

## I

*(Acts whose publication is obligatory)*

**COUNCIL REGULATION (EC) No 2135/98**

**of 24 September 1998**

**amending Regulation (EEC) No 3821/85 on recording equipment in road transport and Directive 88/599/EEC concerning the application of Regulations (EEC) No 3820/84 and (EEC) No 3821/85**

THE COUNCIL OF THE EUROPEAN UNION,

Council Regulation (EEC) No 3820/85 of 20 December 1985 on the harmonisation of certain social legislation relating to road transport <sup>(5)</sup>;

Having regard to the Treaty establishing the European Community, and in particular Article 75(1)(c) and (d) thereof,

(3) Whereas blatant infringements and fraud present a road safety hazard and are unacceptable for reasons of competition for the individual driver who does respect the rules;

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the Economic and Social Committee <sup>(2)</sup>,

(4) Whereas road safety would be improved by the automatic recording and regular monitoring, both by the undertaking and by the competent authorities, of details of the driver's performance and behaviour and of the vehicle's journey, such as speed and distance covered;

Acting in accordance with the procedure laid down in Article 189c of the Treaty <sup>(3)</sup>,

(1) Whereas Council Regulation (EEC) No 3821/85 of 20 December 1985 on recording equipment in road transport <sup>(4)</sup> lays down provisions concerning the construction, installation, use and testing of recording equipment in road transport;

(5) Whereas Community social regulations contain certain requirements for limits on the daily driving and rest time and also for the total driving and rest time, for up to two weeks; whereas it is difficult to monitor compliance with these requirements given that data are recorded on several daily record sheets, out of which the record sheets for the current week and the last day of the previous week are to be stored in the cab;

(2) Whereas experience has shown that the economic pressures and competition in road transport have led some drivers employed by road haulage companies to flout certain rules, particularly those concerning the driving and rest times laid down in

(6) Whereas, to put an end to the most common abuses of the present system, it is therefore necessary to introduce new advanced equipment such as recording equipment fitted with an electronic device for storing relevant information and a personal driver card, so ensuring that the data recorded are retrievable, intelligible when printed out, and reliable, and that they provide an

<sup>(1)</sup> OJ C 243, 31.8.1994, p. 8 and OJ C 370, 31.12.1985, p. 1.

<sup>(2)</sup> OJ C 110, 21.4.1995, p. 19.

<sup>(3)</sup> Opinion of the European Parliament of 13 July 1995 (OJ C 249, 25.9.1995, p. 128), Council Common Position of 11 December 1997 (OJ C 43, 9.2.1998, p. 6) and Decision of the European Parliament of 31 March 1998 (OJ C 138, 4.5.1998, p. 26).

<sup>(4)</sup> OJ L 370, 31.12.1985, p. 8. Regulation as last amended by Commission Regulation (EC) No 1056/97 (OJ L 154, 12.6.1997, p. 21).

<sup>(5)</sup> OJ L 370, 31.12.1985, p. 1.

indisputable record of the work done by both the driver over the last few days and by the vehicle over a period of several months;

(7) Whereas the total security of the system and its components is essential if recording equipment is to function efficiently;

(8) Whereas provisions need to be established to govern the conditions under which the memory cards provided for in Annex IB may be issued and used;

(9) Whereas the data on drivers' activities must be verifiable by the drivers themselves, by the companies that employ them and by the competent authorities of the Member States; whereas, however, only data relevant to their respective activities should be accessible to a driver and his company;

(10) Whereas the recording equipment provided for in this Regulation must be installed on vehicles put into service for the first time after publication in the *Official Journal of the European Communities* of the technical specifications some of which are defined by the Commission in accordance with the committee procedure referred to in Article 18 of Regulation (EEC) No 3821/85; whereas a transitional period is needed to allow new recording equipment to be manufactured in accordance with those technical specifications and granted EC component type-approval;

(11) Whereas it is desirable that recording equipment complying with Annex IB should also offer the possibility of low-cost expansion of its functions for fleet management;

(12) Whereas, in accordance with the principle of subsidiarity, Community action is necessary to amend Regulation (EEC) No 3821/85 in order to ensure that recording equipment complying with Annex IB is compatible with driver cards and that the data produced by recording equipment complying with Annexes I and IB are consistent;

(13) Whereas technical progress necessitates the prompt adoption of the technical requirements laid down in the Annexes to this Regulation; whereas, in order to facilitate the implementation of the measures needed for this purpose, provision should be made for technical adaptations of those Annexes to be approved by the Commission, acting in accordance with the committee procedure as set out in Council Decision 87/373/EEC of 13 July 1987 laying down the procedures for the

exercise of implementing powers conferred on the Commission <sup>(1)</sup>;

