

**Working Party on the Transport of Dangerous Goods**

**Sixty-eighth session Geneva, 15 – 19 Mai 2000**

**Proposal transmitted by Italy**

**PART 9.1 – SCOPE, DEFINITIONS AND CLASSIFICATIONS AND REQUIREMENTS FOR THE APPROVAL OF THE ADR VEHICLES**

**PART 9.2 – REQUIREMENTS CONCERNING THE CONSTRUCTION OF VEHICLES**

<i>Executive Summary:</i>	We have developed additional proposal with the main purpose of ensuring clarity and avoiding misunderstanding in PART 9 - REQUIREMENTS CONCERNING THE CONSTRUCTION AND APPROVAL OF VEHICLES
<i>Action to be taken:</i>	Amendments to PART 9.1 and 9.2
<i>Related documents:</i>	TRANS/WP.15/1999/14 and /46 - TRANS/WP.15/157, 157/Add. 1 and 159

***General remarks***

***PART 9.1***

The scope of this proposal is to improve the understanding of this Part, essential for the practical application of the entire ***Part 9 - REQUIREMENTS CONCERNING THE CONSTRUCTION AND APPROVAL OF VEHICLE.***

We would like to point out that *the vehicle*, complete or completed, ***must be type approved*** by the competent Authority of a Contracting Party according to the ADR prescriptions; afterwards *the vehicle must be individually inspected, checked and certified* with an Individual Approval so that it can be registered, be in a roadworthy condition and used for carrying certain dangerous goods.

The “Vehicle” definition establishes the type of vehicle: complete, incomplete and completed; this vehicle is not suitable for carrying certain dangerous goods by road until the competent Authority will give, after the first inspection, the ***Certificate of Approval***.

The certificate must take the form given in paragraph 9.1.2.2.6.

Here below are listed the necessary steps that the vehicle must follow to grant the Certificate of Approval (see APPENDIX 1):

1. The ***complete and incomplete vehicles*** (tractor for semi-trailer, semi-trailer tank with self-supporting body and van / chassis-cab, trailer-chassis and semi-trailer-chassis) must be type approved according to the requirements laid down in paragraph 9.1.2.1 – Type Approval.

The type approval of the vehicles will be granted according to the following provisions:

- Chapter 9.2 of this Part or
- ECE Regulation n° 105 or
- EC Directive 98/91.

For each vehicle the ***vehicle type approval certificate*** must be granted;

2. For the ***bodies work*** (tank, tank-container, drop side, drop side with curtains, box van and container) only the ***tank and tank-container type approval certificate*** must be granted: each tank and tank-container must be individually inspected, checked and tested before it can go into service.
3. The ***complete or completed vehicles***, to reach a roadworthy condition, must be subject to the ***first inspection*** by the competent Authority of the Country of registration, according to the administrative provisions in paragraphs 9.1.2.2.1 to 9.1.2.2.6 and to the technical requirements of Part 9.2 to 9.8.

The satisfactory results of the first inspection allow the issue, for each vehicle, of the Certificate of Approval according to the requirements referred to in paragraph - *9.1.2.2 Individual Approval* - ; as a consequence the vehicle must be registered, be in a roadworthy condition and used for carrying certain dangerous goods.

In any case, every vehicle type approved according to paragraph - *9.1.2.1.1 - Type approval* - must be subject to a first inspection, by the competent Authority, according to the administrative provisions only laid down in paragraphs 9.1.2.2.1 to 9.1.2.2.6; the compliance with the technical requirements of Chapter 9.2 shall not be verified.

The compliance with Chapter 9.2 shall be verified only in the case that the vehicle or its components have been modified altering its Type Approval; in this case during the first inspection for the Individual Approval the modifications shall be verified according to the technical requirements of Part 9.2.

For example: a van vehicle type approved by the manufacturer, in conformity with the requirements laid down in paragraph 9.2.4.7 – Combustion heater – as regards the cab, shall be verified, according to the technical requirements if the combustion heater has been modified to warm the load compartment.

As a consequence of what above mentioned, we think it's necessary:

- in paragraph 9.1.1.1 - Scope – specify that the requirements of the Part 9 are concerning the vehicles construction, their type approval and their individual approval;
- complete the “Vehicle” definition adding the “Complete vehicle”, “Incomplete vehicle” and “Completed vehicle”;
- add the “Type approval”, “Individual approval” and “ADR Vehicle” definitions;
- delete the “Base vehicle” definition
- add a new Chapter **9.8 - ADDITIONAL REQUIREMENTS CONCERNING THE INDIVIDUAL APPROVAL OF VEHICLES**: these requirements are necessary to complete the requirements for the Individual Approval.

