WP.15/AC.2/16/INF.4

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods
Joint Meeting of Experts on the Regulations annexed to the
European Agreement concerning the International Carriage
of Dangerous Goods by Inland Waterways (ADN)
(ADN Safety Committee)

Sixteenth session
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Item 4 (a) of the provisional agenda

PROPOSALS FOR AMENDMENTS TO THE REGULATIONS ANNEXED TO ADN

Work of the RID/ADR/ADN Joint Meeting

Note by the secretariat

Reproduced below are proposed amendments to the Regulations to the ADN adopted by the RID/ADR/ADN Joint Meeting (ECE/TRANS/WP.15/AC.1/114/Add.1, ECE/TRANS/WP.15/AC.1/116/Add.1, ECE/TRANS/WP.15/AC.1/2009/116 and ECE/TRANS/WP.15/AC.2/2009/16/Add.1).

The Working Party on the Transport of Dangerous Goods (WP.15) adopted some modifications to those proposed amendments which have also been taken into consideration (ECE/TRANS/WP.15/203, annex I).

PART 1

Chapter 1.1

1.1.3.2 Amend (f) to read

"(f) Gases contained in foodstuffs (except UN 1950), including carbonated beverages;".

Add the following new sub-paragraphs:

"(g) Gases contained in balls intended for use in sports; and

(h) Gases contained in light bulbs provided they are packaged so that the projectile effects of any rupture of the bulb will be contained within the package.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

Chapter 1.2

1.2.1 Under "*Approval*", in the definition of "*Multilateral approval*", delete the last sentence ("The term "through or into" specifically excludes…").

In the definitions of "*Battery-vehicle*" and "*Multiple-element gas container*" replace "gases of Class 2" by "gases as defined in 2.2.2.1.1".

In the definitions of "*Battery-wagon*", "*Multiple-element gas container*", replace "gases of Class 2" by "gases as defined in 2.2.2.1.1".

In the definition of "*GHS*", replace "second" with "third" and "ST/SG/AC.10/30/Rev.2" with "ST/SG/AC.10/30/Rev.3".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

Amend the definition of "loader" to read as follows:

"*"Loader"* means any enterprise which:

(a) Loads packaged dangerous goods, small containers or portable tanks into or onto a wagon/vehicle or a container; or

(b) Loads a container, bulk-container, tank-container or portable tank onto a wagon/vehicle.".

(*Reference document: informal document INF.40*)

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

In the definition of "*Manual of Tests and Criteria*", replace "fourth" with "fifth" and amend the text in the parenthesis to read "(ST/SG/AC.10/11/Rev.5)".

In the definition of "*Pressure receptacle*", insert ", metal hydride storage systems" before "and bundles".

In the definitions of "*Tank-container*" and "*Portable tank*", replace "Class 2 substances" by "gases as defined in 2.2.2.1.1".

In the definition of "*UN Model Regulations*", replace "fifteenth" with "sixteenth" and "(ST/SG/AC.10/1/Rev.15)" with "(ST/SG/AC.10/1/Rev.16)".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

In the definition of "wagon", add at the end "(see also battery-wagon, closed wagon, open wagon, sheeted wagon and tank wagon)".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

Add the following new definitions in alphabetical order:

"*Cargo transport unit* means a wagon/vehicle, a container, a tank-container, portable tank or a MEGC;

NOTE: *This definition applies only for the application of Special Provision 302 of Chapter 3.3 and of Chapter 5.5.*".

"*Conveyance* means, for carriage by road or by rail, a vehicle or a wagon;"

"*Fuel cell* means an electrochemical device that converts the chemical energy of a fuel to electrical energy, heat and reaction products;"

"*Fuel cell engine* means a device used to power equipment and which consists of a fuel cell and its fuel supply, whether integrated with or separate from the fuel cell, and includes all appurtenances necessary to fulfil its function;"

"*Metal hydride storage system* means a single complete hydrogen storage system, including a receptacle, metal hydride, pressure relief device, shut-off valve, service equipment and internal components used for the carriage of hydrogen only;"

"*Open cryogenic receptacle* means a transportable thermally insulated receptacle for refrigerated liquefied gases maintained at atmospheric pressure by continuous venting of the refrigerated liquefied gas;"

Consequential amendment: At the end of the definition of "Cryogenic receptacle", add "(see also *"Open cryogenic receptacle"*)""

"*Remanufactured large packaging* means a metal or rigid plastics large packaging that:

(a) Is produced as a UN type from a non-UN type; or

(b) Is converted from one UN design type to another UN design type.

Remanufactured large packagings are subject to the same requirements of ADN that apply to new large packagings of the same type (see also design type definition in 6.6.5.1.2 of ADR);"

"*Reused large packaging* means a large packaging to be refilled which has 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;".

"*Through or into*, for the carriage of Class 7 material, means through or into the countries in which a consignment is carried but specifically excludes countries "over" which a consignment is carried by air provided that there are no scheduled stops in those countries;".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

Add the following new definition:

"*"Unloader"* means any enterprise which:

(a) Removes a container, bulk-container, MEGC, tank-container or portable tank from a vessel/wagon/vehicle; or

(b) Unloads packaged dangerous goods, small containers or portable tanks out of or from a vessel/wagon/vehicle or a container; or

(c) Discharges dangerous goods from a tank (tank vessel/tank wagon/tank-vehicle, demountable tank, portable tank or tank-container) or from a battery-wagon/battery-vehicle, MEMU or MEGC or from a vessel/wagon/vehicle, large container or small container for carriage in bulk or a bulk-container.".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1 as adapted)

Chapter 1.3

1.3.1 In the first sentence, replace "shall receive training" with "shall be trained".
Add a new second sentence to read as follows: "Employees shall be trained in accordance with 1.3.2 before assuming responsibilities and shall only perform functions, for which required training has not yet been provided, under the direct supervision of a trained person.".

1.3.2.2.1 In the first sentence, replace "Personnel shall receive detailed training" with "Personnel shall be trained". In the second sentence, replace "the personnel shall be made aware" with "the personnel shall be aware"

1.3.2.3 Replace "personnel shall receive training covering" with "shall be trained in".

Insert a new 1.3.2.4 to read as follows:

"1.3.2.4 The training shall be periodically supplemented with refresher training to take account of changes in regulations.".

1.3.3 Amend the text after the heading to read as follows:

"Records of training received according to this Chapter shall be kept by the employer and made available to the employee or competent authority, upon request. Records shall be kept by the employer for a period of time established by the competent authority. Records of training shall be verified upon commencing a new employment.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

Chapter 1.4

1.4.2 After the heading, insert the following new Note:

"***NOTE 1:*** *Several participants to which safety obligations are assigned in this section may be one and the same enterprise. Also, the activities and the corresponding safety obligations of a participant can be assumed by several enterprises.*".

Renumber existing Note as Note 2.

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

Amend 1.4.2.2.1 (b) to read as follows:

"(b) Ascertain that all information prescribed in ADN related to the dangerous goods to be carried has been provided by the consignor before carriage, that the prescribed documentation is on board the vessel or if electronic data processing (EDP) or if electronic data interchange (EDI) techniques are used instead of paper documentation, that data are available during transport in a manner at least equivalent to that of paper documentation;".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

Add a new 1.4.3.6 to read as follows:

"1.4.3.6 *(Reserved)*".

Add a new sub-section 1.4.3.7 to read as follows:

"**1.4.3.7** ***Unloader***

NOTE: *In this sub-section, unloading covers removal, unloading and discharging as indicated in the definition of unloader in 1.2.1.*

1.4.3.7.1 In the context of 1.4.1, the unloader shall in particular:

(a) Ascertain that the correct goods are unloaded by comparing the relevant information on the transport document with the information on the package, container, tank, MEMU, MEGC or vessel/wagon/vehicle;

(b) Before and during unloading, check whether the packagings, the tank, the vessel/wagon/vehicle or container have been damaged to an extent which would endanger the unloading operation. If this is the case, ascertain that unloading is not carried out until appropriate measures have been taken;

(c) Comply with all relevant requirements concerning unloading;

(d) Immediately following the unloading of the tank, vessel/wagon/vehicle or container:

(i) Remove any dangerous residues which have adhered to the outside of the tank, vessel/wagon/vehicle or container during the process of unloading; and

(ii) Ensure the closure of valves and inspection openings;

(e) Ensure that the prescribed cleaning and decontamination of the vessels/wagons/vehicles or containers is carried out; and

(f) Ensure that the containers once completely unloaded, cleaned and decontaminated, no longer display danger markings conforming to Chapter 5.3.