(14) Whereas the introduction of new recording equipment means that certain provisions of Directive 88/599/EEC <sup>(2)</sup> concerning the application of Regulations (EEC) No 3820/85 and (EEC) No 3821/85 need to be amended,

HAS ADOPTED THIS REGULATION:

#### Article 1

Regulation (EEC) No 3821/85 is hereby amended as follows:

1. in Article 1 the words 'and of Annexes I and II thereto' shall be replaced by 'and of Annexes I or IB and II thereto';

2. Articles 4, 5, 6, 7, 8 and 11 shall be amended by adding the words 'or memory card' where reference is made to 'record sheet' or 'record sheets';

3. in Article 4 the following subparagraph shall be inserted before the first subparagraph:

'For the purposes of this Chapter, the words "recording equipment" shall mean "recording equipment or its components".';

4. in Article 5, the first subparagraph shall be replaced by the following:

'A Member State shall grant EC component type-approval to any type of recording equipment, to any model record sheet or memory card which conforms to the requirements laid down in Annex I or IB to this Regulation, provided the Member State is in a position to check that production models conform to the approved type.

The system's security must comply with the technical requirements laid down in Annex IB. The Commission, acting in accordance with the procedure laid down in Article 18, shall ensure that the said Annex stipulates that recording equipment may not be granted EC component type-approval until the whole system (the recording equipment itself, driver card and electrical gearbox connections) has demonstrated its capacity to resist attempts to tamper with or alter the data on driving times. The tests necessary to establish this shall be carried out by experts familiar with up to date tampering techniques.;

<sup>(1)</sup> OJ L 197, 18.7.1987, p. 33.

<sup>(2)</sup> OJ L 325, 29.11.1988, p. 55.

## 5. in Article 12:

## (a) the following shall be added to paragraph 1:

'The period of administrative validity of approved workshop and fitter cards shall not exceed one year.

If a card issued to an approved workshop or fitter is to be extended, is damaged, malfunctions, is lost or is stolen, the authority shall supply a replacement card within five working days of receiving a detailed request to that effect.

Where a new card is issued to replace an old one, the new card shall bear the same "workshop" information number, but the index shall be increased by one. The authority issuing the card shall maintain a register of lost, stolen or defective cards.

Member States shall take any measure necessary to prevent the cards distributed to approved fitters and workshops from being falsified.;

## (b) paragraph 2 shall be replaced by the following:

'2. the approved fitter or workshop shall place a special mark on the seals which it affixes and, in addition, shall enter for recording equipment in conformity with Annex IB, the electronic security data for carrying out, in particular, the authentication checks. The competent authorities of each Member State shall maintain a register of the marks and electronic security data used and of approved workshop and fitter cards issued.;

## (c) paragraph 3 shall be replaced by the following:

'3. The competent authorities of the Member States shall forward to the Commission the lists of approved fitters and workshops and the cards issued to them and shall forward to it copies of the marks and of the necessary information relating to the electronic security data used.;

## (d) in paragraph 4 the reference to 'Annex I' shall be replaced by a reference to 'Annexes I and IB';

## (e) in paragraph 5 the words 'or in Annex IB section VI(c)' shall be inserted after the words 'paragraph 4';

## 6. Article 13 shall be replaced by the following:

*'Article 13*

The employer and drivers shall ensure the correct functioning and proper use of, on the one hand, the recording equipment and, on the other, the driver card where a driver is required to drive a vehicle fitted with recording equipment in conformity with Annex IB.;

## 7. in Article 14:

## (a) paragraph 1 shall be replaced by the following:

'1. The employer shall issue a sufficient number of record sheets to drivers of vehicles fitted with recording equipment in conformity with Annex I, bearing in mind the fact that these sheets are personal in character, the length of the period of service and the possible obligation to replace sheets which are damaged, or have been taken by an authorised inspecting officer. The employer shall issue to drivers only sheets of an approved model suitable for use in the equipment installed in the vehicle.

Where the vehicle is fitted with recording equipment in conformity with Annex IB, the employer and the driver shall ensure that, taking into account the length of the period of service, the printing on request referred to in Annex IB can be carried out correctly in the event of an inspection.;

## (b) the following paragraphs shall be added:

'3. The driver card as defined in Annex IB shall be issued, at the request of the driver, by the competent authority of the Member State where the driver has his normal residence.

A Member State may require any driver subject to the provisions of Regulation (EEC) No 3820/85 and normally resident on its territory to hold a driver card.

