2.4 b), 5.1.5.3.1 a)
Type B(M) packages ^{b/} , non fissile and fissile excepted - package design - shipment	2917	Yes See Note 3	Yes See Note 3	No Yes	5.1.5.2.4 b), 5.1.5.3.1 a),5. 1.5.2.2.
Type C packages ^{b/} , non fissile and fissile excepted - package design - shipment	3323	Yes No	No No	See Note 1 See Note 2	5.1.5.2.4 b), 5.1.5.3.1 a)
Packages for fissile material - package design - shipment : sum of criticality safety indexes not more than 50 sum of criticality safety indexes greater than 50	2977, 3324, 3325, 3326, 3327, 3328, 3329, 3330, 3331, 3333	Yes ^{c/} No ^{d/} Yes	Yes ^{c/} No ^{d/} Yes	No See Note 2 See Note 2	5.1.5.3.1 a),5. 1.5.2.2, 6.4.22.4

Subject	UN Number	Competent Authority approval required		Consignor required to notify the competent authorities of the country of origin and of the countries en route ^{a/} before each shipment	Reference
		Country of origin	Countries en route ^{a/}		
Special form radioactive material - design - shipment	- See Note 4	Yes See Note 4	No See Note 4	No See Note 4	1.6.5.4, 5.1.5.3.1 a)
Low dispersable radioactive material - design - shipment	- See Note 4	Yes See Note 4	No See Note 4	No See Note 4	5.1.5.3.1 a),6. 4.22.3
Packages containing 0.1 kg or more of uranium hexafluoride - design - shipment	- See Note 4	Yes See Note 4	No See Note 4	No See Note 4	5.1.5.3.1 a),6. 4.22.3
Special Arrangement - shipment	2919, 3331	Yes	Yes	Yes	5.1.5.3.1 b),5. 1.5.2.4 b)
Approved packages designs subjected to transitional measures	-	See 1.6.5	See 1.6.5	See Note 1	1.6.5.2, 1.6.5.3, 5.1.5.2.4 b), 5.1.5.3.1 a),5. 1.5.2.2.

^{a/} Countries from, through or into which the consignment is transported.

^{b/} If the radioactive contents are fissile material which is not excepted from the provisions for packages containing fissile material, then the provisions for fissile material packages apply, see 6.4.11.

^{c/} Designs of packages for fissile material may also require approval in respect of one of the other items in the table.

^{d/} Shipments may, however, require approval in respect of one of the other items in the table.

CHAPTER 5.2

MARKING AND LABELLING

5.2.1 Marking of packages

NOTE: For markings related to the construction, testing and approval of packagings, large packagings, gas receptacles and IBCs, see Part 6.

5.2.1.1 Unless provided otherwise in ADR, the UN number corresponding to the dangerous goods contained, preceded by the letters "UN" shall be clearly and durably marked on each package. In the case of unpackaged articles the marking shall be displayed on the article, on its cradle or on its handling, storage or launching device.

5.2.1.2 All package markings required by this Chapter:

- (a) shall be readily visible and legible;
- (b) shall be able to withstand open weather exposure without a substantial reduction in effectiveness.

5.2.1.3 Salvage packagings shall additionally be marked with the word "SALVAGE".

5.2.1.4 Intermediate bulk containers of more than 450 litres capacity shall be marked on two opposite sides.

5.2.1.5 *Additional provisions for goods of Class 1*

For goods of Class 1, packages shall, in addition, bear the proper shipping name as determined in accordance with 3.1.2. The marking, which shall be clearly legible and indelible, shall be in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German unless any agreements concluded between the countries concerned in the transport operation provide otherwise.

5.2.1.6 *Additional provisions for goods of Class 2*

Refillable receptacles shall bear the following particulars in clearly legible and durable characters:

- (a) the UN number and the proper shipping name in full of the gas or mixture of gases, as determined in accordance with 3.1.2.

In the case of gases classified under an N.O.S. entry, only the technical name 1/ of the gas has to be indicated in addition to the UN number.

In the case of mixtures, not more than the two constituents which most predominantly contribute to the hazards have to be indicated;

- (b) for compressed gases filled by mass and for liquefied gases, either the maximum filling mass and the tare of the receptacle with fittings and accessories as fitted at the time of filling, or the gross mass;
- (c) the date (year) of the next periodic inspection.

These marks can either be engraved or indicated on a durable information disk or label attached on the receptacle or indicated by an adherent and clearly visible marking such as by printing or by any equivalent process.

NOTE 1: See also 6.2.1.7.1.

NOTE 2: For non refillable receptacles, see 6.2.1.7.2.

5.2.1.7 Special marking provisions for goods of Class 7

5.2.1.7.1 Each package shall be legibly and durably marked on the outside of the packaging with an identification of either the consignor or consignee, or both.

5.2.1.7.2 For each package, other than excepted packages, the UN number preceded by the letters "UN" and the proper shipping name shall be legibly and durably marked on the outside of the packaging. In the case of excepted packages only the UN number, preceded by the letters "UN", is required.

5.2.1.7.3 Each package of gross mass exceeding 50 kg shall have its permissible gross mass legibly and durably marked on the outside of the packaging.

1/ The technical name shall be a name currently used in scientific and technical handbooks, journals and texts. Trade names shall not be used for this purpose. Instead of the technical name the use of one of the following names is permitted:

- For UN No. 1078 refrigerant gas, N.O.S.: mixture F1, mixture F2, mixture F3;
- For UN No. 1060 methylacetylene and propadiene mixtures, stabilized: mixture P1, mixture P2;
- For UN No. 1965 hydrocarbon gas mixture, liquefied, N.O.S.: mixture A or butane, mixture A0₁ or butane, mixture A0₂ or butane, mixture A0 or butane, mixture A1, mixture B1, mixture B2, mixture B, mixture C or propane.

5.2.1.7.4 Each package which conforms to:

- (a) an Industrial package Type 1, an Industrial package Type 2 or an Industrial package Type 3 design shall be legibly and durably marked on the outside of the packaging with "TYPE IP-1", "TYPE IP-2" or "TYPE IP-3" as appropriate;
- (b) a Type A package design shall be legibly and durably marked on the outside of the packaging with "TYPE A";
- (c) an Industrial package Type 2, an Industrial package Type 3 or a Type A package design shall be legibly and durably marked on the outside of the packaging with the international vehicle registration code (VRI Code) 2/ of the country of origin of design and the name of the manufacturers, or other identification of the packaging specified by the competent authority.