1.4.3.7.2 If the unloader makes use of the services of other participants (cleaner, decontamination facility, etc.) he shall take appropriate measures to ensure that the requirements of ADN have been complied with.".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1 as amended by ECE/TRANS/WP.15/203 and adapted)

Chapter 1.6

1.6.1.14 Amend to read as follows: "IBCs manufactured before 1 January 2011 and conforming to a design type which has not passed the vibration test of 6.5.6.13 of ADR or which was not required to meet the criteria of 6.5.6.9.5 (d) of ADR at the time it was subjected to the drop test, may still be used.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

Insert a new 1.6.1.19 to read as follows:

"1.6.1.19 Provisions concerning the classification of environmentally hazardous substances applicable until 31 December 2010 may be applied until 31 December 2012.".

Insert a new 1.6.1.20 to read as follows:

"1.6.1.20 Notwithstanding the requirements of Chapter 3.4 applicable as from 1 January 2011, dangerous goods packed in limited quantities, other than those which are assigned figure "0" in column (7a) of table A of Chapter 3.2, may continue to be carried until 30 June 2015 in accordance with the requirements of Chapter 3.4 in force up to 31 December 2010.".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

Chapter 1.7

1.7.1.1 In the second sentence, replace "2005" with "2009" (twice).
Replace the last sentence with the two following sentences: "Explanatory material can be found in “Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (2005 Edition)”, Safety Standard Series No. TS-G-1.1 (Rev.1), IAEA, Vienna (2008). ".

1.7.1.2 Amend the first sentence to read as follows: "The objective of ADN is to establish requirements that shall be satisfied to ensure safety and to protect persons, property and the environment from the effects of radiation in the carriage of radioactive material.".

1.7.1.3 In the third sentence, replace "that is characterized" by "that are characterized".

1.7.1.5 Renumber the text after the heading as 1.7.1.5.1 and amend the beginning and sub-paragraph (a) to read as follows:

"1.7.1.5.1 Excepted packages which may contain radioactive material in limited quantities, instruments, manufactured articles and empty packagings as specified in 2.2.7.2.4.1 shall be subject only to the following provisions of Parts 5 to 7 of ADR:

(a) The applicable provisions specified in 5.1.2, 5.1.3.2, 5.1.4, 5.1.5.4, 5.2.1.9 and 7.5.11 CV (5.2) of ADR;".

The last sentence becomes new paragraph 1.7.1.5.2.

1.7.2.3 At the end of the second sentence, add "and 7.5.11 CV (1) (1.1) of ADR".

1.7.2.5 Replace "shall receive appropriate training concerning" with "shall be appropriately trained in ".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

Chapter 1.10

Add new 1.10.2.3 and 1.10.2.4 to read as follows:

"1.10.2.3 Such training shall be provided or verified upon employment in a position involving dangerous goods transport and shall be periodically supplemented with refresher training.

1.10.2.4 Records of all security training received shall be kept by the employer and made available to the employee or competent authority, upon request. Records shall be kept by the employer for a period of time established by the competent authority.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

1.10.6 Amend to read as follows:

"1.10.6 For radioactive material, the provisions of this Chapter are deemed to be complied with when the provisions of the Convention on Physical Protection of Nuclear Material[1] and the IAEA circular on "The Physical Protection of Nuclear Material and Nuclear Facilities"[2] are applied.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

PART 2

Chapter 2.1

Insert a new 2.1.2.3 to read as follows and renumber 2.1.2.3 to 2.1.2.6 accordingly:

"2.1.2.3 A substance may contain technical impurities (for example those deriving from the production process) or additives for stability or other purposes that do not affect their classification. However, a substance mentioned by name, i.e. listed as a single entry in Table A of Chapter 3.2, containing technical impurities or additives for stability or other purposes affecting its classification shall be considered a solution or mixture (see 2.1.3.3).".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

2.1.3.3 Amend to read as follows:

"2.1.3.3 A solution or mixture composed of a single predominant substance mentioned by name in Table A of Chapter 3.2 and one or more substances not subject to ADN and/or traces of one or more substances mentioned by name in Table A of Chapter 3.2, shall be assigned the UN number and proper shipping name of the predominant substance mentioned by name in Table A of Chapter 3.2 unless:

(a) The solution or mixture is mentioned by name in Table A of Chapter 3.2;

(b) The name and description of the substance mentioned by name in Table A of Chapter 3.2 specifically indicate that they apply only to the pure substance;

(c) The class, classification code, packing group, or physical state of the solution or mixture is different from that of the substance mentioned by name in Table A of Chapter 3.2; or

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[1] *IAEACIRC/274/Rev.1, IAEA, Vienna (1980).*

[2] *IAEACIRC/225/Rev.4 (Corrected), IAEA, Vienna (1999). See also "Guidance and Considerations for the Implementation of INFCIRC/225/Rev.4, the Physical Protection of Nuclear Material and Nuclear Facilities, IAEA-TECDOC-967/Rev.1.*

(d) The hazard characteristics and properties of the solution or mixture necessitate emergency response measures that are different from those required for the substance mentioned by name in Table A of Chapter 3.2.

In those other cases, except the one described in (a), the solution or mixture shall be classified as a substance not mentioned by name in the relevant class under a collective entry listed in sub-section 2.2.x.3 of that class taking account of the subsidiary risks presented by that solution or mixture, if any, unless the solution or mixture does not meet the criteria of any class, in which case it is not subject to ADN.".

2.1.3.4.1 Move the entry "UN 2481 ETHYL ISOCYANATE" from the first indent (Class 3) to the second indent (Class 6.1).

2.1.3.5 Replace "2.1.2.4" with "2.1.2.5".

2.1.3.5.3 (a) In the text in parenthesis, add: ", for which special provision 290 of Chapter 3.3 applies," after "excepted packages".

2.1.3.6 Replace "2.1.2.4" with "2.1.2.5".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1, as amended)

Chapter 2.2

2.2.1.1.1 Add a new paragraph at the end to read as follows:

"For the purposes of Class 1, the following definition applies:
Phlegmatized means that a substance (or "phlegmatizer") has been added to an explosive to enhance its safety in handling and carriage. The phlegmatizer renders the explosive insensitive, or less sensitive, to the following actions: heat, shock, impact, percussion or friction. Typical phlegmatizing agents include, but are not limited to: wax, paper, water, polymers (such as chlorofluoropolymers), alcohol and oils (such as petroleum jelly and paraffin).".

2.2.1.1.6 In the last sentence of Note 2, insert "articles and" before "packages".

2.2.1.1.7.5 In Note 1, replace "all pyrotechnic composition" with "all pyrotechnic substances".

Amend Note 2 to read as follows:

*"**NOTE 2:** "Flash composition" in this table refers to pyrotechnic substances in powder form or as pyrotechnic units as presented in the fireworks, that are used to produce an aural effect, or used as a bursting charge or lifting charge,*

unless the time taken for the pressure rise is demonstrated to be more than 8 ms for 0.5 g of pyrotechnic substance in the HSL Flash Composition Test in Appendix 7 of the Manual of Tests and Criteria.".

In the default fireworks classification table, replace "pyrotechnic composition" with "pyrotechnic substance" whenever it appears.

2.2.1.1.8 For "POWDER, SMOKELESS" add ", 0509" after "UN Nos. 0160, 0161".

2.2.2.1.1 Delete Note 4.

2.2.2.1.5 Under "Oxidizing gases", amend the second sentence ("Oxidizing ability… 10156-2:2005)") to read as follows:

"*These are pure gases or gas mixtures with an oxidizing power greater than 23.5% as determined by a method specified in ISO 10156:1996 or 10156-2:2005.*".

2.2.3.2.1 Replace "2.3.3.2" with "2.3.3.3" at the end.

2.2.3.3 Under classification code F1, amend the name and description for UN No. 1999 to read "TARS, LIQUID, including road oils, and cutback bitumens".

2.2.42.1.3 Amend to read as follows:

"2.2.42.1.3 Self-heating of a substance is a process where the gradual reaction of that substance with oxygen (in air) generates heat. If the rate of heat production exceeds the rate of heat loss, then the temperature of the substance will rise which, after an induction time, may lead to self-ignition and combustion.".

2.2.43.3 Under classification code "W1" for the two entries for UN No. 1391, delete "having a flash-point above 60 °C".

Under classification code "WF1", replace the two entries for UN No. 1391 with the two following new entries:

"3482 ALKALI METAL DISPERSION, FLAMMABLE or
3482 ALKALINE EARTH METAL DISPERSION, FLAMMABLE".

2.2.52.4 In the table, amend the entries listed below as follows:

Organic peroxide		**Column**	**Amendment**
tert-AMYLPEROXY-3,5,5-TRIMETHYLHEXANOATE		Subsidiary risks and remarks	Delete "3)"
DI-(2-tert-BUTYLPEROXYISOPROPYL)BENZENE(S)		Organic peroxide	Amend to read "DI-(tert-BUTYLPEROXYISOPROPYL) BENZENE(S)"
2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)HEXANE *(Concentration > 52 – 100)*	(1st row)	Delete	

Insert the following new entries:

Organic peroxide	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**
2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)HEXANE	> 90 – 100					OP5			3103	
2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)HEXANE	> 52 – 90	≥ 10				OP7			3105	

2.2.61.1.1 Add a new note at the end to read as follows:

"***NOTE:*** *Genetically modified microorganisms and organisms shall be assigned to this class if they meet the conditions for this class.*".

