CHAPTER 8.2
REQUIREMENTS CONCERNING THE TRAINING OF THE VEHICLE CREW

8.2.1 Scope and general requirements concerning the training of drivers

8.2.1.1 Drivers of vehicles carrying dangerous goods shall hold a certificate issued by the competent authority or by any organization recognized by that authority stating that they have participated in a training course and passed an examination on the particular requirements that have to be met during carriage of dangerous goods.

8.2.1.2 Drivers of vehicles carrying dangerous goods shall attend a basic training course. Training shall be given in the form of a course approved by the competent authority. Its main objectives are to make drivers aware of hazards arising in the carriage of dangerous goods and to give them basic information indispensable for minimizing the likelihood of an incident taking place and, if it does, to enable them to take measures which may prove necessary for their own safety and that of the public and the environment, for limiting the effects of an incident. This training, which shall include individual practical exercises, shall act as the basis of training for all categories of drivers covering at least the subjects defined in 8.2.2.3.2. The competent authority may approve basic training courses limited to specific dangerous goods or to a specific class or classes. These restricted basic training courses shall not be provided for drivers of vehicles referred to in 8.2.1.4.

8.2.1.3 Drivers of vehicles or MEMUs carrying dangerous goods in fixed tanks or demountable tanks with a capacity exceeding 1 m³, drivers of battery-vehicles with a total capacity exceeding 1 m³ and drivers of vehicles or MEMUs carrying dangerous goods in tank-containers, portable tanks or MEGCs with an individual capacity exceeding 3 m³ on a transport unit, shall attend a specialization training course for carriage in tanks covering at least the subjects defined in 8.2.2.3.3. The competent authority may approve tank specialization training courses limited to specific dangerous goods or to a specific class or classes. These restricted tank specialization training courses shall not be provided for drivers of vehicles referred to in 8.2.1.4.

8.2.1.4 Drivers of vehicles carrying substances or articles of Class 1, other than substances and articles of Division 1.4, compatibility group S (see additional requirement S1 in Chapter 8.5), drivers of MEMU carrying mixed loads of substances or articles of Class 1 and substances of Class 5.1 (see 7.5.5.2.3) and drivers of vehicles carrying certain radioactive material (see special provisions S11 and S12 in Chapter 8.5) shall attend specialization training courses covering at least the subjects defined in 8.2.2.3.4 or 8.2.2.3.5.

8.2.1.5 By means of appropriate endorsements on his certificate made every five years by the competent authority or by any organization recognized by that authority, a vehicle driver shall be able to show that he has in the year before the date of expiry of his certificate completed refresher training and has passed corresponding examination. The new period of validity shall begin with the date of expiry of the certificate.

8.2.1.6 Initial or refresher basic training courses and initial or refresher specialization training courses may be given in the form of comprehensive courses, conducted integrally, on the same occasion and by the same training organization.

8.2.1.7 Initial training courses, refresher and all training courses, practical exercises, examinations and the role of competent authorities shall comply with the provisions of 8.2.2.
8.2.1.6 All training certificates conforming to the requirements of this section and issued in accordance with the model shown in 8.2.2.8.3 by the competent authority of a Contracting Party or by any organization recognized by that authority shall be accepted during their period of validity by the competent authorities of other Contracting Parties.

8.2.1.8 The certificate shall be prepared in the language or one of the languages of the country of the competent authority which issued the certificate or recognized the issuing organization and, if this language is not English, French or German, also in English, French or German, except where otherwise provided by agreements concluded between the countries concerned with the transport operation.

8.2.1.9 The certificate shall be prepared in the language or one of the languages of the country of the competent authority which issued the certificate or recognized the issuing organization and, if this language is not English, French or German, also in English, French or German, except where otherwise provided by agreements concluded between the countries concerned with the transport operation.

8.2.2 Special requirements concerning the training of drivers

8.2.2.1 The necessary knowledge and skills shall be imparted by training covering theoretical courses and practical exercises. The knowledge shall be tested in an examination.