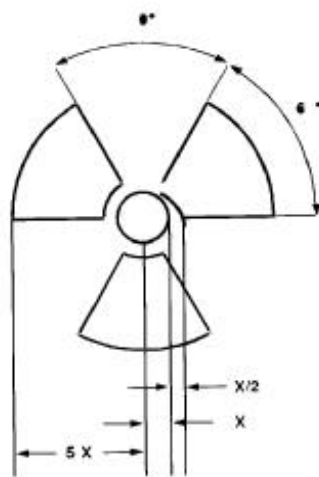
5.2.1.7.5 Each package which conforms to a design approved by the competent authority shall be legibly and durably marked on the outside of the packaging with:

- (a) the identification mark allocated to that design by the competent authority;
- (b) a serial number to uniquely identify each packaging which conforms to that design;
- (c) in the case of a Type B(U) or Type B(M) package design, with "TYPE B(U)" or "TYPE B(M)"; and
- (d) in the case of a Type C package design, with "TYPE C".

5.2.1.7.6 Each package which conforms to a Type B(U), Type B(M) or Type C package design shall have the outside of the outermost receptacle which is resistant to the effects of fire and water plainly marked by embossing, stamping or other means resistant to the effects of fire and water with the trefoil symbol shown in the figure below.

2/ *Distinguishing sign for motor vehicles in international traffic prescribed in the Vienna Convention on Road Traffic (1968).*

Basic trefoil symbol with proportions based on a central circle of radius X . The minimum allowable size of X shall be 4 mm.



5.2.1.7.7 Where LSA-I or SCO-I material is contained in receptacles or wrapping materials and is transported under exclusive use as permitted by 4.1.9.2.3, the outer surface of these receptacles or wrapping materials may bear the marking 'RADIOACTIVE LSA-I' or 'RADIOACTIVE SCO-I', as appropriate.

5.2.2 Labelling of packages

5.2.2.1 *Labelling provisions*

5.2.2.1.1 For each article or substance listed in Table A of Chapter 3.2, the labels shown in column [5] shall be affixed unless otherwise provided for by a special provision in column [6].

5.2.2.1.2 Indelible danger markings corresponding exactly to the prescribed models may be used instead of labels.

5.2.2.1.3 - 5.2.2.1.5 [reserved]

5.2.2.1.6 Each label shall:

- (a) be affixed to the same surface of the package, if the dimensions of the package allow; for packages of Class 1 and 7, near the mark indicating the proper shipping name;
- (b) be so placed on the package that it is not covered or obscured by any part or attachment to the packaging or any other label or marking; and
- (c) be displayed next to each other when more than one label is required.

Where a package is of such an irregular shape or small size that a label cannot be satisfactorily affixed, the label may be attached to the package by a securely affixed tag or other suitable means.

5.2.2.1.7 Intermediate bulk containers of more than 450 litres capacity shall be labelled on two opposite sides.

5.2.2.1.8 [reserved]

5.2.2.1.9 *Special provisions for the labelling of self-reactive substances and organic peroxides*

- (a) The label conforming to model No. 4.1 also implies that the product may be flammable and hence no label conforming to model No. 3 is required. In addition, a label conforming to model No. 1 shall be applied for self-reactive substances Type B, unless the competent authority has permitted this label to be dispensed with for a specific packaging because test data have proven that the self-reactive substance in such a packaging does not exhibit explosive behaviour.
- (b) The label conforming to model No. 5.2 also implies that the product may be flammable and hence no label conforming to model No. 3 is required. In addition, the following labels shall be applied:
 - (i) A label conforming to model No. 1 for organic peroxides type B, unless the competent authority has permitted this label to be dispensed with for a specific packaging because test data have proven that the organic peroxide in such a packaging does not exhibit explosive behaviour;
 - (ii) A label conforming to model No.8 is required when Packing Group I or II criteria of Class 8 are met.

For self-reactive substances and organic peroxides mentioned by name, the labels to be affixed are indicated in the list found in 2.2.41.4 and 2.2.52.4 respectively.

5.2.2.1.10 *Special provisions for the labelling of infectious substances packages*

In addition to the label conforming to model No. 6.2, infectious substances packages shall bear any other label required by the nature of the contents.

5.2.2.1.11 *Special provisions for the labelling of radioactive material*

5.2.2.1.11.1 Except as provided for large containers and tanks in accordance with [5.3.1.1.5.1], each package, overpack and container containing radioactive material shall bear at least two labels which conform to the models Nos.7A, 7B, and 7C as appropriate according to the category (see 2.2.7.8.4) of that package, overpack or container. Labels shall be affixed to two opposite sides on the outside of the package or on the outside of all four sides of the container. Each overpack containing radioactive material shall bear at least two labels on opposite sides of the outside of the overpack. In addition, each package, overpack and container containing fissile material, other than fissile material excepted under [6.4.11.2] shall bear labels which conform to model No.7E; such labels, where applicable shall be affixed adjacent to the labels for radioactive material. Labels shall not cover the markings specified in 5.2.1. Any labels which do not relate to the contents shall be removed or covered.

5.2.2.1.11.2 Each label conforming to models Nos.7A, 7B, and 7C shall be completed with the following information.

- (a) Contents:
 - (i) except for LSA-I material, the name(s) of the radionuclide(s) as taken from Table 2.2.7.7.2.1, using the symbols prescribed therein. For mixtures of radionuclides, the most restrictive nuclides shall be listed to the extent the space on the line permits. The group of LSA or SCO shall be shown following the name(s) of the radionuclide(s). The terms "LSA-II", "LSA-III", "SCO-I" and "SCO-II" shall be used for this purpose;
 - (ii) for LSA-I material, only the term "LSA-I" is necessary; the name of the radionuclide is not necessary;
- (b) Activity: The maximum activity of the radioactive contents during transport expressed in becquerels (Bq) with the appropriate SI prefix (see 1.2.2.1). For fissile material, the mass of fissile material in grams (g), or multiples thereof, may be used in place of activity;
- (c) For overpacks and containers the "contents" and "activity" entries on the label shall bear the information required in (a) and (b) below, respectively, totalled together for the entire contents of the overpack or container except that on labels for overpacks or containers containing mixed loads of packages containing different radionuclides, such entries may read "See Transport Documents";
- (d) Transport index: see 2.2.7.6.1.1 and 2.2.7.6.1.2 (no transport index entry is required for category I-WHITE).

5.2.2.1.11.3 Each label conforming to the model number 7E shall be completed with the criticality safety index (CSI) as stated in the certificate of approval for special arrangement or the certificate of approval for the package design issued by the competent authority.