(a) For the purposes of this Regulation "normal residence" means the place where a person usually lives, that is for at least 185 days in each calendar year, because of personal and occupational ties, or, in the case of a person with no occupational ties, because of personal ties which show close links between that person and the place where he is living.

However, the normal residence of a person whose occupational ties are in a different place from his personal ties and who consequently lives in turn in different places situated in two or more Member States shall

be regarded as being the place of his personal ties, provided that such person returns there regularly. This last condition need not be met where the person is living in a Member State in order to carry out a fixed-term assignment.

- (b) Drivers shall give proof of their place of normal residence by any appropriate means, such as their identity card or any other valid document.
- (c) Where the competent authorities of the Member State issuing the driver card have doubts as to the validity of a statement as to normal residence made in accordance with point (b), or for the purpose of certain specific controls, they may request any additional information or evidence.
- (d) The competent authorities of the issuing Member State shall, as far as this can be done, ensure that the applicant does not already hold a valid driver card.

4. (a) The competent authority of the Member State shall personalise the driver card in accordance with the provisions of Annex IB.

For administrative purposes, the driver card may not be valid for more than five years.

The driver may hold one valid driver card only. The driver is authorised to use only his own personalised driver card. The driver shall not use a driver card which is defective or which has expired.

When a new driver card is issued replacing the old, the new card shall bear the same driver card issue number but the index shall be increased by one. The issuing authority shall keep records of issued, stolen, lost or defective driver cards for a period at least equivalent to their period of administrative validity.

If the driver card is damaged, malfunctions or is lost or stolen, the authority shall supply a replacement card within five working days of receiving a detailed request to that effect.

In the event of a request for the renewal of a card whose expiry date is approaching, the authority shall supply a new card before the expiry date provided that the request was sent to it within the time limits laid down in the second subparagraph of Article 15(1).

- (b) Driver cards shall be issued only to applicants who are subject to the provisions of Regulation (EEC) No 3820/85.

- (c) The driver card shall be personal. It may not, during its official period of validity, be withdrawn or suspended for whatever reason unless the competent authority of a Member State finds that the card has been falsified, or the driver is using a card of which he is not the holder, or that the card held has been obtained on the basis of false declarations and/or forged documents. If such suspension or withdrawal measures are taken by a Member State other than the Member State of issue, the former shall return the card to the authorities of the Member State which issued it and shall indicate the reasons for returning it.

- (d) Driver cards issued by Member States shall be mutually recognised.

Where the holder of a valid driver card issued by a Member State has established his normal place of residence in another Member State, he may ask for his card to be exchanged for an equivalent driver card; it shall be the responsibility of the Member State which carries out the exchange to verify if necessary whether the card produced is actually still valid.

Member States carrying out an exchange shall return the old card to the authorities of the Member State of issue and indicate the reasons for so doing.

- (e) Where a Member State replaces or exchanges a driver card, the replacement or exchange, and any subsequent replacement or renewal, shall be registered in that Member State.
- (f) Member States shall take all the necessary measures to prevent any possibility of driver cards being falsified.

5. Member States shall ensure that data needed to monitor compliance with Regulation (EEC) No 3820/85 and Council Directive 92/6/EEC of 10 February 1992 on the installation and use of speed limitation devices for certain categories of motor vehicles in the Community(\*) which are recorded and stored by recording equipment in conformity with Annex IB to this Regulation can be made available for at least 365 days after the

date of their recording and that they can be made available under conditions that guarantee the security and accuracy of the data.

Member States shall take any measures necessary to ensure that the resale or decommissioning of recording equipment cannot detract, in particular, from the satisfactory application of this paragraph.

(\*) OJ L 57, 2.3.1992, p.27.;

8. in Article 15:

(a) paragraph 1 and paragraph 2, first subparagraph, shall be amended by adding the words 'or driver card' where reference is made to 'record sheet' or 'record sheets';

(b) in paragraph 1:

— the following subparagraph shall be inserted after the first subparagraph:

'Where a driver wishes to renew his driver card, he shall apply to the competent authorities of the Member State in which he has his normal residence not later than 15 working days before the expiry date of the card.';

— the following fourth subparagraph shall be added:

'If the driver card is damaged, malfunctions or is lost or stolen, the driver shall apply within seven calendar days for its replacement to the competent authorities of the Member State in which he has his normal residence.';

(c) after Article 5 the following paragraph shall be inserted:

'5a. The driver shall enter in the recording equipment in conformity with Annex IB the symbols of the countries in which he begins and ends his daily work period. However, a Member State may require drivers of vehicles engaged in transport operations inside its territory to add more detailed geographic specifications to the country symbol provided that the Member State has notified them to the Commission before 1 April 1998 and that they do not number more than 20.