8.2.2.2 The training body shall ensure that the training instructors have a good knowledge of, and take into consideration, recent developments in regulations and training requirements relating to the carriage of dangerous goods. The training shall be practice-related. The training programme shall conform with the approval referred to in 8.2.2.6, on the subjects set out in 8.2.2.3.2 to 8.2.2.3.5. The initial training and refresher training shall also include individual practical exercises (see 8.2.2.4).

8.2.2.3 Structure of training

8.2.2.3.1 Training shall be given in the form of a basic training course and, when applicable, specialization training courses. Basic training courses and specialization training courses may be given in the form of comprehensive training courses, conducted integrally, on the same occasion and by the same training body. Initial and refresher training shall be given in the form of a basic training course and, when applicable, specialization training courses.

8.2.2.3.2 Subjects to be covered by the basic training course shall be, at least:

(a) General requirements governing the carriage of dangerous goods;
(b) Main types of hazard;
(c) Information on environmental protection in the control of the transfer of wastes;
(d) Preventive and safety measures appropriate to the various types of hazard;
(e) What to do after an accident (first aid, road safety, basic knowledge about the use of protective equipment, instructions in writing, etc.);
(f) Marking, labelling, placarding and orange-coloured plate marking;
(g) What a driver should and should not do during the carriage of dangerous goods;
(h) Purpose and the method of operation of technical equipment on vehicles;
(i) Prohibitions on mixed loading in the same vehicle or container;
(j) Precautions to be taken during loading and unloading of dangerous goods;
(k) General information concerning civil liability;
(l) Information on multimodal transport operations;

(m) Handling and stowage of packages;

(n) Traffic restrictions in tunnels and instructions on behaviour in tunnels (prevention and safety, prevention of incidents, safety, action in the event of fire or other emergencies, etc.);

(o) Security awareness.

8.2.2.3.3 Special Subjects to be covered by the specialization training course for carriage in tanks shall be, at least:

(a) Behaviour of vehicles on the road, including movements of the load;

(b) Specific requirements of the vehicles;

(c) General theoretical knowledge of the various and different filling and discharge systems;

(d) Specific additional provisions applicable to the use of those vehicles (certificates of approval, approval marking, placarding and orange-coloured plate marking, etc.).

8.2.2.3.4 Special Subjects to be covered by the specialization training course for the carriage of substances and articles of Class 1 shall be, at least:

(a) Specific hazards related to explosive and pyrotechnical substances and articles;

(b) Specific requirements concerning mixed loading of substances and articles of Class 1.

8.2.2.3.5 Special Subjects to be covered by the specialization training course for the carriage of radioactive material of Class 7 shall be, at least:

(a) Specific hazards related to ionizing radiation;

(b) Specific requirements concerning packing, handling, mixed loading and stowage of radioactive material;

(c) Special measures to be taken in the event of an accident involving radioactive material.

8.2.2.4.3.6 Teaching units are intended to last 45 minutes.

8.2.2.4.3.7 Normally, not more than eight teaching units are permitted on each day of the course training day.

8.2.2.4.3.8 The individual practical exercises shall take place in connection with the theoretical training, and shall at least cover first aid, fire-fighting and what to do in case of an incident or accident.
8.2.2.4 Initial training programme

8.2.2.4.1 The minimum duration of the theoretical element of each initial training course or part of the comprehensive training course shall be as follows:

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Duration</th>
</tr>
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<tbody>
<tr>
<td>Basic training course</td>
<td>18 teaching units</td>
</tr>
<tr>
<td>Specialization training course for carriage in tanks</td>
<td>12 teaching units</td>
</tr>
<tr>
<td>Specialization training course for carriage of substances and articles of Class 1</td>
<td>8 teaching units</td>
</tr>
<tr>
<td>Specialization training course for carriage of radioactive material of Class 7</td>
<td>8 teaching units</td>
</tr>
</tbody>
</table>

For the basic training course and the specialization training course for carriage in tanks, additional teaching units are required for practical exercises referred to in 8.2.2.3.8 which will vary depending on the number of drivers under instruction.

8.2.2.4.2 The total duration of the comprehensive training course may be determined by the competent authority, who shall maintain the duration of the basic training course and the specialization training course for tanks, but may supplement it with shortened specialization training courses for Classes 1 and 7.