5.2.2.1.11.4 For overpacks and containers, the criticality safety index (CSI) on the label shall bear the information required in 5.2.2.1.11.3 totalled together for the fissile contents of the overpack container.

5.2.2.1.12 *Additional labelling*

With the exception of Classes 1 and 7, Label No. 11 illustrated in 5.2.2.2.2 shall be displayed on two opposite sides of a package on the following packages:

- packages containing liquids in receptacles, the closures of which are not visible from the outside;
- packages containing vented receptacles or vented receptacles without outer packaging;
and
- packages containing refrigerated liquefied gases.

5.2.2.2 *Provisions for labels*

5.2.2.2.1 Labels shall satisfy the provisions below and conform, in terms of colour, symbols and general format, to the models shown in 5.2.2.2.2.

5.2.2.2.1.1 Labels, except label No. 11, shall be in the form of a square set at an angle of 45° (diamond-shaped) with minimum dimensions of 100 mm by 100 mm. They have a line of the same colour as the symbol, 5 mm inside the edge and running parallel with it. Label No. 11 shall be rectangular, of standard format A5 (148x210 mm). If the size of the package so requires, the dimensions of the labels may be reduced, provided that they remain clearly visible.

5.2.2.2.1.2 Gas cylinders for Class 2 may, on account of their shape, orientation and securing mechanisms for transport, bear labels representative of those specified in this section, which have been reduced in size, according to the dimensions outlined in ISO 7225:1994, "*Precautionary labels for gas cylinders*", for display on the non-cylindrical part (shoulder) of such cylinders.

5.2.2.2.1.3 Labels, except label No.11, are divided into halves. With the exception of Divisions 1.4, 1.5 and 1.6, the upper half of the label is reserved for the pictorial symbol and the lower half for texts and the class number and the compatibility group letter as appropriate.

NOTE: For the labels of Classes 1, 2, 3, 5.1, 5.2, 7,8 and 9, the respective class number shall be shown in the bottom corner. For the labels of Classes 4.1, 4.2 and 4.3 and of Classes 6.1 and 6.2 only figures 4 and 6 respectively shall be shown in the bottom corner (see 5.2.2.2.2)

5.2.2.2.1.4 Except for Divisions 1.4, 1.5 and 1.6, labels for Class 1 show in the lower half the division number and compatibility group letter for the substance or article. Labels for Divisions 1.4, 1.5 and 1.6 show in the upper half the division number and in the lower half the compatibility group letter.

5.2.2.2.1.5 On labels other than those for material of Class 7, the optional insertion of any text (other than the class number) in the space below the symbol shall be confined to particulars indicating the nature of the risk and precautions to be taken in handling.

5.2.2.2.1.6 The symbols, text and numbers shall be clearly legible and indelible and shall be shown in black on all labels except for:

- (a) the Class 8 label, where the text (if any) and class number shall appear in white; and
- (b) labels with entirely green, red or blue backgrounds where they may be shown in white.

5.2.2.2.1.7 All labels shall be able to withstand open weather exposure without a substantial reduction in effectiveness.

5.2.2.2.2 Models

CLASS 1 HAZARD
Explosive substances or articles



(No.1)
Divisions 1.1, 1.2 and 1.3

Symbol (exploding bomb): black; Background: orange; Figure '1' in bottom corner



(No.1.4)
Division 1.4



(No.1.5)
Division 1.5



(No.1.6)
Division 1.6

Background: orange; Figures: black; Numerals shall be about 30 mm in height and be about 5 mm thick (for a label measuring 100 mm x 100 mm); Figure '1' in bottom corner

- ★★ Place for division - to be left blank if explosive is the subsidiary risk
- ★ Place for compatibility group - to be left blank if explosive is the subsidiary risk

CLASS 2 HAZARD
Gases



(No.2.1)
Flammable gases

Symbol (flame): black or white;
Background: red; Figure '2' in bottom corner



(No.2.2)

Non flammable, non-toxic gases
Symbol (gas cylinder): black or white;
Background: green; Figure '2' in bottom corner



(No.2.3)
Toxic gases

Symbol (skull and crossbones): black;
Background: white; Figure '2' in bottom corner

CLASS 3 HAZARD
Flammable liquids



(No.3)

Symbol (flame): black or white;
Background: red; Figure '3' in bottom corner



CLASS 4.1 HAZARD
Flammable solids, self-reactive
substances and desensitized explosives



(No. 4.1)
Symbol (flame): black;
Background: white with
seven vertical red stripes;
Figure '4' in bottom corner

CLASS 4.2 HAZARD
Substances liable to
spontaneous combustion



(No. 4.2)
Symbol (flame): black;
Background: upper half white,
lower half red;
Figure '4' in bottom corner

CLASS 4.3 HAZARD
Substances which, in contact with water,
emit flammable gases



(No. 4.3)
Symbol (flame): black or white;
Background: blue;
Figure '4' in bottom corner

CLASS 5.1 HAZARD
Oxidizing substances



(No. 5.1)
Symbol (flame over circle): black;
Background: yellow;
Figures '5.1' in bottom corner

CLASS 5.2 HAZARD
Organic peroxides



(No. 5.2)
Symbol (flame over circle): black;
Background: yellow;
Figures '5.2' in bottom corner

CLASS 6.1 HAZARD
Toxic substances



(No. 6.1)
Symbol (skull and crossbones): black;
Background: white; Figure '6' in bottom corner

CLASS 6.2 HAZARD
Infectious substances



(No. 6.2)

The lower half of the label may bear the inscriptions: 'INFECTIOUS SUBSTANCE' and
'IN THE CASE OF DAMAGE OR LEAKAGE IMMEDIATELY NOTIFY PUBLIC HEALTH AUTHORITY';
Symbol (three crescents superimposed on a circle) and inscriptions: black;
Background: white; Figure '6' in bottom corner

CLASS 7 HAZARD
Radioactive material



(No. 7A)

Category I - White
Symbol (trefoil): black;
Background: white;

Text (mandatory): black in lower half of label:
'RADIOACTIVE'
'CONTENTS ...'
'ACTIVITY...'

One red vertical bar shall follow the word 'RADIOACTIVE';
Figure '7' in bottom corner.



(No. 7B)

Category II - Yellow

Symbol (trefoil): black;

Background: upper half yellow with white border, lower half white;

Text (mandatory): black in lower half of label:

'RADIOACTIVE'
'CONTENTS...'
'ACTIVITY...'

In a black outlined box: 'TRANSPORT INDEX';
Two red vertical bars shall follow the word 'RADIOACTIVE';
Figure '7' in bottom corner.