## ***PART 9.2***

Following the resolution passed during last sixty-seventh session meeting (see report TRANS/WP.15/159 para 46) we think it's necessary to add here in this Part a new sentence as reminder of the transitional provisions put in a new section 1.6.5 of PART 1 – General provisions of the restructured ADR.

***In this sentence the application date for the new prescriptions regarding only the vehicles construction will have to be inserted.***

The date will have to be later (one or two years) than the ADR entry into force date.

This will allow manufacturers to conform the vehicle's construction in time with the above mentioned ADR entry into force date.

## ***Document explanation***

- 9.1 New title
- 9.1.1 New title
- 9.1.1.1 Scope – the added sentence underlines that the prescriptions are valid for the construction and the Type approval of the vehicle and for its Individual approval.
- 9.1.1.2 “Base vehicle” definition deleted and replaced with “Vehicle” and the added definitions of complete, incomplete and completed vehicle.
- A new definition for “Type approval”, “Individual approval” and “ADR Vehicle” added.
- 9.1.1.3 A new paragraph “Classification of the vehicles” added.
- The definitions remain the same, as they were approved.
- 9.1.2 Paragraph 9.1.2. revised and split in two parts:
- \* 9.1.2.1 Type approval
  - \* 9.1.2.2 Individual approval
- A reference to a new APPENDIX 1 added.
- 9.1.2.1.1 “base vehicle” replaced with “vehicle”
- 9.1.2.1.2 “base vehicle” replaced with “vehicle” and added “the” before the word compliance
- 9.1.2.2 New sentences have been added to underline that every complete or completed vehicle must have a certificate of approval for carrying certain dangerous goods to be in a roadworthy condition.
- Second part of the paragraph transformed in new paragraph 9.1.2.2.3.
- Old paragraph 9.1.2.1.5 renumbered as 9.1.2.2.6
- Order of the paragraphs changed; these paragraphs have not been modified.
- APPENDIX 1 New added
- 9.2 New title
- 9.2.1 A new sentence as reminder of the Transitional Provisions in paragraph 1.6.5 added.
- 9.8 New Chapter

**All the modifications are written in Italic**

## **PART 9.1**

### **SCOPE, DEFINITIONS and CLASSIFICATIONS AND REQUIREMENTS FOR THE APPROVAL OF THE ADR VEHICLES**

#### **9.1.1. SCOPE, DEFINITIONS and CLASSIFICATION**

##### **9.1.1.1 SCOPE**

The provisions of Part 9 shall apply to vehicles of categories N and O, as defined in Annex 7 of the consolidated Resolutions of Vehicles (R.E.3)<sup>(1)</sup>, intended for the transport of dangerous goods by roads.

*These provisions refer to vehicles, as regards their construction, their type approval and their subsequent individual approval; all provisions shall be fulfilled by vehicles intended for the transport of dangerous goods so that they can be allowed for use on the public roads.*

##### **9.1.1.2 DEFINITIONS**

For the purpose of PART 9:

**“Vehicle”** means any vehicle, whether complete (e.g. one stage built vans, lorries, tractors, trailers), incomplete (e.g. chassis-cab, trailer chassis), or completed (e.g. chassis or chassis-cab fitted with a bodywork) intended for the transport of dangerous goods by road:

- **“Complete vehicle”** means any vehicle which does not need any further completion;
- **“Incomplete vehicle”** means any vehicle which still needs completion in at least one further stage;
- **“Completed vehicle”** means any vehicle resulting from the multi-stage process;

**“Type approval”** means the procedure whereby a competent Authority of a Contracting Party certifies that a type of vehicle satisfies the relevant technical requirements of Part 9.2;

**“Individual approval”** means the procedure whereby a competent Authority of a Contracting Party certifies that a vehicle is suitable for being used on the road as ADR vehicle; the vehicle is in a roadworthy condition and used for carrying certain dangerous goods;

**“ADR vehicle”** means any motor vehicle and trailer which comply with all the requirements laid down in Part 9 and which may be used on the road for carrying certain dangerous goods.