8.2.2.5 Refresher training programme

8.2.2.5.1 Refresher training undertaken at regular intervals serves the purpose of bringing the drivers' knowledge up to date; it shall cover new technical, legal and substance-related developments.

8.2.2.5.2 Refresher training shall have been completed before the period referred to in 8.2.1.5 has expired.

8.2.2.5.2 The duration of the refresher training including individual practical exercises shall be at least two days for comprehensive training courses, or at least one half the duration allocated to the corresponding initial basic or initial specialization training courses as specified in 8.2.2.4.1 for individual training courses.

8.2.2.5.3 The duration of the refresher training including individual practical exercises shall be at least two days.

8.2.2.5.4 A driver may replace a refresher training course and examination with the corresponding initial training course and examination.

8.2.2.5.4 Normally, not more than eight teaching units shall be permitted on each training day.

8.2.2.6 Approval of training

8.2.2.6.1 The training courses shall be subject to approval by the competent authority.

8.2.2.6.2 Approval shall only be given with regard to applications submitted in writing.

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1 Additional teaching units are required for practical exercises referred to in 8.2.2.4.5 below which will vary depending on the number of drivers under instruction.
8.2.6.3 The following documents shall be attached to the application for approval:

(a) A detailed training programme specifying the subjects taught and indicating the time schedule and planned teaching methods;

(b) Qualifications and fields of activities of the teaching personnel;

(c) Information on the premises where the courses take place and on the teaching materials as well as on the facilities for the practical exercises;

(d) Conditions of participation in the courses, such as number of participants.

8.2.6.4 The competent authority shall organize the supervision of training and examinations.

8.2.6.5 Approval shall be granted in writing by the competent authority subject to the following conditions:

(a) The training shall be given in conformity with the application documents;

(b) The competent authority shall be granted the right to send authorized persons to be present at the training courses and examinations;

(c) The competent authority shall be advised in time of the dates and the places of the individual training courses;

(d) The approval may be withdrawn if the conditions of approval are not complied with.

8.2.6.6 The approval document shall indicate whether the courses concerned are basic or specialization training courses, initial or refresher training courses, and whether they are limited to specific dangerous goods or to a specific class or classes.

8.2.6.7 If the training body, after a training course has been given approval, intends to make any alterations with respect to such details as were relevant to the approval, it shall seek permission in advance from the competent authority. This applies in particular to changes concerning the training programme.

8.2.7 Examinations

8.2.7.1 Examinations for the initial basic training course

8.2.7.1.1 After completion of the basic training, including the practical exercises, an examination shall be held on the corresponding basic training course.

8.2.7.1.2 In the examination, the candidate has to prove that he has the knowledge, insight and skill for the practice of professional driver of vehicles carrying dangerous goods as provided in the basic training course.

8.2.7.1.3 For this purpose the competent authority, or the examination body approved by that authority, shall prepare a catalogue of questions which refer to the items summarized in 8.2.3.2. Questions in the examination shall be drawn from this catalogue. The candidates shall not have any knowledge of the questions selected from the catalogue prior to the examination.

8.2.7.1.4 A single examination for comprehensive training courses may be held.

8.2.7.1.5 Each competent authority shall supervise the modalities of the examination.
8.2.2.7.1.6 The examination shall take the form of a written examination or a combination of a written and oral examination. Each candidate shall be asked at least 25 written questions for the basic training course. If the examination follows a refresher training course, at least 15 written questions shall be asked. The duration of these examinations shall be at least 45 and 30 minutes respectively. The questions may be of a varying degree of difficulty and be allocated a different weighting.

8.2.2.7.2 Examinations for initial specialization training courses for carriage in tanks or for carriage of explosive substances and articles of Class 1 or radioactive material of Class 7

8.2.2.7.2.1 After having sat the examination on the basic training course and after having attended the specialization course for carriage in tanks or for the carriage of explosive substances and articles of Class 1 or radioactive material of Class 7, the candidate shall be allowed to take part in the corresponding examination corresponding to the training.

8.2.2.7.2.2 This examination shall be held and supervised on the same basis as in 8.2.2.7.1. The catalogue of questions shall refer to the items summarized in 8.2.2.3.3, 8.2.2.3.4 or 8.2.2.3.5, as appropriate.