(No. 7C)

Category III - Yellow

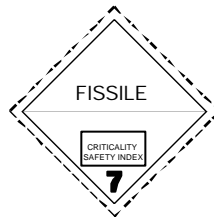
Symbol (trefoil): black;

Background: upper half yellow with white border, lower half white;

Text (mandatory): black in lower half of label:

'RADIOACTIVE'
'CONTENTS...'
'ACTIVITY...'

In a black outlined box: 'TRANSPORT INDEX';
Three red vertical bars shall follow the word 'RADIOACTIVE';
Figure '7' in bottom corner.



(No. 7E)

Class 7 fissile material

Background: white;

Text (mandatory): black in upper half of label: 'FISSILE';

In a black outlined box in the lower half of the label:

'CRITICALITY SAFETY INDEX'

Figure '7' in bottom corner.

CLASS 8 HAZARD
Corrosive substances



(No. 8)

Symbol (liquids, spilling from two glass test tubes and attacking a hand and a metal): black;

Background: upper half white;
lower half black with white border;

Figure '8' in bottom corner

CLASS 9 HAZARD

Miscellaneous dangerous substances and articles



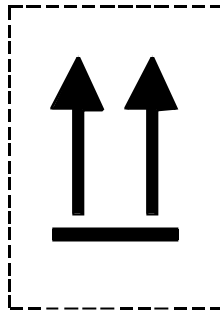
(No. 9)

Symbol (seven vertical stripes in upper half): black;

Background: white;

Figure '9' underlined in bottom corner

No. 11



(No. 11)

Two black arrows on white
or suitable contrasting background

CHAPTER 5.4

DOCUMENTATION

NOTE: *The use of electronic data processing (EDP) or electronic data interchange (EDI) techniques as an aid to or instead of paper documentation is permitted, provided that the procedures used for the capture, storage and processing of electronics data meet the legal requirements as regards the evidential value and availability of data during transport in a manner at least equivalent to that of paper documentation.*

5.4.0 Any carriage of goods governed by ADR shall be accompanied by the documentation prescribed in this chapter, as appropriate, unless exempted under 1.1.3.6.2.

NOTE: *For the list of documentation to be carried on board transport units, refer to 8.1.2.*

5.4.1 Dangerous goods transport document

5.4.1.1 General information required in the transport document

5.4.1.1.1 The transport document(s) shall contain the following information for each dangerous substance, material or article offered for transport:

- (a) the UN number;
- (b) the proper shipping name supplemented, when applicable, with the technical or chemical name, as determined in accordance with 3.1.2;
- (c) the class of the goods, or for substances and articles of Class 1 the division, followed immediately by the compatibility group letter;
- (d) where assigned, the packing group for the substance or article;
- (e) the initials ADR or RID;
- (f) the number and a description of the packages;
- (g) the total quantity of dangerous goods covered by the description (as a volume or as a gross mass, or as a net mass as appropriate and, in addition, in the case of explosive substances or articles of Class 1, as a total net mass of explosive contents);

NOTE: *In the case of application of 1.1.3.6 the total quantity of dangerous goods carried per transport unit shall be expressed as a value calculated in accordance with the provisions of 1.1.3.6.*

- (h) the name and address of the consignor;

- (i) the name and address of the consignee(s);
- (j) a declaration as required by the terms of any special agreement.

The location and order in which the elements of information required appear in the transport document is left optional, except that (a), (b), (c), (d) and (e) shall appear in that sequence, e.g.

1098 ALLYL ALCOHOL, 6.1, I, ADR

5.4.1.1.2 The information required on a transport document shall be legible.

5.4.1.1.3 *Special provisions for wastes*

If waste containing dangerous goods (other than radioactive wastes) is being transported, the proper shipping name shall be preceded by the word[s] "**WASTE[, CONTAINING]**".

5.4.1.1.4 *Special provisions for dangerous goods packed in limited quantities*

No information is required in the transport document for carriage of dangerous goods packed in limited quantities according to Chapter 3.4.

5.4.1.1.5 *Special provisions for salvage packagings*

When dangerous goods are transported in a salvage packaging, the words "**SALVAGE PACKAGE**" shall be added after the description of the goods in the transport document.

5.4.1.1.6 *Special provisions for empty uncleaned packagings and tanks*

For empty means of containment, uncleaned, the description in the transport document shall be "**EMPTY PACKAGING**", "**EMPTY RECEPTACLE**", "**EMPTY IBC**", "**EMPTY DEMOUNTABLE TANK**", "**EMPTY PORTABLE TANK**", "**EMPTY TANK-CONTAINER**", "**EMPTY BATTERY-VEHICLE**", "**EMPTY MEGC**", as appropriate, followed by the class number and the letters "**ADR** or **RID**". See example as follows:

"EMPTY PACKAGING, 3, ADR"

In the case of empty gas receptacles with a capacity of more than 1000 litres, empty tank-vehicles (including battery-vehicles), demountable tanks, portable tanks, tank-containers and MEGCs, uncleaned, this description shall be followed by the words "**last load**" together with the UN number and proper shipping name of the goods last loaded. See example as follows:

"EMPTY TANK-VEHICLE, 2, ADR, LAST LOAD: 1017 CHLORINE"

5.4.1.1.7 *Special provisions for carriage prior to or following maritime or air carriage*

For carriage in accordance with 1.1.4.2, a statement shall be included in the transport document, as follows: "**Carriage in accordance with 1.1.4.2**".

5.4.1.1.8 *Special provisions for use of [tank-containers] approved for maritime transport*

For carriage in accordance with 1.1.4.3, a statement shall be included in the transport document, as follows: "**Carriage in accordance with 1.1.4.3**".

5.4.1.1.9 Reserved

5.4.1.1.10 *Special provisions for exemptions related to quantities carried per transport unit*

5.4.1.1.10.1 In the case of exemptions provided for in 1.1.3.6, the transport document shall bear the following inscription: "**Load not exceeding the exemption limits prescribed in 1.1.3.6.**"

5.4.1.1.10.2 Where consignments from more than one consignor are carried in the same transport unit, the transport documents accompanying these consignments need not bear the inscription mentioned in 5.4.1.1.10.1.