2.2.61.3 Under classification code "TFC", add at the end (the text between brackets is deleted):

"3488 TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}

3489 TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}

3492 TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}

3493 TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}".

After classification code "TFC", add a new branch to read as follows:

flammable, water-reactive TFW	3490 TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50} 3491 TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}

2.2.62.1.3 Delete the definition of "Genetically modified micro-organisms and organisms".

2.2.7.1.3 In the definition of *Fissile material*, amend the text before sub-paragraphs (a) and (b) to read:

"*Fissile nuclides* means uranium-233, uranium-235, plutonium-239 and plutonium-241. *Fissile material* means a material containing any of the fissile nuclides. Excluded from the definition of fissile material are:".

2.2.7.2.2.1 In the table, under "Kr-79", in the third column, replace "1 x 10^0" with "2 x 10^0".

2.2.7.2.3.1.2 (a) (ii) Replace "providing they" by "that".

2.2.7.2.3.1.2 (a) (iii) and (iv) Replace "excluding material classified as fissile according to 2.2.7.2.3.5" with "excluding fissile material not excepted under 2.2.7.2.3.5".

2.2.7.2.3.1.2 (c) At the beginning, insert "meeting the requirements of 2.2.7.2.3.1.3," after "excluding powders,".

2.2.7.2.3.4.1 In the second sentence, insert ", taking into account the provisions of 6.4.8.14 of ADR," after "package".

2.2.7.2.3.5 Amend the introductory sentence before sub-paragraph (a) to read as follows:

"Packages containing fissile material shall be classified under the relevant entry of Table 2.2.7.2.1.1, the description of which includes the words "FISSILE" or "fissile-excepted". Classification as "fissile-excepted" is allowed only if one of the conditions (a) to (d) of this paragraph is met. Only one type of exception is allowed per consignment (see also 6.4.7.2 of ADR).".

2.2.7.2.3.5 (a) Amend to read as follows:

"(a) A mass limit per consignment, provided that the smallest external dimension of each package is not less than 10 cm, such that:

$$\frac{\text{mass of uranium} - 235\,(\text{g})}{\text{X}} + \frac{\text{mass of other fissile material}\,(\text{g})}{\text{Y}} < 1$$

where X and Y are the mass limits defined in Table 2.2.7.2.3.5, provided that either:

(i) each individual package contains not more than 15 g of fissile nuclides; for unpackaged material, this quantity limitation shall apply to the consignment being carried in or on the conveyance; or

(ii) the fissile material is a homogeneous hydrogenous solution or mixture where the ratio of fissile nuclides to hydrogen is less than 5% by mass; or

(iii) there are not more than 5 g of fissile nuclides in any 10 litre volume of material.

Beryllium shall not be present in quantities exceeding 1% of the applicable consignment mass limits provided in Table 2.2.7.2.3.5 except where the concentration of beryllium in the material does not exceed 1 gram beryllium in any 1 000 grams.

Deuterium shall also not be present in quantities exceeding 1% of the applicable consignment mass limits provided in Table 2.2.7.2.3.5 except where deuterium occurs up to natural concentration in hydrogen.".

2.2.7.2.3.5 (b) Replace "fissile material is" by "fissile nuclides are".

2.2.7.2.3.5 (d) Amend to read as follows:

"(d) Plutonium containing not more than 20% of fissile nuclides by mass up to a maximum of 1 kg of plutonium per consignment. Shipments under this exception shall be under exclusive use.".

2.2.7.2.4.1.1 (b) At the end, add "as specified in Table 2.2.7.2.4.1.2".

2.2.7.2.4.1.1 (d) At the end, add "as specified in Table 2.2.7.2.4.1.2".

2.2.7.2.4.1.3 In the first sentence before sub-paragraph (a), replace "provided that" with "only if".

2.2.7.2.4.1.4 At the beginning, replace "Radioactive material with an activity not exceeding the limit" with "Radioactive material in forms other than as specified in 2.2.7.2.4.1.3 and with an activity not exceeding the limits".

2.2.7.2.4.1.5 In the first sentence, delete "with an activity not exceeding the limit specified in column 4 of Table 2.2.7.2.4.1.2" and replace "provided that" with "only if".

2.2.7.2.4.1.6 The first amendment only applies to the French version. At the end, replace "provided that" with "only if".

2.2.7.2.4.2 Replace "if the conditions of 2.2.7.2.3.1 and 4.1.9.2 are met" with "if the definition of LSA in 2.2.7.1.3 and the conditions of 2.2.7.2.3.1, 4.1.9.2 and 7.5.11 CV/CW33 (2) are met".

2.2.7.2.4.3 Replace "if the conditions of 2.2.7.2.3.2 and 4.1.9.2 are met" with "if the definition of SCO in 2.2.7.1.3 and the conditions of 2.2.7.2.3.2, 4.1.9.2 and 7.5.11 CV/CW33 (2) are met".

2.2.8.1.6 At the end, replace "OECD Guideline 404[8]" with "OECD Test Guideline 404[1] or 435[2]. A substance which is determined not to be corrosive in accordance with OECD Test Guideline 430[3] or 431[4] may be considered not to be corrosive to skin for the purposes of ADN without further testing.".

(Renumber footnotes as appropriate)
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

Chapter 2.3

2.3.3.1 Amend to read as follows:

"**2.3.3.1** ***Determination of flash-point***

2.3.3.1.1 The following methods for determining the flash-point of flammable liquids may be used:

International standards:

ISO 1516 (Determination of flash/no flash – Closed cup equilibrium method)
ISO 1523 (Determination of flash point – Closed cup equilibrium method)
ISO 2719 (Determination of flash point – Pensky-Martens closed cup method)

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[1] *OECD Guideline for the testing of chemicals No. 404 "Acute Dermal Irritation/Corrosion" 2002.*

[2] *OECD Guideline for the testing of chemicals No. 435 "In Vitro Membrane Barrier Test Method for Skin Corrosion" 2006.*

[3] *OECD Guideline for the testing of chemicals No. 430 "In Vitro Skin Corrosion: Transcutaneous Electrical Resistance Test (TER)" 2004.*

[4] *OECD Guideline for the testing of chemicals No. 431 "In Vitro Skin Corrosion: Human Skin Model Test" 2004.*

ISO 13736 (Determination of flash point – Abel closed-cup method)
ISO 3679 (Determination of flash point – Rapid equilibrium closed cup method)
ISO 3680 (Determination of flash/no flash – Rapid equilibrium closed cup method)

National standards:

American Society for Testing Materials International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, Pennsylvania, USA 19428-2959:

ASTM D3828-07a, Standard Test Methods for Flash Point by Small Scale Closed-Cup Tester
ASTM D56-05, Standard Test Method for Flash Point by Tag Closed-Cup Tester
ASTM D3278-96(2004)e1, Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus
ASTM D93-08, Standard Test Methods for Flash Point by Pensky-Martens Closed-Cup Tester

Association française de normalisation, AFNOR, 11, rue de Pressensé, F-93571 La Plaine Saint-Denis Cedex:

French Standard NF M 07 - 019
French Standards NF M 07 - 011 / NF T 30 - 050 / NF T 66 - 009
French Standard NF M 07 - 036

Deutsches Institut für Normung, Burggrafenstr. 6, D-10787 Berlin:

Standard DIN 51755 (flash-points below 65 °C)

State Committee of the Council of Ministers for Standardization, RUS-113813, GSP, Moscow, M-49 Leninsky Prospect, 9:

GOST 12.1.044-84

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

2.3.3.1.2 *Existing text of 2.3.3.1.2 with the following modification:* amend sub-paragraph (d) to read as follows:
"(d) International Standards EN ISO 13736 and EN ISO 2719, Method B.".

2.3.3.1.3 *Existing text of 2.3.3.1.6 with the following modifications:* amend the first sentence to read "The standards listed in 2.3.3.1.1 shall only be used for flash-point ranges which are specified therein.". In the second sentence, replace "the method" with "the standard".

2.3.3.1.4 *Existing text of 2.3.3.1.7 with the following modification:* delete "in accordance with 2.3.3.1.5" and "in accordance with 2.3.3.1.4".