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<sup>(1)</sup> Document of the United Nations Economic Commission for Europe, TRANS/WP.29/78/rev. 1, as amended.

### 9.1.1.3

### CLASSIFICATION

Vehicles intended for the transport of dangerous goods by road are classified as follows:

❑ **EX/II or EX/III vehicle**

A vehicle intended for the carriage of explosive substances ... **UNCHANGED**

❑ **FL vehicle**

a vehicle intended for the carriage of liquids having a flash-point of 61° C or less (with exception of diesel fuel complying with standard EN 590: 1993, gas oil, and heating oil (light) – UN number 1202 – with flash-point as specified in standard EN 590: 1993) or flammable gases ... **UNCHANGED**

❑ **OX vehicle**

a vehicle intended for the carriage of hydrogen peroxide, stabilized or hydrogen peroxide, aqueous solution stabilized with more than 60 per cent hydrogen peroxide (Class 5.1, UN number 2015) in ... **UNCHANGED**

❑ **AT vehicle**

a vehicle, other than that of type FL or OX, intended for the carriage of dangerous goods in tank-containers ... **UNCHANGED**

❑ **[OTHER vehicle**

a vehicle other than an EX/II, EX/III, FL, OX or AT vehicle, intended for the carriage of dangerous goods in

tank-containers of less than 3,000 l capacity,  
battery vehicles of less than 1,000 l capacity,  
closed, open body and sheeted vehicles

for which no special certificate of approval, other than those required according to general safety requirements applicable to vehicles in a general manner, is required.]

### 9.1.2

### APPROVAL OF THE ADR VEHICLES

*EX/II, EX/III, FL, OX and AT vehicles shall comply with the requirements provided in this PART.*

*The explanatory layout of the mentioned procedures in the paragraphs 9.1.2.1 and 9.1.2.2 for ADR vehicles is given in APPENDIX 1.*

9.1.2.1 **Type approval**

9.1.2.1.1 At the request of the manufacturer or his duly accredited representative, motor vehicles and their trailers which are subject to Individual Approval according to paragraph 9.1.2.2 below may be type approved by a competent authority in accordance with [the provisions of Chapter 9.2 or] the provisions of ECE Regulation n° 105<sup>(2)</sup> or Directive 98/91/EC<sup>(3)</sup> provided that they have been amended so that their provisions correspond to those of Part 9.2 of this Part.

This type approval, granted by one Contracting Party, shall be accepted by the other Contracting Parties as ensuring the conformity of the vehicle when the approval of the vehicle is obtained, provided that no modification of the vehicle alters its validity.

9.1.2.1.2 When the vehicle has been type-approved, *the* compliance with paragraph 9.2.4.7.2. and, for EX/II and EX/III vehicles, with paragraphs 9.2.4.4 and 9.2.4.5, shall be verified on the completed vehicle.

9.1.2.2 **Individual approval**

*In order to circulate on the road, every vehicle (complete or completed) other than those defined in paragraph 9.1.1.3 as "Other vehicle", must be subjected to the first inspection, by the competent Authority, according to the administrative provisions of the following paragraphs and to the technical requirements of PART 9.2 to 9.8.*

*Every vehicle type approved according to paragraph 9.1.2.1.1 must be subjected to a first inspection, by the competent Authority, according to the administrative provisions of the following paragraphs; in this case the compliance with Chapter 9.2 shall not be verified.*

*The compliance with Chapter 9.2 shall be verified only in the case that the vehicle or its components have been modified and its Type Approval has been altered; in this case during the first inspection for the Individual Approval the modifications shall be verified according to the technical requirements of Part 9.2.*

9.1.2.2.1 Conformity of EX/II, EX/III, FL, OX and AT vehicles with the requirements of this Part is subject to a certificate of approval issued by the competent authority of the country of registration for each vehicle whose inspection yields satisfactory results. It shall be drawn up in the language or one of the languages of the country issuing it, and also, if that language is not English, French, or German, in English, French or German unless agreements concluded between the countries concerned in the transport operation provide otherwise. It shall conform to the paragraph 9.1.2.2.3 below.

9.1.2.2.2 A certificate of approval issued by the competent authorities of one Contracting Party for a vehicle registered in the territory of that Contracting Party shall be accepted, so long as its validity continues, by the competent authorities of the other Contracting Parties.