5.4.1.2 *Additional information required for certain classes*

5.4.1.2.1 *Special provisions for Class 1*

- (a) For full loads, the transport document shall indicate the number of packages, the mass of each package in kg and the total net mass in kg of explosive substance;
- (b) For mixed packing of two different goods, the description of the goods in the transport document shall include the UN numbers and names printed in capitals in columns (1) and (2) of Table A of Chapter 3.2 of both substances or articles. If more than two different goods are contained in the same package in conformity with the mixed packing provisions given in [marginal 2104], the transport document shall indicate under the description of the goods the UN numbers of all the substances and articles contained in the package, in the form, "**Goods of UN Nos ...**";
- (c) For the carriage of substances and articles assigned to an n.o.s. entry or the entry 0190 Samples, Explosive or packed conforming to Packing Instruction P101, a copy of the competent authority approval with the conditions of carriage shall be attached to the transport document. It shall be in an official language of the forwarding country and also, if that language is not English, French or German, in English, French or German unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise;
- (d) If packages containing substances and articles of compatibility groups B and D are loaded together in the same vehicle in accordance with the requirements of 7.5.2.2, the approval certificate of the protective container/separate compartment in accordance with 7.5.2.2, footnote 1/, shall be attached to the transport document;

- (e) When explosive substances or articles are carried in packagings conforming to Packing Instruction P101, the transport document shall bear the inscription "**Packaging approved by the competent authority of ...**" (see 4.1.4.1, packing instruction P101).

NOTE: The commercial or technical name of the goods may be entered additionally to the proper shipping name in the transport document.

5.4.1.2.2 *Additional provisions for Class 2*

- (a) For the carriage of mixtures (see 2.2.2.1(1)) in tanks (demountable tanks, fixed tanks, portable tanks, tank-containers or elements of battery-vehicles or of MEGCs), the composition of the mixture as a percentage of the volume or as a percentage of the mass shall be given. Constituents below 1% need not be indicated (see also 3.1.2.6.1.2);
- (b) For the carriage of receptacles referred to in 6.2.1.1 under the conditions of 4.1.6.6, the following entry shall be included in the transport document:

"Carriage in conformity with 4.1.6.6".

5.4.1.2.3 *Additional provisions for self-reactive substances of Class 4.1 and organic peroxides of Class 5.2*

5.4.1.2.3.1 For self-reactive substances of Class 4.1 and for organic peroxides of Class 5.2 that require temperature control during transport, the control and emergency temperatures shall be indicated in the transport document, as follows: "**Control temperature: ... °C Emergency temperature: ... °C**".

5.4.1.2.3.2 When for certain self-reactive substances of Class 4.1 and certain organic peroxides of Class 5.2 the competent authority has permitted the label conforming to model No.1 to be dispensed with for a specific packaging (see 5.2.2.1.9), a statement to this effect shall be included in the transport document, as follows: "**The label conforming to model No.1 is not required**".

5.4.1.2.3.3 When organic peroxides and self-reactive substances are transported under conditions where approval is required (for organic peroxides see 2.2.52.1(7) [4.1.7.2.2 and special provision TA2 of 6.8.4]; for self-reactive substances see 2.2.41.1(13) and [4.4.7.2.2.], a statement to this effect shall be included in the transport document, e.g. "**Carriage in accordance with 2.2.52.1 (7)**".

A copy of the approval of the competent authority with the conditions of carriage shall be attached to the transport document.

5.4.1.2.3.4 When a sample of an organic peroxide (see 2.2.52.1 (8)) or a self-reactive substance (see 2.2.41.1 (15)) is transported, a statement to this effect shall be included in the transport document, e.g. "**Carriage in accordance with 2.2.52.1 (8)**".

5.4.1.2.3.5 When self-reactive substances type G (see Manual of Tests and Criteria, Part II, paragraph 20.4.2(g)) are carried, the following statement may be given in the transport document: "**Not a self-reactive substance of Class 4.1**".

When organic peroxides type G (see Manual of Tests and Criteria, Part II, paragraph 20.4.2(g)) are carried, the following statement may be given in the transport document: "**Not a substance of Class 5.2**".

5.4.1.2.4 *Additional provisions for Class 6.2*

- (a) If the infectious substance is a genetically modified substance, the words "**genetically modified micro-organisms**" shall be added in the transport document;
- (b) For diagnostic specimens which are offered for transport under the conditions of [2.2.62.1 (8)], the proper shipping name shall be: "**Diagnostic specimen, containing ...**" (the infectious substance determining the classification to be entered);
- (c) For the carriage of easily perishable substances, appropriate information shall be provided, e.g. "**Cool at +2/+4 °C**" or "**Carry in frozen state**" or "**Do not freeze**".

5.4.1.2.5 *Special provisions for radioactive material*

5.4.1.2.5.1 The consignor shall include in the transport documents with each consignment the following information, as applicable in the order given:

- (a) The UN number assigned to the material preceded by the letters "UN";
- (b) The proper shipping name;
- (c) The Class number "7";
- (d) The name or symbol of each radionuclide or, for mixtures of radionuclides, an appropriate general description or a list of the most restrictive nuclides;
- (e) A description of the physical and chemical form of the material, or a notation that the material is special form radioactive material or low dispersible radioactive material. A generic chemical description is acceptable for chemical form;
- (f) The maximum activity of the radioactive contents during transport expressed in becquerels (Bq) with an appropriate SI prefix (see 1.2.2.1). For fissile material, the mass of fissile material in grams (g), or appropriate multiples thereof, may be used in place of activity;
- (g) The category of the package, i.e. I-WHITE, II-YELLOW, III-YELLOW;
- (h) The transport index (categories II-YELLOW and III-YELLOW only);
- (i) For consignments including fissile material other than consignments excepted under 6.4.11.2, the criticality safety index;

- (j) The identification mark for each competent authority approval certificate (special form radioactive material, low dispersible radioactive material, special arrangement, package design, or shipment) applicable to the consignment;
- (k) For consignments of packages in an overpack or container, a detailed statement of the contents of each package within the overpack or container and, where appropriate, of each overpack or container in the consignment. If packages are to be removed from the overpack or container at a point of intermediate unloading, appropriate transport documents shall be made available;
- (l) Where a consignment is required to be shipped under exclusive use, the statement "EXCLUSIVE USE SHIPMENT"; and
- (m) For LSA-II, LSA-III, SCO-I and SCO-II, the total activity of the consignment as a multiple of A_2 .

5.4.1.2.5.2 The consignor shall provide in the transport documents a statement regarding actions, if any, that are required to be taken by the carrier. The statement shall be in the languages deemed necessary by the carrier or the authorities concerned, and shall include at least the following information:

- (a) Supplementary requirements for loading, stowage, carriage, handling and unloading of the package, overpack or container including any special stowage provisions for the safe dissipation of heat (see provision CV33 (3.2) of 7.5.11), or a statement that no such requirements are necessary;
- (b) Restrictions on the mode of transport or vehicle and any necessary routing instructions;
- (c) Emergency arrangements appropriate to the consignment.