2.3.3.1.5 *Existing text of 2.3.3.1.8.*
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

2.3.3.2 Insert a new sub-section 2.3.3.2 to read as follows and renumber 2.3.3.2 accordingly:

"**2.3.3.2** ***Determination of initial boiling point***

The following methods for determining the initial boiling point of flammable liquids may be used:

International standards:

ISO 3924 (Petroleum products – Determination of boiling range distribution – Gas chromatography method)
ISO 4626 (Volatile organic liquids – Determination of boiling range of organic solvents used as raw materials)
ISO 3405 (Petroleum products – Determination of distillation characteristics at atmospheric pressure)

National standards:

American Society for Testing Materials International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, Pennsylvania, USA 19428-2959:

ASTM D86-07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure
ASTM D1078-05, Standard Test Method for Distillation Range of Volatile Organic Liquids

Further acceptable methods:

Method A.2 as described in Part A of the Annex to Commission Regulation (EC) No 440/2008[1].".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1 and ECE/TRANS/WP.15/203)

PART 3

Chapter 3.1

3.1.2.8.1 In the first sentence, insert "or 318" after "special provision 274".

[1] *Commission Regulation (EC) No 440/2008 of 30 May 2008 laying down test methods pursuant to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Official Journal of the European Union, No. L 142 of 31.05.2008, p.1-739 and No. L 143 of 03.06.2008, p.55)* .

3.1.2.8.1.1 In the first sentence, replace ", if relevant a biological name," with "or biological name,".

Delete 3.1.2.9 and add a new 3.1.3 to read as follows:

"**3.1.3 Solutions or mixtures**

NOTE: *Where a substance is specifically mentioned by name in Table A of Chapter 3.2, it shall be identified in carriage by the proper shipping name in Column (2) of Table A of Chapter 3.2. Such substances may contain technical impurities (for example those deriving from the production process) or additives for stability or other purposes that do not affect its classification. However, a substance mentioned by name containing technical impurities or additives for stability or other purposes affecting its classification shall be considered a solution or mixture (see 2.1.3.3).*

3.1.3.1 A solution or mixture is not subject to ADN if the characteristics, properties, form or physical state of the solution or mixture are such that it does not meet the criteria, including human experience criteria, for inclusion in any class.

3.1.3.2 A solution or mixture composed of a single predominant substance mentioned by name in Table A of Chapter 3.2 and one or more substances not subject to ADN and/or traces of one or more substances mentioned by name in Table A of Chapter 3.2, shall be assigned the UN number and proper shipping name of the predominant substance mentioned by name in Table A of Chapter 3.2 unless:

(a) The solution or mixture is mentioned by name in Table A of Chapter 3.2;

(b) The name and description of the substance mentioned by name in Table A of Chapter 3.2 specifically indicate that they apply only to the pure substance;

(c) The class, classification code, packing group, or physical state of the solution or mixture is different from that of the substance mentioned by name in Table A of Chapter 3.2; or

(d) The hazard characteristics and properties of the solution or mixture necessitate emergency response measures that are different from those required for the substance mentioned by name in Table A of Chapter 3.2.

Qualifying words such as "SOLUTION" or "MIXTURE", as appropriate, shall be added as part of the proper shipping name, for example, "ACETONE SOLUTION". In addition, the concentration of the mixture or solution may also be indicated after the basic description of the mixture or solution, for example, "ACETONE 75% SOLUTION".

3.1.3.3 A solution or mixture that is not mentioned by name in Table A of Chapter 3.2 and that is composed of two or more dangerous goods shall be assigned to an entry that has the proper shipping name, description, class, classification code and

packing group that most precisely describe the solution or mixture.".
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

Chapter 3.2

3.2.1 Amend the explanatory notes for column (7a) to read as follows:

"Column (7a) "Limited Quantities"
Provides the maximum quantity per inner packaging or article for carrying dangerous goods as limited quantities in accordance with Chapter 3.4.".
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

Table A

In column (7a), add the maximum quantity per inner packaging or article for carrying dangerous goods as limited quantities, as given in Chapter 3.2 of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, sixteenth revised edition (document ST/SG/AC.10/1/Rev.16).
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

In column (7a), delete alphanumeric codes LQ wherever they appear.
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

UN 1748 Delete "589" in column (6) (twice).

UN 2447 In the French text, amend the designation in column (2) to read as follows: "PHOSPHORE BLANC FONDU".
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

For UN Nos. 1851, 3248 and 3249, all packing groups, delete "274" in column (6).
(Reference document: ECE/TRANS/WP.15/AC.1/114/Add.1)

For UN Nos. 0323, 0366, 0441, 0445, 0455, 0456, 0460 and 0500, add "347" in column (6).

For UN Nos. 1002 and 1956, delete "292" in column (6).

For UN Nos. 1092, 1098, 1135, 1143, 1163, 1182, 1185, 1238, 1239, 1244, 1251, 1510, 1541, 1580, 1595, 1605, 1647, 1670, 1695, 1752, 1809, 1810, 1834, 1838, 1892, 1994, 2232, 2334, 2337, 2382, 2407, 2474, 2477, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2521, 2605, 2606, 2644, 2646, 2668, 3023, 3079 and 3246 add "354" in column (6).

For UN Nos. 1092, 1098, 1135, 1143, 1163, 1182, 1185, 1238, 1239, 1244, 1251, 1541, 1580, 1595, 1605, 1647, 1670, 1695, 1752, 1809, 1810, 1838, 1892, 1994, 2232, 2334, 2337, 2382, 2407, 2474, 2477, 2480, 2482, 2484, 2485, 2486, 2487, 2488, 2521, 2606, 2644, 2646, 2668, 3023, 3246 and 3381 to 3390 amend the code in column (7b) to read "E0".

For UN Nos. 1450 and 3213 (PG II and III), replace "604" with "350" in column (6).

For UN Nos. 1461 and 3210 (PG II and III), replace "605" with "351" in column (6).

For UN Nos. 1482 (PG II and III) and 3214, replace "608" with "353" in column (6).

For UN Nos. 1748 (PG II), 2208 and 2880 (PG II and III), delete "313" in column (6).

For UN Nos. 1950 (twelve times) and 2037 (nine times), add "344" in column (6).

For UN Nos. 2605 and 3079, replace "3" with "6.1" in column (3a) and replace "3 + 6.1" with "6.1 + 3" in column (5). In column (2) amend the code to read "TF1".

For UN Nos. 2910, 2916, 2917, 2919 and 3323, add "325" in column (6).

For UN Nos. 3328, 3329, 3330 and 3331, add "326" in column (6).

For UN Nos. 3480 and 3481, add "348" in column (6).

UN 1040 Add "342" in column (6) (twice).

UN 1072 Add "355" in column (6).

UN 1266 (PG II and III) Add "163" in column (6) (six times).

UN 1267 (PG I, II and III) Add "357" in column (6) (four times).

UN 1391 Delete the second entry. In the first entry, delete "having a flash-point above 60 °C" in column (2).

UN 1462 Replace "606" with "352" in column (6).

UN 1510 Replace "5.1" with "6.1" in column (3a) and replace "5.1+6.1" with "6.1+5.1" in column (5).
In column (3b), replace "OT1" with "TO1".

UN 1649 Delete the second entry. In the first entry, delete "having a flash-point above 60 °C" in column (2).

UN 1810 Replace "8" with "6.1" in column (3a) and replace "8" with "6.1+8" in column (5).
Replace "II" with "I" in column (4).
In column (2) amend the code to read "TC3".
In column (7a), amend the code to read "0".

UN 1834 Replace "8" with "6.1+8" in column (5).
In column (2) amend the code to read "TC3".
In column (3a), replace "8" with "6.1".

UN 1838 Replace "8" with "6.1" in column (3a) and replace "8" with "6.1+8" in column (5).
Replace "II" with "I" in column (4).
In column (2) amend the code to read "TC3".

In column (7a), amend the code to read "0".

UN 1977 Add "345 346" in column (6).

UN 1999 (PG II and III) In column (2), amend the name and description to read "TARS, LIQUID, including road oils, and cutback bitumens" (six times). The texts in parenthesis remain unchanged. Amend the alphabetical index accordingly.

UN 2030 Delete the second entry. In the first entry, delete ", having a flash-point above 60 °C" in column (2).

UN 2474 Replace "II" with "I" in column (4).
Amend the code in column (7a) to read "0".

UN 2481 Replace "3" with "6.1" in column (3a) and replace "3 + 6.1" with "6.1 + 3" in column (5).
In column (2) amend the code to read "TF1".

UN 2483 Replace "3" with "6.1" in column (3a) and replace "3 + 6.1" with "6.1 + 3" in column (5).
In column (2) amend the code to read "TF1".

UN 2486 Replace "3" with "6.1" in column (3a) and replace "3 + 6.1" with "6.1 + 3" in column (5).
In column (2) amend the code to read "TF1".
Replace "II" with "I" in column (4).

UN 2668 Replace "II" with "I" in column (4).
Amend the code in column (7a) to read "0".

UN 3166 In column (2), insert "or engine, fuel cell, flammable gas powered or engine, fuel cell, flammable liquid powered or vehicle, fuel cell, flammable gas powered or vehicle, fuel cell, flammable liquid powered" at the end. Amend the alphabetical index accordingly.