8.2.2.7.3 Examinations for refresher training

8.2.2.7.3.1 After having undertaken refresher training the candidate shall be allowed to take part in the corresponding examination.

8.2.2.7.3.2 The examination shall be held and supervised on the same basis as set out in 8.2.2.7.1.

8.2.2.7.3.3 In the examination at least 15 questions shall be asked with respect to the refresher training.

8.2.2.7.3.4 If an examination is based on a restricted basic training course, this limits the examination of the specialization training course to the same scope.

8.2.2.8 Certificate of driver's training

8.2.2.8.1 According to 8.2.1.8, the certificate referred to in 8.2.1.1 shall be issued:

(a) After completion of a basic training course, provided the candidate has successfully passed the examination in accordance with 8.2.2.7.1;

(b) If applicable, after completion of a specialization course for carriage in tanks or carriage of explosive substances or articles or of radioactive material of substances and articles of Class 1 or radioactive material of Class 7, or after having acquired the knowledge referred to in special provisions S1 and S11 in Chapter 8.5, provided the candidate has successfully passed an examination in accordance with 8.2.2.7.2.

(c) If applicable, after completion of a restricted basic or restricted tank specialization training course, provided the candidate has successfully passed the examination in accordance with 8.2.2.7.1 or 8.2.2.7.2. The certificate issued shall clearly indicate its limited scope of validity to the relevant dangerous goods or class(es).

8.2.2.8.2 The date of validity of a driver training certificate shall be five years from the date the driver passes an initial basic or initial comprehensive training examination.
The certificate shall be renewed if the driver furnishes proof of participation in refresher training in accordance with 8.2.2.5 and has passed an examination in accordance with 8.2.2.7 in the following cases:

(a) In the twelve months before the date of expiry of the certificate. The competent authority shall issue a new certificate, valid for five years, the period of validity of which shall begin with the date of expiry of the previous certificate;

(b) Prior to the twelve months before the date of expiry of the certificate. The competent authority shall issue a new certificate, valid for five years, the period of validity of which shall begin from the date on which the refresher examination was passed.

Where a driver extends the scope of his certificate during its period of validity, by meeting the requirements of 8.2.2.8.1 (b) and (c), the period of validity of a new certificate shall remain that of the previous certificate. When a driver has passed a specialization training examination, the specialization shall be valid until the date of expiry of the certificate.

The certificate shall be renewed if the candidate furnishes proof of his participation in refresher training in accordance with 8.2.1.5 and if he has passed an examination in accordance with 8.2.2.7.3.

8.2.2.8.3 The certificate shall have the layout of the model shown in 8.2.2.8.5. Its dimensions shall be in accordance with ISO 7810:2003 ID-1 and it shall be made of plastic. The colour shall be white with black lettering. It shall include an additional security feature such as a hologram, UV printing or guilloche patterns. The certificate shall have the layout of the model below. It is recommended that the format shall be the same as the European national driving permit, namely A7 (105 mm × 74 mm), or a double sheet that can be folded to that format.

8.2.2.8.4 The certificate shall be prepared in the language(s) or one of the languages of the country of the competent authority which issued the certificate. If none of these languages is English, French or German, the title of the certificate, the title of item 8 and the titles on the back shall also be drawn up in English, French or German.
8.2.2.8.5 Model for the training certificate for drivers of vehicles carrying dangerous goods

** Distinguishing sign used on vehicles in international traffic (for Parties to the 1968 Convention on Road Traffic or the 1949 Convention on Road Traffic, as notified to the Secretary General of the United Nations in accordance with respectively article 45 (4) or annex 4 of these conventions).

8.2.3 Training of persons other than the drivers holding a certificate in accordance with 8.2.1, involved in the carriage of dangerous goods by road

Persons whose duties concern the carriage of dangerous goods by road shall have received training in the requirements governing the carriage of such goods appropriate to their responsibilities and duties according to Chapter 1.3. This requirement shall apply to individuals such as personnel who are employed by the road vehicle operator or the consignor, personnel who load or unload dangerous goods, personnel in freight forwarding or shipping agencies and drivers of vehicles other than drivers holding a certificate in accordance with 8.2.1, involved in the carriage of dangerous goods by road.

* Replace the text with appropriate data.