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<sup>(2)</sup> Regulation No. 105 (Uniform provisions concerning the approval of vehicles intended for the carriage of dangerous goods with regards their specific constructional features).

<sup>(3)</sup> Directive 98/91/EC of the European Parliament and of the Council of 14 December 1998 relating to motor vehicles and their trailers intended for the transport of dangerous goods by road and amending Directive 70/156/EEC relating to the type approval of motor vehicles and their trailers (Official Journal of the European Communities No. L 011 of 16/01/1999 p. 0025 – 0036).

9.1.2.2.3 The certificate of approval shall have the same layout as the model shown in 9.1.2.2.6 below. Its dimensions shall be 210 mm x 297 mm (format A4). Both front and back shall be used. The colour shall be white, with a pink diagonal stripe. The approval certificate for a vacuum-operated waste tank-vehicle shall bear the following remark: "vacuum-operated waste tank-vehicle".

9.1.2.2.4 The validity of a certificate of approval shall expire not later than one year after the date of the technical inspection of the vehicle preceding the issue of the certificate. The next approval term shall, however, be related to the last nominal expiry date, if the technical inspection is performed within one month before or after that date.

However, in the case of tanks subject to compulsory periodic inspection this provision shall not mean that tightness (leakproofness) tests, hydraulic pressure tests or internal inspections of tanks have to be carried out at intervals shorter than those laid down in Chapter 6.8 and 6.9.

9.1.2.2.5 EX/II, EX/III, FL, OX and AT vehicles shall be subject to annual technical inspections in their country of registration to make sure that they conform to the relevant provisions of this Part, and to the general safety regulations (concerning brakes, lighting, etc.) in force in their country of registration; if these vehicles are trailers or semi-trailers coupled behind a drawing vehicle, the drawing vehicle shall be subject to technical inspection for the same purposes.

When vehicles are required to be fitted with an endurance braking system, the manufacturer shall issue, with the exception of vehicles type approved according to paragraph 9.1.2.1.1, a declaration of conformity with subsection 9.2.3.3. This declaration shall be presented at the first technical inspection.

No special certificates of approval shall be required for vehicles other than EX/II, EX/III FL, OX and AT vehicles, apart from those required by the general safety regulations normally applicable to vehicles in the country of origin.

