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# **ECONOMIC COMMISSION FOR EUROPE**

#### INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods (Sixty-ninth session, Geneva, 13-17 November 2000)

# **Transmitted by the Government of Italy**

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

# CHAPTER 9.2 – REQUIREMENTS CONCERNING THE CONSTRUCTION OF VEHICLES

Executive Summary: 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

Action to be taken: PART 1: CHAPTER 1.6 paragraph 1.6.5.4 to be amended (new sentence)

PART 8: CHAPTER 8.1 paragraph 8.1.4 and 8.1.5 to be deleted

PART 9: CHAPTER 9.1 and 9.2 to be amended and CHAPTER 9.8 to

be added

**Related documents**: TRANS/WP.15/159/Add. 1 and 11 and TRANS/WP.15/161/Add. 1

# General remarks

## CHAPTER 9.1

The scope of this proposal is to improve the understanding of the CHAPTER 9.1, 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 incomplete, *may 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) may 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 no 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 CHAPTER 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 two cases:

- when the vehicle or its component has been modified altering, as a consequence,
- its type Approval; and
- when the vehicle is not, from the beginning, type approved for the transport of dangerous goods.

In these cases during the first inspection for the Individual Approval the vehicle shall be verified according to the technical requirements of Part 9.2.

# Example 1

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.

# Example 2

A vehicle type approved by the manufacturer in conformity with the requirements laid down for the goods vehicles has been modified by the owner to transport of dangerous goods.

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 CHAPTER 9.1 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.

# CHAPTER 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

# PART 1 - CHAPTER 1.6 - Paragraph 1.6.5

1.6.5.4 A new sentence added

### PART 8 - CHAPTER 8.1

8.1.4 Deleted

8.1.5 Deleted

# PART 9 - CHAPTER 9.1

9.1 New title

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

# PART 9 - CHAPTER 9.2

- 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

# **Proposal**

#### PART 1

### **GENERAL PROVISIONS**

#### CHAPTER 1.6

# TRANSITIONAL MEASURES

# 1.6.5 Vehicles

# **1.6.5.4** As regards the construction ... *UNCHANGED*

All the new technical requirements related to the construction of the vehicles introduced in the CHAPTER 9.2 will be applicable to all ADR vehicles 24 months after the date of the coming into force of the European Agreement concerning the international carriage of Dangerous goods by Road, as specified here below:

- New registered vehicles, as regards type approved vehicles
- *New individual vehicle approvals, as regards vehicles not type approved.*

### PART 8

# REQUIREMENTS FOR VEHICLE CREWS, EQUIPMENT, OPERATION AND DOCUMENTATION

# CHAPTER 8.1

# GENERAL REQUIREMENTS CONCERNING TRANSPORT UNITS AND EQUIPMENT ON BOARD

Delete paragraph 8.1.4 and 8.1.5

#### PART 9

# REQUIREMENTS CONCERNING THE CONSTRUCTION AND APPROVAL OF VEHICLE.

#### CHAPTER 9.1

# SCOPE, DEFINITIONS and CLASSIFICATIONS AND REOUIREMENTS 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 (one stage built);

"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 CHAPTER 9.2;

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

"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.

#### **CLASSIFICATION**

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

□ EX/II or EX/III vehicle

**UNCHANGED** 

□ FL vehicle

**UNCHANGED** 

□ OX vehicle

**UNCHANGED** 

□ AT vehicle

**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 no 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 CHAPTER 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 CHAPTER 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; but in this case the compliance with CHAPTER 9.2 shall not be verified.

The compliance with CHAPTER 9.2 shall only be verified when the type approved vehicle or its components are modified and, as a consequence, its Type Approval is altered.

In this case during the first inspection for the Individual Approval the vehicle shall be verified according to the technical requirements of CHAPTER 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

<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).

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.
- 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 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 of the vehicle or his duly accredited representative 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<sup>o</sup>

Testifying that the vehicle specified below ....

**UNCHANGED** 

# APPENDIX 1 – Explanatory layout of the procedures for ADR vehicles

# VEHICLE TYPE APPROVAL

→ VEHICLE TYPE APPROVAL CERTIFICATE

(for complete and incomplete vehicle)

(only to the request of the manufacturer)

# TANK AND TANK-CONTAINER TYPE APPROVAL

→ TANK AND TANK-CONTAINER

TYPE APPROVAL CERTIFICATE

(Requested mandatorily)

# BODY WORK OTHER THAN TANK AND TANK-CONTAINER

→ NO SPECIAL TYPE APPROVAL CERTIFICATE IS REQUESTED

**VEHICLE TECHNICAL VERIFICATION** 

**→** 

VEHICLE TYPE APPROVAL CERTIFICATE

OR

VEHICLE INDIVIDUAL APPROVAL

VERIFICATIONS OF THE REQUIREMENTS OF CHAPTER 9.2

TANK OR TANK-CONTAINER CERTIFICATE

ADDITIONAL REQUIREMENTS OF CHAPTER 9.3 TO 9.8

**→** ADMINISTRATIVE PROVISIONS

Ψ

REQUIREMENTS OF PARAGRAPHS FROM 9.1.2.2.1 TO 9.1.2.2.6

**CHAPTER 9.2** (4)

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

# REQUIREMENTS CONCERNING THE CONSTRUCTION OF VEHICLES

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

[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.

Table of the TECHNICAL SPECIFICATIONS: UNCHANGED

### 9.2.2 *UNCHANGED*

### CHAPTER 9.3

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

### **UNCHANGED**

# **CHAPTER 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**

All the new technical requirements related to the construction of the vehicles introduced in the CHAPTER 9.2 will be applicable to all ADR vehicles 24 months after the date of the coming into force of the European Agreement concerning the international carriage of Dangerous goods by Road, as specified here below:

- New registered vehicles, as regards type approved vehicles
- New individual vehicle approvals, as regards vehicles not type approved.

(see paragraph 1.6.5.4 – Vehicles of PART 1 – General provisions).

#### CHAPTER 9.5

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

#### **UNCHANGED**

### CHAPTER 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**

### **CHAPTER 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**

### CHAPTER 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 <i>UNCHANGED</i>
	(b) In addition to the equipment prescribed under (a) above, at least <i>UNCHANGED</i>
9.8.1.1.2	The extinguishing agents contained in the fire extinguishers with <i>UNCHANGED</i>
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 *UNCHANGED*
- (c) The necessary equipment to take the additional and *UNCHANGED*

For the complete text see the old paragraph 8.1.4 and 8.1.5 of the PART 8, CHAPTER 8.1