UN 3212 In column (6), replace "559" with "349".

UN 3359 In column (2), amend the proper shipping name to read "FUMIGATED CARGO TRANSPORT UNIT". Amend the alphabetical index accordingly.
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

Consequential amendment: in 2.2.9.3, for code M11, amend the official transport designation for UN No. 3359 to read "FUMIGATED CARGO TRANSPORT UNIT".
(Reference document: ECE/TRANS/WP.15/203)

UN 34684 Add "356" in column (6).

UN 3474 In column (2), amend the name and description to read "1-HYDROXYBENZOTRIAZOLE MONOHYDRATE". Amend the alphabetical index accordingly.
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

Add the following new entries and amend the alphabetical index accordingly:

(1)	(2)	(3)	(3b)	(5)	(4)	(6)	(7a)	(7b)	(8)	(9)	(10)		(11)		(12)	(13)
0509	POWDER, SMOKELESS	1	1.4C		1.4		0	E0		PP		LO01	HA01, HA03, HA04, HA05, HA06		1	
1471	LITHIUM HYPOCHLORITE, DRY or LITHIUM HYPOCHLORITE MIXTURE	5.1	O2	III	5.1		5 kg	E1		PP					0	
3482	ALKALI METAL DISPERSION, FLAMMABLE or ALKALINE EARTH METAL DISPERSION, FLAMMABLE	4.3	WF1	I	4.3 +3	182 183 506	0	E0		PP, EX, A	VE01		HA08		1	
3483	MOTOR FUEL ANTI-KNOCK MIXTURE, FLAMMABLE	6.1	TF1	I	6.1 +3		0	E5		PP, EP, EX, TOX, A	VE01, VE02				2	
3484	HYDRAZINE AQUEOUS SOLUTION, FLAMMABLE with more than 37% hydrazine, by mass	8	CFT	I	8 +3 +6.1	530	0	E0		PP, EP, EX, TOX, A	VE01, VE02				2	
3485	CALCIUM HYPOCHLORITE, DRY, CORROSIVE or CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 39% available chlorine (8.8% available oxygen)	5.1	OC2	II	5.1 +8	314	1 kg	E2		PP					0	

(1)	(2)	(3)	(3b)	(5)	(4)	(6)	(7a)	(7b)	(8)	(9)	(10)		(11)		(12)	(13)
3486	CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 10% but not more than 39% available chlorine	5.1	OC2	III	5.1 +8	314	5 kg	E1		PP					0	
3487	CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water	5.1	OC2	II	5.1 +8	314 322	1 kg	E2		PP					0	
3487	CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water	5.1	OC2	III	5.1 +8	314	5 kg	E1		PP					0	
3488	TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	6.1	TFC	I	6.1 +3 +8	274	0	E0		PP, EP, EX, TOX, A	VE02, VE02				2	

(1)	(2)	(3)	(3b)	(5)	(4)	(6)	(7a)	(7b)	(8)	(9)	(10)		(11)		(12)	(13)
3489	TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	6.1	TFC	I	6.1 +3 +8	274	0	E0		PP, EP, EX, TOX, A	VE01, VE02				2	
3490	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	6.1	TFW	I	6.1 +4.3 +3	274	0	E0		PP, EP, EX[2] , TOX, A	VE01[2], VE02				2	
3491	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	6.1	TFW	I	6.1 +4.3 +3	274	0	E0		PP, EP, EX[2] , TOX, A	VE01[2], VE02				2	

(1)	(2)	(3)	(3b)	(5)	(4)	(6)	(7a)	(7b)	(8)	(9)	(10)		(11)		(12)	(13)
3492	TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	6.1	TFC	I	6.1 +8 +3	274	0	E0		PP, EP, EX, TOX, A	VE01, VE02				2	
3493	TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	6.1	TFC	I	6.1 +8 +3	274	0	E0		PP, EP, EX, TOX, A	VE01, VE02				2	
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	I	3 +6.1	343 649	0	E0		PP, EP, EX, TOX, A	VE01, VE02				2	
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	II	3 +6.1	343 649	1 *l*	E2		PP, EP, EX, TOX, A	VE01, VE02				2	
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	III	3 +6.1	343 649	5 *l*	E1		PP, EP, EX, TOX, A	VE01, VE02				0	
3495	IODINE	8	CT2	III	8 + 6.1	279	5 kg	E1		PP, EP					0	
3496	Batteries, nickel-metal hydride	9	M11	NOT SUBJECT TO ADN												

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1 and ECE/TRANS/WP.15/AC.2/2009/27)

Table B

In the French text, under the entry "PHOSPHORE JAUNE FONDU", replace "PHOSPHORE JAUNE FONDU" with "phosphore jaune fondu, voir".
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

Chapter 3.3

3.3.1 **SP172** At the end, add the following new sentence: "For packing, see also 4.1.9.1.5 of ADR.".

SP188 In (b), at the end of the second sentence, delete ", except those manufactured before 1 January 2009 which may be carried in accordance with this special provision and without this marking until 31 December 2010".
In (f), at the beginning, insert "button cell batteries installed in equipment (including circuit boards), or" after "Except for packages containing".

SP198 Insert ", perfumery products" after "paints" and ", 1266" after "1263" respectively.

SP219 Amend to read as follows:

"**219** Genetically modified microorganisms (GMMOs) and genetically modified organisms (GMOs) packed and marked in accordance with packing instruction P904 of 4.1.4.1 of ADR are not subject to any other requirements of ADN.

If GMMOs or GMOs meet the criteria for inclusion in Class 6.1 or 6.2 (see 2.2.61.1 and 2.2.62.1) the requirements in ADN for the carriage of toxic substances or infectious substances apply.".

SP290 Amend to read as follows:

"**290** When this radioactive material meets the definitions and criteria of other classes as defined in Part 2, it shall be classified in accordance with the following:

(a) Where the substance meets the criteria for dangerous goods in excepted quantities as set out in Chapter 3.5, the packagings shall be in accordance with 3.5.2 and meet the testing requirements of 3.5.3. All other requirements applicable to radioactive material, excepted packages as set out in 1.7.1.5 shall apply without reference to the other class;

(b) Where the quantity exceeds the limits specified in 3.5.1.2 the substance shall be classified in accordance with the predominant subsidiary risk. The transport document shall describe the substance with the UN number and proper shipping name applicable to the other class supplemented with the name applicable to the radioactive

excepted package according to Column 2 of Table A of Chapter 3.2, and shall be carried in accordance with the provisions applicable to that UN number. An example of the information shown on the transport document is:

"UN 1993, Flammable liquid, n.o.s. (ethanol and toluene mixture), Radioactive material, excepted package – limited quantity of material, 3, PG II".

In addition, the requirements of 2.2.7.2.4.1 shall apply.

(c) The provisions of Chapter 3.4 for the carriage of dangerous goods packed in limited quantities shall not apply to substances classified in accordance with sub-paragraph (b);

(d) When the substance meets a special provision that exempts this substance from all dangerous goods provisions of the other classes it shall be classified in accordance with the applicable UN number of Class 7 and all requirements specified in 1.7.1.5 shall apply.".

SP292 Amend to read as follows:

"**292** *(Deleted).*".

SP302 Amend to read as follows:

"**302** Fumigated cargo transport units containing no other dangerous goods are only subject to the provisions of 5.5.2.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

SP304 Amend to read as follows:

"**304** This entry may only be used for the transport of non-activated batteries which contain dry potassium hydroxide and which are intended to be activated prior to use by addition of an appropriate amount of water to the individual cells.".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

SP313 Amend to read as follows:

"**313** *(Deleted).*".

SP503 Delete "or yellow".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

SP559 Amend to read as follows:

"**559** *(Deleted)*".

SP589 Amend to read as follows:
"**589** *(Deleted)*".

SP593 Replace "P203 (12) with "P203, paragraph (6) for open cryogenic receptacles".
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

SP604 to **SP606** Amend to read as follows:
"**604 to 606** *(Deleted)*".

SP608 Amend to read as follows:
"**608** *(Deleted)*".
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

SP645 Insert a new second sentence to read as follows: "The approval shall be given in writing as a classification approval certificate (see 5.4.1.2.1 (g)) and shall be provided with a unique reference.".
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

SP649 Amend to read as follows:
"**649** *(Deleted)*

Consequential amendment: In Table A of chapter 3.2, delete 649 everywhere that this code appears in column (6) (applies to UN Nos. 1267, 1268 and 3295).
(Reference document: ECE/TRANS/WP.15/203)

Add the following new special provisions:

"**342** Glass inner receptacles (such as ampoules or capsules) intended only for use in sterilization devices, when containing less than 30 ml of ethylene oxide per inner packaging with not more than 300 ml per outer packaging, may be carried in accordance with the provisions in Chapter 3.5, irrespective of the indication of "E0" in column (7b) of Table A of Chapter 3.2 provided that:

(a) After filling, each glass inner receptacle has been determined to be leak-tight by placing the glass inner receptacle in a hot water bath at a temperature, and for a period of time, sufficient to ensure that an internal pressure equal to the vapour pressure of ethylene oxide at 55 °C is achieved. Any glass inner receptacle showing evidence of leakage, distortion or other defect under this test shall not be carried under the terms of this special provision;

(b) In addition to the packaging required by 3.5.2, each glass inner receptacle is placed in a sealed plastics bag compatible with ethylene oxide and capable of containing the contents in the event of breakage or leakage of the glass inner receptacle; and

(c) Each glass inner receptacle is protected by a means of preventing puncture of the plastics bag (e.g. sleeves or cushioning) in the event of damage to the packaging (e.g. by crushing).