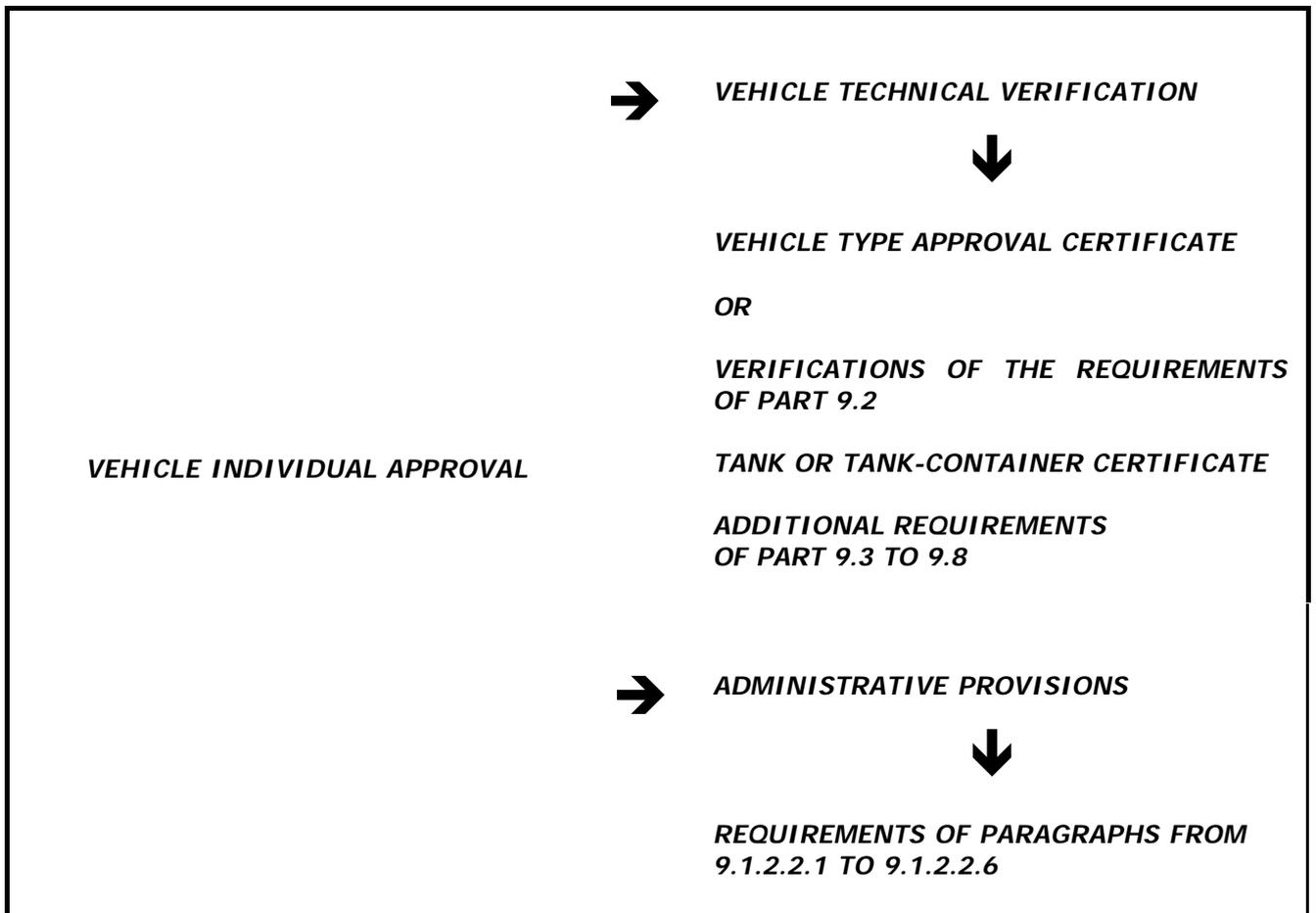
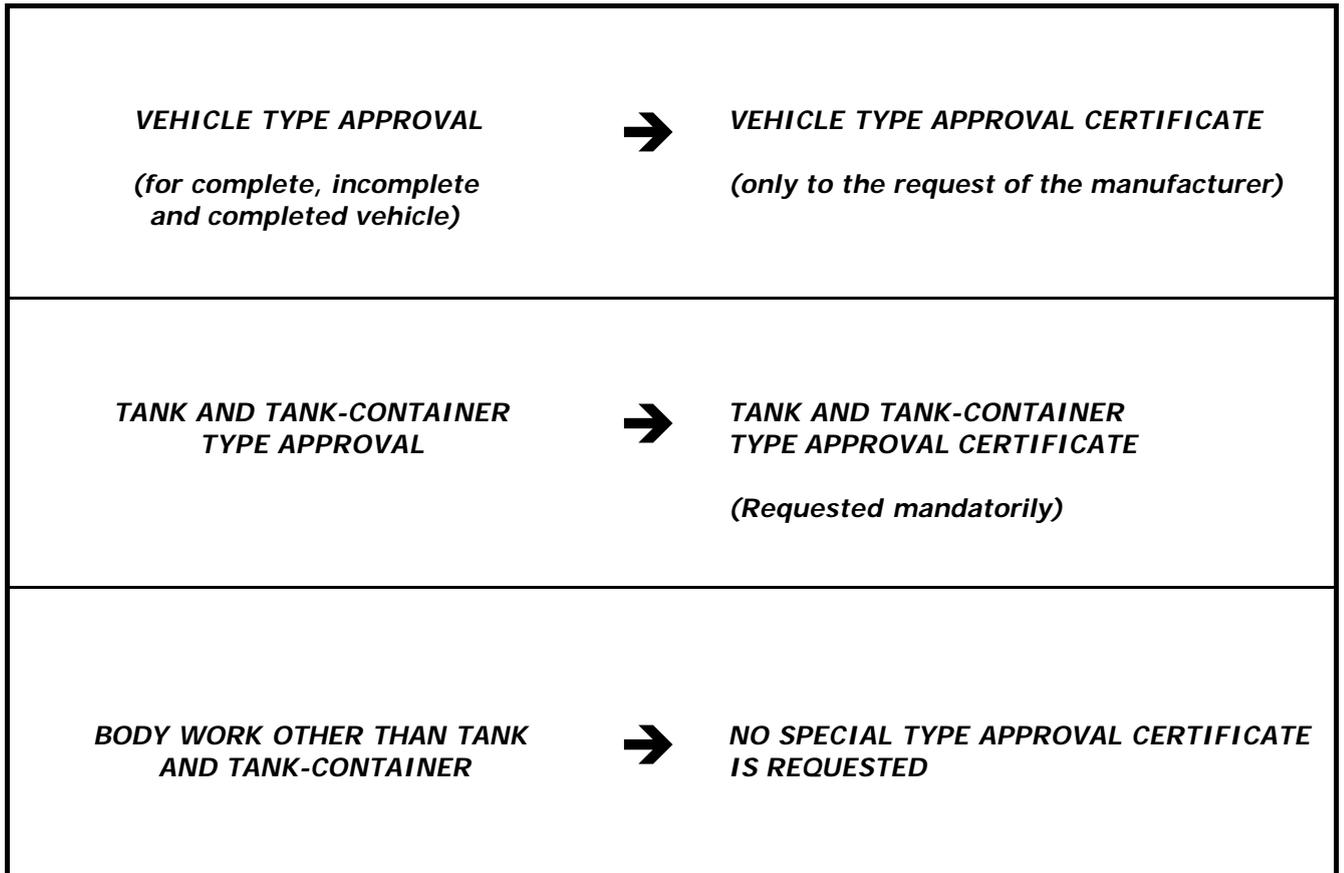
**9.1.2.2.6 CERTIFICATE OF APPROVAL FOR VEHICLES CARRYING CERTAIN DANGEROUS GOODS**