5.4.1.2.5.3 The applicable competent authority certificates need not necessarily accompany the consignment. The consignor shall make them available to the carrier(s) before loading and unloading.

5.4.1.3 Certification

[The dangerous goods transport document shall in addition include, or be accompanied by, a certificate or declaration that the consignment offered can be accepted for transport and that the goods are properly packaged, marked and labelled, and in proper condition for transport in accordance with the applicable regulations. The form for this declaration is:

"I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national [governmental] regulations."

The declaration shall be signed and dated by the consignor. Facsimile signatures are acceptable where applicable laws and regulations recognize legal validity of facsimile signatures.]

[ADR: marginal 2002 (9)]

- (9) The consignor, either in the transport document or in a separate declaration incorporated into or combined with it, shall certify that the substance presented may be carried by road in conformity with the provisions of ADR and that its condition, treatment and, as appropriate its packaging, the intermediate bulk container or tank container and the labelling conform to the provisions of ADR. Furthermore, if several dangerous goods are packed together in a collective package or in a single container, the consignor is required to declare that this mixed packing is not prohibited.]

5.4.1.4 **Format and language to be used**

5.4.1.4.1 The document containing the information in 5.4.1.1, 5.4.1.2 and 5.4.1.3 may be that already required by other regulations in force for carriage by another mode of transport. In case of multiple consignees, the name and address of the consignees and the quantities delivered enabling the nature and quantities transported to be evaluated at any time, may be entered in other documents which are to be used or in any other documents made mandatory according to other specific regulations and which shall be on board the vehicle.

The particulars to be entered in the document shall be drafted in an official language of the forwarding country, and also, if that language is not English, French, or German, in English, French or German, unless international road transport tariffs, if any, or agreements concluded between the countries concerned in the transport operation, provide otherwise.

5.4.1.4.2 If by reason of the size of the load, a consignment cannot be loaded in its entirety on a single transport unit, at least as many separate documents, or copies of the single document, shall be made out as transport units loaded. Furthermore, in all cases, separate transport documents shall be made out for consignments or parts of consignments which may not be loaded together on the same vehicle by reason of the prohibitions set forth in [7.5.2].

The information relative to the hazards of the goods to be transported (as indicated in 5.4.1.1) may be incorporated in, or combined with, an existing transport or cargo handling document. The layout of the information in the document (or the order of transmission of the corresponding data by electronic data processing (EDP) or electronic data interchange (EDI) techniques) shall be as provided in 5.4.1.1.1.

When an existing transport document or cargo handling document cannot be used for the purposes of dangerous goods documentation for multimodal transport, the use of documents corresponding to the example shown in 5.4.4 is considered advisable ¹.

5.4.1.5 Non-dangerous goods

When goods mentioned by name in Table A of Chapter 3.2, are not subject to ADR because they are considered as non-dangerous according to Part 2, the consignor may enter in the transport document a statement to that effect, e.g.

"Not goods of Class...."

***NOTE:** This provision may be used in particular when the consignor considers that, due to the chemical nature of the goods (e.g solutions and mixtures) carried or to the fact that such goods are deemed dangerous for other regulatory purposes the consignment might be subject to control during the journey.*

¹ If used, the relevant recommendations of the UN/ECE Working Party on Facilitation of International Trade Procedures may be consulted, in particular Recommendation No.1 (United Nations Lay-out Key for Trade Documents) (ECE/TRADE/137, edition 96.1), Recommendation No.11 (Documentary Aspects of the International Transport of Dangerous Goods) ECE/TRADE/204, edition 96.1) and Recommendation No.22 (Lay-out Key for standard Consignment Instructions) (ECE/TRADE/168, edition 96.1). Refer to the Trade Data Elements Directory, Volume III, Trade Facilitation Recommendations (ECE/TRADE/200) (United Nations publication Sales No.E.96.II.E.13).

5.4.2 Container packing certificate

If the carriage of dangerous goods in a large container precedes a voyage by sea, a container packing certificate conforming [to section 5.4.2 of the IMDG Code]² shall be provided with the transport document³.

2/ Guidelines for use in practice and in training for loading goods in transport units have also been drawn up by the International Maritime Organization (IMO), the International Labour Organization (ILO) and the United Nations Economic Commission for Europe (UN/ECE) and have been published by IMO “(IMO/ILO/UN-ECE Guidelines for Packing of Cargo Transport Units (CTUs))”.

3/ Section 5.4.2 of the IMDG Code requires the following:

“5.4.2 Container/vehicle packing certificate

5.4.2.1 When packages containing dangerous goods are packed onto or into any unit, such as, freight container, flat, trailer or other vehicle intended for transport by sea, those responsible for the packing of the unit shall provide a “container/vehicle packing certificate” specifying the container/vehicle/unit identification number(s) and certifying that the operation has been carried out in accordance with the following conditions:

- .1 The cargo transport unit was clean, dry and apparently fit to receive the goods;
- .2 If the consignments include goods of Class 1, other than Division 1.4, the cargo transport unit is structurally serviceable in conformity with 7.4.10 (of the IMDG Code).
- .3 Goods, which should be segregated, have not been packed together onto or in the cargo transport unit (unless approved by the competent authority concerned in accordance with 7.2.2.3 (of the IMDG Code));
- .4 All packages have been externally inspected for damage, leakage or sifting, and only sound packages have been loaded;
- .5 Drums have been stowed in an upright position, unless otherwise authorized by the competent authority;
- .6 All packages have been properly packed onto or in the cargo transport unit and secured;
- .7 When dangerous goods are transported in bulk packagings, the cargo has been evenly distributed;
- .8 The cargo transport unit and the packages therein are properly marked,

The functions of the transport document required under 5.4.1, of the declaration required in 5.4.1.3 and of the container packing certificate as provided above may be incorporated into a single document; if not, these documents shall be attached one to the other. If these functions are incorporated into a single document, the inclusion in the transport document of a statement that the loading of the container has been carried out in accordance with the applicable modal regulations together with the identification of the person responsible for the container packing certificate shall be sufficient.

NOTE: The container packing certificate is not required for tank-containers.