343 This entry applies to crude oil containing hydrogen sulphide in sufficient concentration that vapours evolved from the crude oil can present an inhalation hazard. The packing group assigned shall be determined by the flammability hazard and inhalation hazard, in accordance with the degree of danger presented.

344 The provisions of 6.2.6 of ADR shall be met.

345 This gas contained in open cryogenic receptacles with a maximum capacity of 1 litre constructed with glass double walls having the space between the inner and outer wall evacuated (vacuum insulated) is not subject to ADN provided each receptacle is carried in an outer packaging with suitable cushioning or absorbent materials to protect it from impact damage.

346 Open cryogenic receptacles conforming to the requirements of packing instruction P203 of 4.1.4.1 of ADR and containing no dangerous goods except for UN No. 1977 nitrogen, refrigerated liquid, which is fully absorbed in a porous material are not subject to any other requirements of ADN.

347 This entry shall only be used if the results of Test series 6 (d) of Part I of the Manual of Tests and Criteria have demonstrated that any hazardous effects arising from functioning are confined within the package.

348 Batteries manufactured after 31 December 2011 shall be marked with the Watt-hour rating on the outside case.

349 Mixtures of a hypochlorite with an ammonium salt are not to be accepted for carriage. UN No. 1791 hypochlorite solution is a substance of Class 8.

350 Ammonium bromate and its aqueous solutions and mixtures of a bromate with an ammonium salt are not to be accepted for carriage.

351 Ammonium chlorate and its aqueous solutions and mixtures of a chlorate with an ammonium salt are not to be accepted for carriage.

352 Ammonium chlorite and its aqueous solutions and mixtures of a chlorite with an ammonium salt are not to be accepted for carriage.

353 Ammonium permanganate and its aqueous solutions and mixtures of a permanganate with an ammonium salt are not to be accepted for carriage.

354 This substance is toxic by inhalation.

355 Oxygen cylinders for emergency use carried under this entry may include installed actuating cartridges (cartridges, power device of Division 1.4, Compatibility Group C or S), without changing the classification in Class 2 provided the total quantity of deflagrating (propellant) explosives does not exceed 3.2 g per oxygen cylinder. The cylinders with the installed actuating cartridges as prepared for carriage shall have an effective means of preventing inadvertent activation.

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as adapted)

356 Metal hydride storage system(s) installed in conveyances or in completed conveyance components or intended to be installed in conveyances shall be approved by the competent authority of the country of manufacture* before acceptance for carriage. The transport document shall include an indication that the package was approved by the competent authority of the country of manufacture* or a copy of the competent authority of the country of manufacture* approval shall accompany each consignment.

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

357 Petroleum crude oil containing hydrogen sulphide in sufficient concentration that vapours evolved from the crude oil can present an inhalation hazard shall be consigned under the entry UN 3494 PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

"**656** The requirement of the first sentence of special provision 188 (e) does not apply to devices which are intentionally active in transport (radio frequency identification (RFID) transmitters, watches, sensors, etc.) and which are not capable of generating a dangerous evolution of heat.

Notwithstanding special provision 188 (b), batteries manufactured before 1 January 2009 may continue to be carried without the Watt-hour rating on the outside case after 31 December 2010.".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

Chapter 3.4

Amend Chapter 3.4 to read as follows:

"**CHAPTER 3.4**

DANGEROUS GOODS PACKED IN LIMITED QUANTITIES

3.4.1 This Chapter provides the provisions applicable to the transport of dangerous goods of certain classes packed in limited quantities. The applicable quantity limit for the inner

* If the country of manufacture is not a Contracting Party to ADN, the approval shall be recognized by the competent authority of a Contracting Party to ADN.

packaging or article is specified for each substance in Column (7a) of Table A of chapter 3.2. In addition, the quantity "0" has been indicated in this column for each entry not permitted to be transported in accordance with this chapter. Limited quantities of dangerous goods packed in such limited quantities, meeting the provisions of this chapter are not subject to any other provisions of ADN except the relevant provisions of:

(a) Part 1, Chapters 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.8, 1.9;

(b) Part 2;

(c) Part 3, Chapters 3.1, 3.2, 3.3 (except special provisions 61, 178, 181, 220, 274, 313, 625, 633 and 650 (e));

~~(d) Part 4, paragraphs 4.1.1.1, 4.1.1.2, 4.1.1.4 to 4.1.1.8;~~

(e) Part 5, 5.1.2.1(a) (i) and (b), 5.1.2.2, 5.1.2.3, 5.2.1.9, 5.4.2;

~~(f) Part 6, construction requirements of 6.1.4 and paragraphs 6.2.5.1 and 6.2.6.1 to 6.2.6.3;~~

~~(g) Part 7, Chapter 7.1 and 7.2.1, 7.2.2, 7.5.1 (except 7.5.1.4), 7.5.7, 7.5.8, 7.5.9;~~

~~(h) 8.6.3.3.~~

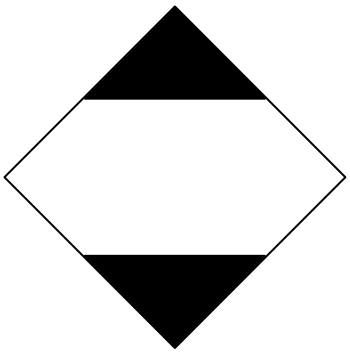
3.4.2 Dangerous goods shall be packed only in inner packagings placed in suitable outer packagings. Intermediate packagings may be used. However, the use of inner packagings is not necessary for the transport of articles such as aerosols or "receptacles, small, containing gas". The total gross mass of the package shall not exceed 30 kg.

3.4.3 Shrink-wrapped or stretch-wrapped trays meeting the conditions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 of ADR are acceptable as outer packagings for articles or inner packagings containing dangerous goods carried in accordance with this Chapter. Inner packagings that are liable to break or be easily punctured, such as those made of glass, porcelain, stoneware or certain plastics, shall be placed in suitable intermediate packagings meeting the provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 of ADR, and be so designed that they meet the construction requirements of 6.1.4 of ADR. The total gross mass of the package shall not exceed 20 kg.

3.4.4 Liquid goods of Class 8, packing group II in glass, porcelain or stoneware inner packagings shall be enclosed in a compatible and rigid intermediate packaging.

3.4.5 and 3.4.6 *(Reserved)*

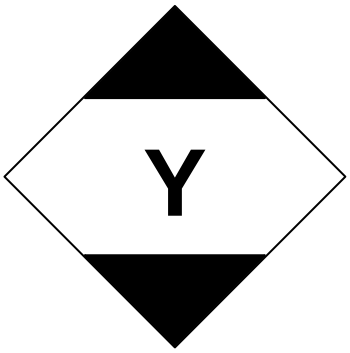
3.4.7 Except for air transport, packages containing dangerous goods in limited quantities shall bear the marking shown below.



The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness.

The top and bottom portions and the surrounding line shall be black. The centre area shall be white or a suitable contrasting background. The minimum dimensions shall be 100 mm × 100 mm and the minimum width of line forming the diamond shall be 2 mm. If the size of the package so requires, the dimension may be reduced, to be not less than 50 mm × 50 mm provided the marking remains clearly visible.

3.4.8 Packages containing dangerous goods consigned for air transport in conformity with the provisions of Part 3, Chapter 4 of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air shall bear the marking shown below.



The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness. The top and bottom portions and the surrounding line shall be black. The centre area shall be white or a suitable contrasting background. The minimum dimensions shall be 100 mm × 100 mm. The minimum width of line forming diamond shall be 2 mm. The symbol "Y" shall be placed in the centre of the mark and shall be clearly visible. If the size of the package so requires, the dimension may be reduced, to be not less than 50 mm × 50 mm provided the marking remains clearly visible.

3.4.9 Packages containing dangerous goods bearing the marking shown in 3.4.8 shall be deemed to meet the provisions of sections 3.4.1 to 3.4.4 of this chapter and need not bear the marking shown in 3.4.7.