1. Certificate N°

Testifying that the vehicle specified below ....

*UNCHANGED*

APPENDIX 1 – Explanatory layout of the procedures for ADR vehicles



## PART 9.2 <sup>(4)</sup>

### REQUIREMENTS CONCERNING THE CONSTRUCTION OF VEHICLES

9.2.1 EX/II, EX/III, FL, OX and AT vehicles and their trailers intended for the carriage of dangerous goods shall comply with the requirements of this Chapter, according to ... **UNCHANGED**

[For "Other vehicle" as defined in 9.1.1.3 above] [For vehicles other than of EX/II, EX/III, FL, OX and AT]:

- the requirements of 9.2.3.1 are applicable to all vehicles first registered after 30.06.1997;
- the requirements of 9.2.5 are applicable to all motor vehicles with a maximum mass exceeding 12 tonnes registered after 31.12.1987.

9.2.2 **UNCHANGED**

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<sup>(4)</sup> **As reminder:**

*All the new technical prescriptions related to the construction of the vehicles, introduced in the Part 9.2, will applicable to all ADR vehicles which are first registered 24 months after the coming into force date of the European Agreement concerning the international carriage of Dangerous goods by Road (see of the European paragraph 1.6.5 of PART 1 – General provisions).*

TECHNICAL SPECIFICATIONS		VEHICLE					REMARKS
		EX/II	EX/III	AT	FL	OX	
<b>9.2.2</b>	<b>ELECTRICAL EQUIPMENT</b>						
9.2.2.2	<input type="checkbox"/> wiring		X	X	X	X	a) for AT only
9.2.2.3	<input type="checkbox"/> battery master switch						
9.2.2.3.1	✓		X		X		
9.2.2.3.2	✓		X		X		
9.2.2.3.3	✓				X		
9.2.2.3.4	✓		X		X		
9.2.2.4	<input type="checkbox"/> batteries	X	X		X		
9.2.2.5	<input type="checkbox"/> permanently energized installation						
9.2.2.5.1	✓				X		
9.2.2.5.2	✓		X				
9.2.2.6	<input type="checkbox"/> electrical installation situated to the rear of the driver's cab		X		X		
<b>9.2.3</b>	<b>BRAKING</b>						
9.2.3.1	<input type="checkbox"/> general provisions			X	X	X	
9.2.3.2	<input type="checkbox"/> anti lock braking system		X		X	X	b), d)
9.2.3.3	<input type="checkbox"/> endurance braking system				X	X	c), d)
9.2.3.4.1	<input type="checkbox"/> emergency braking device for rear						
9.2.3.4.2	<input type="checkbox"/> emergency braking device for front		X				
<b>9.2.4</b>	<b>FIRE RISKS</b>						
9.2.4.1	<input type="checkbox"/> Cab: material	X	X				
9.2.4.2	<input type="checkbox"/> Cab: thermal shield					X	
9.2.4.3	<input type="checkbox"/> fuel tanks	X	X		X	X	
9.2.4.4	<input type="checkbox"/> engine	X	X		X	X	
9.2.4.5	<input type="checkbox"/> exhaust system	X	X		X		
9.2.4.6	<input type="checkbox"/> endurance braking		X	X	X	X	
9.2.4.7.1	<input type="checkbox"/> combustion heaters	X	X	X	X	X	e)
9.2.4.7.3	<input type="checkbox"/> combustion heaters				X		
9.2.4.7.6	<input type="checkbox"/> combustion heaters	X	X				
<b>9.2.5</b>	<b>SPEED LIMITATION</b>	X	X	X	X	X	f)
<b>9.2.6</b>	<b>COUPLE DEVICE</b>	X	X				