5.4.3 Instructions in writing

5.4.3.1 As a precaution against any accident or emergency that may occur or arise during carriage, the driver shall be given instructions in writing, specifying concisely for each dangerous substance or article carried or for each group of goods presenting the same dangers to which the substance(s) or article(s) carried belong(s):

- (a) the name of the substance or article or group of goods, the Class and the UN number or for a group of goods the UN numbers of the goods for which these instructions are intended or are applicable;
- (b) the nature of the danger inherent in these goods as well as the measures to be taken by the driver and the personal protection equipment to be used by the driver;

labelled, and placarded;

- .9 *When solid carbon dioxide (CO₂-dry ice) is used for cooling purposes, the cargo transport unit is externally marked or labelled in a conspicuous place, such as, at the door end, with the words: DANGEROUS CO₂ GAS (DRY ICE) INSIDE. VENTILATE THOROUGHLY BEFORE ENTERING”,*
- .10 *The dangerous goods transport document required in 5.4.1 (of the IMDG Code) has been received for each dangerous goods consignment packed onto or in the cargo transport unit.*

5.4.2.2 The functions of the dangerous goods transport document required in 5.4.1 (of the IMDG Code) and of the container/vehicle packing certificate required in 5.4.2.1 (of the IMDG Code) may be incorporated into a single document; if not, these documents shall be attached one to the other. If these functions are incorporated into a single document, such as, a dangerous goods declaration, a shipping note, etc., the inclusion of a signed declaration phrase such as “It is declared that the packing of the goods into the unit has been carried out in accordance with the provisions of 5.4.2.1” will suffice. The person signing this declaration shall be identified on the document.

NOTE: The container packing certificate or vehicle declaration is not required for tanks.”

- (c) the general actions to be taken, e.g. to warn the road users and passers-by and call the police/fire brigade;

- (d) the additional actions to be taken to deal with minor leakages or spillages to prevent their escalation, if this can be achieved without personal risk;
- (e) the special actions to be taken for certain goods, if applicable;
- (f) the necessary equipment for general and, if applicable, additional and/or special actions.

5.4.3.2 These instructions shall be provided by the consignor and shall be handed out to the driver at the latest when the dangerous goods are loaded on the vehicle. Information on the content of the instructions shall be supplied to the carrier at the latest when the transport order is given, so as to enable him to take the necessary steps to ensure that the employees concerned are aware of these instructions and are capable of carrying them out properly and to ensure that the necessary equipment is on board the vehicle.

5.4.3.3 The consignor shall be responsible for the content of these instructions. They shall be provided in a language the driver(s) taking over the dangerous goods is (are) able to read and to understand, and in all languages of the countries of origin, transit and destination. In the case of countries with more than one official language, the competent authority shall specify the official language or languages applicable throughout the territory or in each region or part of the territory.

5.4.3.4 These instructions shall be kept readily identifiable in the driver's cab.

5.4.3.5 Instructions in writing according to this section which are not applicable to the goods which are on board of the vehicle, shall be kept separate from pertinent documents in such a way as to prevent confusion.

5.4.3.6 The carrier shall ensure that the drivers concerned understand and are capable of carrying out these instructions properly.

5.4.3.7 In case of mixed loads of packaged goods including dangerous goods which belong to different groups of goods presenting the same dangers, the instructions in writing may be restricted to one instruction per Class of dangerous goods carried on board of the vehicle. In such case no name of goods, or UN number has to be mentioned in the instructions.

5.4.3.8 These instructions shall be drafted according to the following format:

LOAD

- Mention of the proper shipping name of the substance or article, or the name of the group of goods presenting the same dangers, the Class and the UN number or for a group of goods the UN numbers of the goods for which these instructions are intended or are applicable.
- Description shall be restricted to e.g. the physical state with indication of any colour and mention of any odour, to aid identification of leakages or spillages.

NATURE OF DANGER

Short enumeration of dangers:

- Main danger;
- Additional dangers including possible delayed effects and dangers for the environment;
- Behaviour under fire or heating (decomposition, explosion, development of toxic fumes, etc.);
- If applicable, it shall be mentioned here that the goods carried react dangerously with water.

PERSONAL PROTECTION

Mention of the personal protection intended for the driver in accordance with the requirements of 8.15.

GENERAL ACTIONS TO BE TAKEN BY DRIVER

Mention of the following instructions:

- Stop the engine
- No naked lights. No smoking
- Mark roads and warn other road users or passers-by
- Inform the public about the hazard and give advice to keep upwind
- Notify police and fire brigade as soon as possible.

ADDITIONAL AND/OR SPECIAL ACTIONS TO BE TAKEN BY THE DRIVER

Appropriate instructions shall be included here as well as the list of equipment necessary for the driver to perform the additional and/or special actions according to the class(es) of the goods being carried (e.g. shovel, collecting container, etc.).

It is considered that drivers of vehicles should be instructed and trained to take additional actions with minor leakages or spillages to prevent their escalation, provided that this can be achieved without personal risk.

It is considered that any special action recommended by the consignor requires a special training of the driver. If applicable, appropriate instructions shall be included here as well as the list of equipment needed for these special actions.

FIRE

Information for the driver in case of fire:

Drivers should be instructed during training to deal with minor vehicle fires. They shall not attempt to deal with any fire involving the load.

FIRST AID

Information for the driver in case of contact with the transported good(s).

ADDITIONAL INFORMATION

* * * * *

5.4.4. Example of a multimodal dangerous goods form

Example of a form which may be used as a combined dangerous goods declaration and container packing certificate for multimodal transport of dangerous goods.

MULTIMODAL DANGEROUS GOODS FORM

BLACK HATCHINGS BLACK HATCHINGS BLACK HATCHINGS BLACK HATCHINGS BLACK HATCHINGS BLACK HATCHINGS BLACK HATCHINGS BLACK HATCHINGS BLACK HATCHINGS BLACK HATCHINGS