3.4.10 *(Reserved)*

3.4.11 When packages containing dangerous goods packed in limited quantities are placed in an overpack, the provisions of 5.1.2 shall apply. In addition the overpack shall be marked with the markings required by this chapter unless the markings representative of all dangerous goods in the overpack are visible. The provisions of 5.1.2.1 (a) (ii) and 5.2.1.4 apply only if other dangerous goods which are not packed in limited quantities are contained, and only in relation to these other dangerous goods.

3.4.12 In advance of carriage, consignors of dangerous goods packed in limited quantities shall inform the carrier in a traceable form of the total gross mass of such goods to be consigned.

3.4.13 (a) Transport units with a maximum mass exceeding 12 tonnes carrying packages with dangerous goods in limited quantities shall be marked in accordance with 3.4.15 at the front and at the rear except when orange-coloured plate marking is displayed in accordance with 5.3.2.

(b) Wagons carrying packages with dangerous goods in limited quantities shall be marked in accordance with 3.4.15 on both sides except when placards in accordance with section 5.3.1 are already affixed.

(c) Containers carrying packages with dangerous goods in limited quantities shall be marked in accordance with 3.4.12 on all four sides except

- when placards in accordance with section 5.3.1 are already affixed;
- for small containers loaded on a wagon;
- for containers loaded on a transport unit with a maximum mass less than or equal to 12 tonnes.

If the containers are loaded on a transport unit or wagon, the carrying transport unit or wagon need not be marked, except when the marking affixed to the containers is not visible from the outside of this carrying transport unit or wagon. In this latter case, the same marking shall also be affixed at the front and the rear of the carrying transport unit, or on both sides of the carrying wagon.

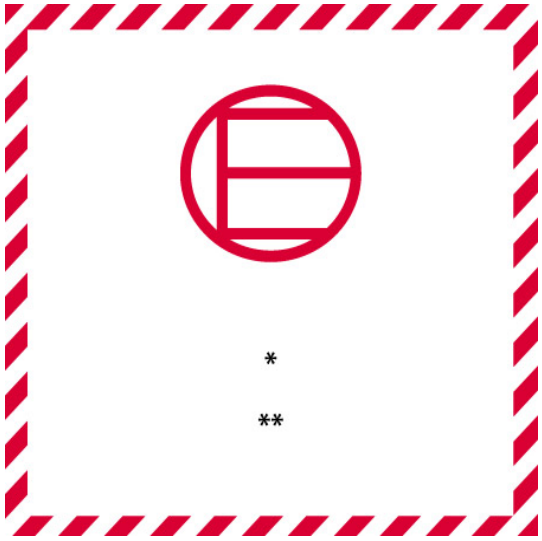
3.4.14 Markings specified in 3.4.13 may be dispensed with, if the total gross mass of the packages containing dangerous goods packed in limited quantities carried does not exceed 8 tonnes per transport unit.

3.4.15 The marking shall be that required in 3.4.7, except that the minimum dimensions shall be 250 mm × 250 mm.

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1 as amended by ECE/TRANS/WP.15/203 and adapted)

Chapter 3.5

3.5.4.2 Amend the figure to read as follows:



Excepted quantities mark

Hatching and symbol of the same colour, black or red,
on white or suitable contrasting background

* *The first or only label number indicated in column (5) of Table A of Chapter 3.2 shall be shown in this location.*

** *The name of the consignor or of the consignee shall be shown in this location if not shown elsewhere on the package.*

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

PART 5

Chapter 5.1

5.1.5.1.4 (a) Insert "the competent authority of the country of origin of the shipment and to" after "have been submitted to".

5.1.5.1.4 (b) At the end, insert "the competent authority of the country of origin of the shipment and" after "shall notify".

5.1.5.1.4 (d) In sub-paragraph (v), insert "(or of each fissile nuclide for mixtures when appropriate)" after "the mass of fissile material".

5.1.5.3.4 (d) and (e) Replace "when otherwise specified in the competent authority approval certificate of the country of origin of design (see 2.2.7.2.4.6)" with "under the provisions of 5.1.5.3.5".

5.1.5.3.5 Add a new paragraph 5.1.5.3.5 to read as follows:

"5.1.5.3.5 In all cases of international carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, the categorization shall be in accordance with the certificate of the country of origin of design".

5.1.5.4 Add a new sub-section 5.1.5.4 to read as follows, and renumber existing 5.1.5.4 as 5.1.5.5:

"**5.1.5.4** ***Specific provisions for excepted packages***

5.1.5.4.1 Excepted packages shall be legibly and durably marked on the outside of the packaging with:

(a) The UN number preceded by the letters "UN";

(b) An identification of either the consignor or consignee, or both; and

(c) The permissible gross mass if this exceeds 50 kg.

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

5.1.5.4.2 The documentation requirements of Chapter 5.4 do not apply to excepted packages of radioactive material, except that the UN number preceded by the letters "UN" and the name and address of the consignor or consignee shall be shown on a transport document such as a bill of lading, air waybill or CMR/CIM consignment note.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

Chapter 5.2

5.2.1.7.2 Amend the second sentence to read "The marking of excepted packages shall be as required by 5.1.5.4.1.".

5.2.1.7.8 Amend to read as follows:

"5.2.1.7.8 In all cases of international carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, marking shall be in accordance with the certificate of the country of origin of the design.".

5.2.1.8.1 Amend to read as follows:

"5.2.1.8.1 Packages containing environmentally hazardous substances meeting the criteria of 2.2.9.1.10 shall be durably marked with the environmentally hazardous substance mark shown in 5.2.1.8.3 with the exception of single packagings and combination

packagings where such single packagings or inner packagings of such combination packagings have:

- a net quantity of 5 *l* or less for liquids; or

- a net mass of 5 kg or less for solids.".

5.2.1.9.1 Replace "ISO 780:1985" with "ISO 780:1997".

5.2.1.9.2 (d) Delete "or" at the end.

5.2.1.9.2 (e) Add "or" at the end.

5.2.1.9.2 Add a new sub-paragraph (f) to read as follows:

"(f) Combination packagings containing hermetically sealed inner packagings each containing not more than 500 ml.".

5.2.2.1.11.2 (b) In the second sentence, insert "(or mass of each fissile nuclide for mixtures when appropriate)" after "the mass of fissile material".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

5.2.2.1.11.5 Amend to read as follows:

"5.2.2.1.11.5 In all cases of international carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, labelling shall be in accordance with the certificate of the country of origin of design.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

Chapter 5.3

5.3.2.1.4 In the first sentence, replace "under exclusive use" with "required to be carried under exclusive use". In the second sentence, insert "when required to be" before "carried under exclusive use.".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

5.3.2.3.2 Insert the following new line after the line for code 668:

"X668 highly toxic substance, corrosive, which reacts dangerously with water[1]".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

Chapter 5.4

"5.4.0 Amend to read as follows:

"**5.4.0 General**

5.4.0.1 Unless otherwise specified, any carriage of goods governed by ADN shall be accompanied by the documentation prescribed in this Chapter, as appropriate.

5.4.0.2 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.

5.4.0.3 When the dangerous goods transport information is given to the carrier by EDP or EDI techniques, the consignor shall be able to give the information to the carrier as a paper document, with the information in the sequence required by this Chapter.".

Existing Note 1 after 5.4.0 remains and should be placed after 5.4.0.1.".
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

5.4.1.1.1 (e) At the end, add the following new Note:

"***NOTE:*** *The number, type and capacity of each inner packaging within the outer packaging of a combination packaging is not required to be indicated.*".
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

5.4.1.1.3 In the first paragraph, delete "the UN number and".
In the first paragraph, amend the four examples to read as follows:

""UN 1230 WASTE METHANOL, 3 (6.1), II,", or
"UN 1230 WASTE METHANOL, 3 (6.1), PG II,", or
"UN 1993 WASTE FLAMMABLE LIQUID, N.O.S. (toluene and ethyl alcohol), 3, II,", or
"UN 1993 WASTE FLAMMABLE LIQUID, N.O.S. (toluene and ethyl alcohol), 3, PG II".".

5.4.1.1.6.1 At the end, replace "proper shipping name required in 5.4.1.1.1 (b)" with "dangerous goods description specified in 5.4.1.1.1 (a) to (d)".
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

5.4.1.1.18 Add a new paragraph to read as follows:

"5.4.1.1.18 *Special provisions for carriage of environmentally hazardous substances (aquatic environment)*

When a substance belonging to one of classes 1 to 9 meets the classification criteria of 2.2.9.1.10, the transport document shall bear the additional inscription "ENVIRONMENTALLY HAZARDOUS". This additional requirement does not apply to UN Nos. 3077 and 3082 or for the exceptions listed in 5.2.1.8.1.
The inscription "MARINE POLLUTANT" (according to 5.4.1.4.3 of the IMDG Code) instead of "ENVIRONMENTALLY HAZARDOUS" is acceptable for carriage in a transport chain including maritime carriage.".
Renumber existing 5.4.1.1.18.