### Notes to table

- a) In the case of AT vehicles carrying tank-containers, this requirement shall apply only to vehicles first registered after 30 June 1997.

Applicable to all AT vehicles carrying tank-containers as from 1<sup>o</sup> January 2005.

- b) Applicable to vehicles first registered after 30 June 1993 in respect ... **UNCHANGED**

- c) Applicable to all vehicles, except for transport units ... **UNCHANGED**

- d) Mandatory compliance for all vehicles as from 1<sup>o</sup> January 2010 ... **UNCHANGED**

- e) Applicable to motor vehicles equipped after 30 June 1999. Mandatory ... **UNCHANGED**

- f) Applicable to motor vehicles with a maximum mass of 12 t ... **UNCHANGED**

### **PART 9.3**

#### **ADDITIONAL REQUIREMENTS CONCERNING THE CONSTRUCTION OF VEHICLE BODIES (EX/II AND EX/III)**

*UNCHANGED*

### **PART 9.4**

#### **ADDITIONAL REQUIREMENTS CONCERNING THE CONSTRUCTION OF THE BODIES OF VEHICLES INTENDED FOR THE TRANSPORT OF DANGEROUS GOODS IN PACKAGES (OTHER THAN EX/II AND EX/III VEHICLES)**

*UNCHANGED*

### **PART 9.5**

#### **ADDITIONAL REQUIREMENTS CONCERNING THE CONSTRUCTION OF THE BODIES OF VEHICLES INTENDED FOR THE TRANSPORT OF DANGEROUS SOLIDS IN BULK**

*UNCHANGED*

### **PART 9.6**

#### **ADDITIONAL REQUIREMENTS CONCERNING VEHICLES INTENDED FOR THE CARRIAGE OF TEMPERATURE CONTROLLED SELF-REACTIVE SUBSTANCES OF CLASS 4.1 AND ORGANIC PEROXIDES OF CLASS 5.2**

*UNCHANGED*

### **PART 9.7**

#### **ADDITIONAL REQUIREMENTS CONCERNING TANK-VEHICLES (FIXED TANKS) BATTERY-VEHICLES AND VEHICLES USED FOR THE CARRIAGE OF DANGEROUS GOODS IN DEMOUNTABLE TANKS OR IN TANK-CONTAINERS OF A CAPACITY GREATER THAN 3,000 LITRES (FL, OX AND AT VEHICLES)**

*UNCHANGED*

(\*) To be updated with the reference of the new ECE Regulation No. 111 – Stability of tank vehicles

## **PART 9.8**

### **ADDITIONAL REQUIREMENTS CONCERNING THE INDIVIDUAL APPROVAL OF VEHICLES**

9.8.1 Every transport unit carrying dangerous goods shall be equipped with:

#### 9.8.1.1 **Fire-fighting appliances**

9.8.1.1.1 (a) At least one portable fire extinguisher of .... **UNCHANGED**

(b) In addition to the equipment prescribed under (a) above, at least ... **UNCHANGED**

9.8.1.1.2 The extinguishing agents contained in the fire extinguishers with ... **UNCHANGED**

9.8.1.1.3 The portable fire extinguishers conforming to the provisions of paragraph 9.8.1.1.1 above shall be fitted with ... **UNCHANGED**

#### 9.8.1.2 **Miscellaneous equipment**

Every transport unit carrying dangerous goods shall be equipped with:

(a) For each vehicle, at least one scotch of a size suited to the weight ... **UNCHANGED**

(b) The necessary equipment to take the general actions ... **UNCHANGED**

(c) The necessary equipment to take the additional and ... **UNCHANGED**

***See Part 8, paragraphs 8.1.3 and 8.1.4 for the complete text***