1. Shipper / Consignor / Sender		2. Transport document number										
		3. Page 1 of Pages	4. Shipper's reference		5. Freight Forwarder's reference							
6. Consignee		7. Carrier (to be completed by the carrier)										
8. This shipment is within the limitations prescribed for: (Delete non-applicable)		9. Additional handling information										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">PASSENGER AND CARGO AIRCRAFT</td> <td style="width: 50%; text-align: center;">CARGO AIRCRAFT ONLY</td> </tr> </table>		PASSENGER AND CARGO AIRCRAFT	CARGO AIRCRAFT ONLY									
PASSENGER AND CARGO AIRCRAFT	CARGO AIRCRAFT ONLY											
10. Vessel / flight no. and date	11. Port / place of loading											
12. Port / place of discharge	13. Destination											
14. Shipping marks		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">* Number and kind of packages; description of goods</th> <th style="width: 15%;">Gross mass (kg)</th> <th style="width: 15%;">Net mass</th> <th style="width: 30%;">Cube (m3)</th> </tr> </thead> <tbody> <tr> <td style="height: 150px;"> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			* Number and kind of packages; description of goods	Gross mass (kg)	Net mass	Cube (m3)				
* Number and kind of packages; description of goods	Gross mass (kg)	Net mass	Cube (m3)									
15. Container identification No./ vehicle registration No.	16. Seal number (s)	17. Container/vehicle size & type	18. Tare (kg)	19. Total gross mass (including tare) (kg)								
CONTAINER/VEHICLE PACKING CERTIFICATE I hereby declare that the goods described above have been packed/loaded into the container/vehicle identified above in accordance with the applicable provisions. ** MUST BE COMPLETED AND SIGNED FOR ALL CONTAINER/VEHICLE LOADS BY PERSON RESPONSIBLE FOR PACKING/LOADING		21. RECEIVING ORGANISATION RECEIPT Received the above number of packages/containers/trailers in apparent good order and condition unless stated hereon: RECEIVING ORGANISATION REMARKS:										
20. Name of company		Hauler's name	22. Name of company (OF SHIPPER PREPARING THIS NOTE)									
Name / Status of declarant		Vehicle reg. no.	Name/Status of declarant									
Place and date		Signature and date	Place and date									
Signature of declarant		DRIVER'S SIGNATURE	Signature of declarant									

* FOR DANGEROUS GOODS you must specify proper shipping name, hazard class, UN no., packing group (where assigned) and any other element of information required under applicable national and international regulations

** See 5.4.2.

CHAPTER 5.5

SPECIAL REQUIREMENTS

5.5.1 Special requirements for the consignment of infectious substances [in risk groups 3 and 4]

5.5.1.1 Unless an infectious substance cannot be consigned by any other means, live vertebrate or invertebrate animals shall not be used to consign such a substance. Such animals shall be packed, marked, indicated, and carried in accordance with the relevant regulations governing the carriage of animals ¹.

5.5.1.2 The transport of infectious substances requires co-ordinated action by the consignor, the carrier and the consignee to ensure safety and arrival on time and in proper condition. To this end, the following measures shall be taken:

- (a) *Advance arrangements between consignor, carrier and consignee.* Dispatch of infectious substances shall not take place before advance arrangements have been made between consignor, carrier and consignee or before the consignee has confirmed with his competent authorities that the substances can legally be imported and that no delay will be incurred in the delivery of the consignment to its destination;
- (b) *Preparation of dispatch documents.* In order to secure transmission without hindrance it is necessary to prepare all dispatch documents, including the transport document (see Chapter 5.4), in strict accordance with rules governing the acceptance of the goods to be dispatched;
- (c) *Routeing.* Whatever the mode used, transport shall be by the quickest possible routeing. If transshipment is necessary, precautions shall be taken to ensure special care, expeditious handling and monitoring of the substances in transit;
- (d) *Timely notification of all transport data by consignor to consignee.* The consignor shall notify the consignee in advance of transport details, such as: means of transport, flight or train number(s), transport document number and date and hour of expected arrival at the point of destination, so that the consignment can be collected promptly. The most rapid means of communication shall be used for this notification.

¹ Regulations governing the carriage of live animals are contained in, e.g. Directive 91/628/EEC (Official Journal of the European Communities No. L340 of 11 December 1991, p.17) and in the Recommendations of the Council of Europe (Ministerial Committee) on the carriage of certain animal species.

[5.5.1.3 The requirements of 5.5.1.2 are deemed to be met if the arrangements comply with Directive 90/219/EEC ².

NOTE: *These special procedures shall not apply to clinical waste UN No. 3291.]*

5.5.1.4 Dead animals which are known or reasonably believed to contain an infectious substance shall be packed, marked, labelled and carried in accordance with the conditions ³ specified by the competent authority of the country of origin ⁴.

5.5.2 Special requirements for fumigated containers and vehicles

5.5.2.1 Transport documents associated with containers and vehicles that have been fumigated shall show the date of fumigation and the type and amount of the fumigant used. In addition, instructions for disposal of any residual fumigant including fumigation devices (if used) shall be provided.

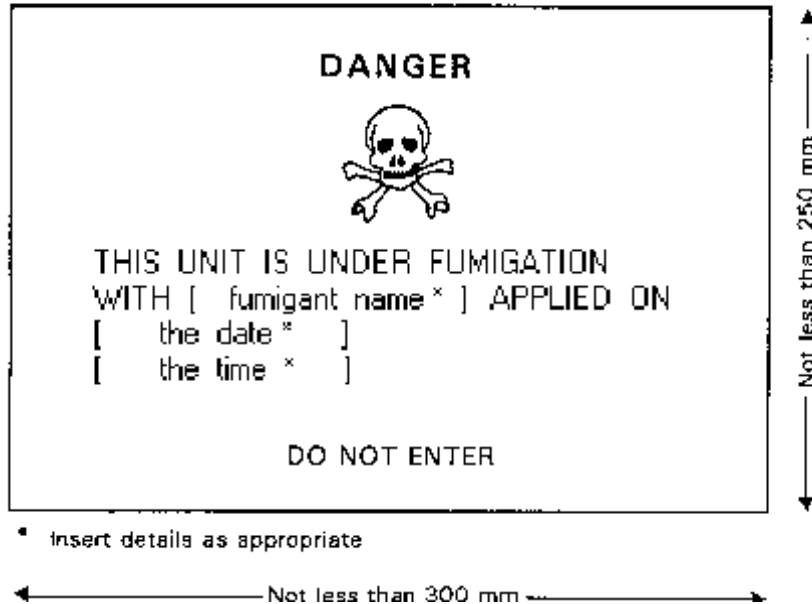
^{2/} Council of the European Communities Directive 90/219/EEC of 23 April 1990 on contained use of genetically modified micro-organisms (official Journal of the European communities, No. L117 of 8 May 1990, p.1 - 14).

^{3/} Such regulations are contained e.g. in the Council of the European Communities Directive 90/667/EEC of 27 November 1990, laying down the veterinary rules for the disposal and processing of animal waste, for its placing on the market and for the prevention of pathogens in feedstuffs of animal or fish origin and amending Directive 90/425/EEC (Official Journal of the European Communities, No. L363 of 27 December 1990 p. 0051-0060)

^{4/} If the country of origin is not contracting party to ADR, the competent authority of the first ADR country reached by the consignment.

5.5.2.2 A warning sign as specified in the figure below shall be placed on each fumigated container or vehicle in a location where it will be easily seen by persons attempting to enter the interior of container or vehicle.

Fumigation warning sign



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