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1 as amended by ECE/TRANS/WP.15/203)

5.4.1.2.1 Amend sup-paragraph (g) to read as follows:

"(g) When fireworks of UN Nos. 0333, 0334, 0335, 0336 and 0337 are carried, the transport document shall bear the inscription:
"Classification of fireworks by the competent authority of XX with the firework reference XX/YYZZZZ".

The classification approval certificate need not be carried with the consignment, but shall be made available by the consignor to the carrier or the competent authorities for control purposes. The classification approval certificate or a copy of it shall be in an official language of the forwarding country, and also, if that language is not German, English or French, in German, English or French.".

Add a new Note to read as follows:

"***NOTE:*** *The classification reference(s) shall consist of the ADN Contracting Party in which the classification code according to special provision 645 of 3.3.1 was approved, indicated by the distinguishing sign for motor vehicles in international traffic (XX)*[*]*, the competent authority identification (YY) and a unique serial reference (ZZZZ). Examples of such classification references are:*

GB/HSE123456
D/BAM1234".

(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1 as amended by ECE/TRANS/WP.15/203)

5.4.1.2.5.1 (c) In the second sentence, insert "(or mass of each fissile nuclide for mixtures when appropriate)" after "the mass of fissile material".

5.4.1.2.5.1 (j) At the end, add: "For radioactive material for which the A_2 value is unlimited, the multiple of A_2 shall be zero.".

5.4.1.2.5.3 Amend to read as follows:

"5.4.1.2.5.3 In all cases of international carriage of packages requiring competent authorities design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, the UN number and proper shipping name required in 5.4.1.1.1 shall be in accordance with the certificate of the country of origin of design.".

[*] *Distinguishing sign for motor vehicles in international traffic prescribed in Vienna Convention on Road Traffic (1968).*

5.4.2 Amend the heading to read as follows:

"**5.4.2 Large container or vehicle/wagon packing certificate**".
(Reference document: ECE/TRANS/WP.15/AC.1/116/Add.1)

[Footnote 4 to 5.4.2 to be checked after consideration of draft amendments to section 5.4.2 of the IMDG code by IMO.].
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1 as amended by ECE/TRANS/WP.15/AC.1/116/Add.1)

[5.4.2.3 Amend to read as follows:

"5.4.2.3 If the dangerous goods documentation is presented to the carrier by means of EDP or EDI transmission techniques, the signature(s) may be electronic signature(s) or may be replaced by the name(s) (in capitals) of the person authorized to sign.".

5.4.2.4 Add a new paragraph 5.4.2.4 to read as follows:

"5.4.2.4 When the dangerous goods transport information is given to a carrier by EDP or EDI techniques and subsequently the dangerous goods are transferred to a carrier that requires a paper dangerous goods transport document, the carrier shall ensure that the paper document indicates "Original received electronically" and the name of the signatory shall be shown in capital letters.".]
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

5.4.3.4 Amend the second page of the model of the instructions in writing as follows:

In the first line of the table, replace the first label by model label No. 1 in 5.2.2.2.2.

In the sixth line, delete the third sentence in column (3).

In the seventh line in column (2), in the third sentence, insert "or self-ignition" after "vapours". At the end, insert the following new sentence: "Risk of explosion of desensitized explosives after loss of desensitizer.". Delete the text in column (3).

In the eighth line in column (2), in the first sentence, insert "fire by" before "spontaneous combustion".

Amend the third page of the model of the instructions in writing as follows:

In the first line of the table, amend the first sentence of column (2) to read as follows: "Risk of vigorous reaction, ignition and explosion in contact with combustible or flammable substances". Delete the second sentence in column (2).

In the second line, in column (2), insert "or self-ignition" after "vapours".

In the third line, in column (2), amend the first sentence to read as follows: "Risk of intoxication by inhalation, skin contact or ingestion." In the second sentence, insert "or sewage system" after "environment".

In the fourth line, in column (2), insert "May cause serious disease in humans or animals." after "Risk of infection". In the second line, insert "or sewage system" after "environment".

In the seventh line, in column (2), amend the first sentence to read as follows: "Risk of burns by corrosion". Insert the following new third sentence: "Spilled substance may evolve corrosive vapours." In the last sentence, replace "and" by "or". Delete the text in column (3).

In the eighth line, in column (2), in the last sentence, replace "and" by "or". Delete the text in column (3).

On the fourth page of the model, at the beginning, insert the following new table:

"**Additional guidance to members of the crew on the hazard characteristics of dangerous goods, indicated by marks or warning signs, and on actions subject to prevailing circumstances**		
Mark or warning sign	**Hazard characteristics**	**Additional guidance**
(1)	**(2)**	**(3)**
 Environmentally hazardous substances	Risk to the aquatic environment or the sewage system.	
 Elevated temperature substances	Risk of burns by heat.	Avoid contact with hot parts of the transport unit and the spilled substance."

(Reference document: ECE/TRANS/WP.15/203)

5.4.4 Insert a new section 5.4.4 to read as follows:

"**5.4.4 Retention of dangerous goods transport information**

5.4.4.1 The consignor and the carrier shall retain a copy of the dangerous goods transport document and additional information and documentation as specified in ADN, for a minimum period of three months.

5.4.4.2 When the documents are kept electronically or in a computer system, the consignor and the carrier shall be able to reproduce them in a printed form.".

Renumber 5.4.4 as 5.4.5.

Consequential amendment:
In 5.4.1.4.2 replace "5.4.4" with "5.4.5".
(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)

Chapter 5.5

Amend to read as follows:

"**CHAPTER 5.5**

SPECIAL PROVISIONS

5.5.1 *(Deleted)*

5.5.2 Special provisions applicable to fumigated cargo transport units (UN 3359)

5.5.2.1 ***General***

5.5.2.1.1 Fumigated cargo transport units (UN 3359) containing no other dangerous goods are not subject to any provisions of ADN other than those of this section.

NOTE: *For the purposes of this Chapter, cargo transport unit means a wagon/vehicle, a container, a tank-container, a portable tank or a MEGC.*

5.5.2.1.2 When the fumigated cargo transport unit is loaded with dangerous goods in addition to the fumigant, any provision of ADN relevant to these goods (including placarding, marking and documentation) applies in addition to the provisions of this section.

5.5.2.1.3 Only cargo transport units that can be closed in such a way that the escape of gas is reduced to a minimum shall be used for the carriage of cargo under fumigation.

5.5.2.2 ***Training***

Persons engaged in the handling of fumigated cargo transport units shall be trained commensurate with their responsibilities.

5.5.2.3 ***Marking and placarding***

5.5.2.3.1 A fumigated cargo transport unit shall be marked with a warning mark, as specified in 5.5.2.3.2, affixed at each access point in a location where it will be easily seen by persons opening or entering the cargo transport unit. This mark shall remain on the cargo transport unit until the following provisions are met:

(a) The fumigated cargo transport unit has been ventilated to remove harmful concentrations of fumigant gas; and

(b) The fumigated goods or materials have been unloaded.

5.5.2.3.2 The fumigation warning mark shall be rectangular and shall not be less than 300 mm wide and 250 mm high. The markings shall be in black print on a white background with lettering not less than 25 mm high. An illustration of this mark is given in the figure below.

Fumigation warning mark
(*Existing fumigation warning sign unchanged*)

5.5.2.3.3 If the fumigated cargo transport unit has been completely ventilated either by opening the doors of the unit or by mechanical ventilation after fumigation, the date of ventilation shall be marked on the fumigation warning mark.

5.5.2.3.4 When the fumigated cargo transport unit has been ventilated and unloaded, the fumigation warning mark shall be removed.

5.5.2.3.5 Placards conforming to model No. 9 (see 5.2.2.2.2) shall not be affixed to a fumigated cargo transport unit except as required for other Class 9 substances or articles packed therein.

5.5.2.4 ***Documentation***

5.5.2.4.1 Documents associated with the carriage of cargo transport units that have been fumigated and have not been completely ventilated before carriage shall include the following information:

- "UN 3359, fumigated cargo transport unit, 9", or "UN 3359, fumigated cargo transport unit, class 9";
- The date and time of fumigation; and
- The type and amount of the fumigant used.

These particulars shall be drafted in an official language of the forwarding country and also, if the 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.

5.5.2.4.2 The transport document may be in any form, provided it contains the information required in 5.5.2.4.1. This information shall be easy to identify, legible and durable.

5.5.2.4.3 Instructions for disposal of any residual fumigant including fumigation devices (if used) shall be provided.

5.5.2.4.4 A document is not required when the fumigated cargo transport unit has been completely ventilated and the date of ventilation has been marked on the warning mark (see 5.5.2.3.3 and 5.5.2.3.4).".

(Reference document: ECE/TRANS/WP.15/AC.1/2009/16/Add.1)