The above data entries shall be activated by the driver, and may be entirely manual or automatic if the recording equipment is linked to a satellite tracking system.';

(d) at the beginning of the first subparagraph of paragraph 6 the word 'equipment' shall be replaced by 'recording equipment defined in Annex I';

(e) paragraph 7 shall be replaced by the following:

'7. Where the driver drives a vehicle fitted with recording equipment in conformity with Annex I, he must be able to produce, whenever an inspecting officer so requests:

- the record sheets for the current week and, in any event, the sheet for the last day on which he drove during the previous week,
- the driver card if he holds one, and
- print-outs from the recording equipment defined in Annex IB relating to the periods of time indicated in paragraph 3, second indent, (a), (b), (c) and (d) if he drove a vehicle fitted with such recording equipment during the period referred to in the first indent of this paragraph.

Where the driver drives a vehicle fitted with recording equipment in conformity with Annex IB, he must be able to produce, whenever an inspecting officer so requests:

- the driver card of which he is the holder,
- the record sheets corresponding to the same period as the one referred to in the first indent of the previous subparagraph during which he drove a vehicle fitted with recording equipment in conformity with Annex I.

An authorised inspecting officer may check compliance with Regulation (EEC) No 3820/85 by analysis of the record sheets, of the displayed or printed data which have been recorded by the recording equipment or by the driver card or, failing this, by analysis of any other supporting document that justifies non-compliance with a provision, such as those laid down in Article 16(2) and (3).';

(f) the following paragraph shall be added:

'8. It shall be forbidden to falsify, suppress or destroy data recorded on the record sheet, stored in the recording equipment or on the driver card, or print-outs from the recording equipment as defined in Annex IB. The same applies to any manipulation of the recording equipment, record

sheet or driver card which may result in data and/or printed information being falsified, suppressed or destroyed. No device which could be used to this effect shall be present on the vehicle.’;

9. in Article 16:

(a) paragraph 2 shall be replaced by the following:

‘2. While the recording equipment is unserviceable or malfunctioning, drivers shall mark on the record sheet or sheets, or on a temporary sheet to be attached to the record sheet or to the driver card, on which he shall enter data enabling him to be identified (driver’s card number and/or name and/or driving licence number), including his signature, all information for the various periods of time which are no longer recorded or printed out correctly by the recording equipment.

If a driver card is damaged, malfunctions or is lost or stolen, the driver shall, at the end of his journey, print out the information relating to the periods of time recorded by the recording equipment and mark on that document the details that enable him to be identified (the driver card number and/or name and/or driving licence number), including his signature.’;

(b) the following paragraph shall be added:

‘3. If a driver card is damaged or if it malfunctions, the driver shall return it to the competent authority of the Member State in which he has his normal residence. Theft of the driver card shall be the subject of a formal declaration to the competent authorities of the State where the theft occurred.

Loss of the driver card must be reported in a formal declaration to the competent authorities of the State that issued it and to the competent authorities of the Member State of normal residence where they are different.

The diver may continue to drive without a driver card for a maximum period of 15 calendar days or for a longer period if this is necessary for the vehicle to return to its premises, provided he can prove the impossibility of producing or using the card during this period.

Where the authorities of the Member State in which the driver has his normal residence are different from those which issued his card and where the latter are requested to renew, replace or exchange the driver card, they shall inform the authorities which issued the old card of the precise reasons for its renewal, replacement or exchange.’;

10. Article 17 shall be replaced by the following:

*‘Article 17*

1. The amendments necessary to adapt the Annexes to technical progress shall be adopted in accordance with the procedure laid down in Article 18.

2. The technical specifications relating to the following sections of Annex IB shall be adopted as soon as possible and if possible before 1 July 1998 by the same procedure:

(a) Chapter II

- (d) 17:  
displaying and printing of faults in the recording equipment,
- (d) 18:  
displaying and printing of faults in the driver card,
- (d) 21:  
displaying and printing of summary reports;

(b) Chapter III

- (a) 6.3:  
standards for the protection of vehicle electronics against electrical interference and magnetic fields,
- (a) 6.5:  
protection (security) of the total system,
- (c) 1:  
warning signals indicating the internal malfunctioning of the recording equipment,
- (c) 5:  
format of the warnings,
- (f):  
maximum tolerances;

## (c) Chapter IV, A:

- 4:  
standards,
  - 5:  
security, including data protection,
  - 6:  
temperature range,
  - 8:  
electrical characteristics,
  - 9:  
logical structure of the driver card,
  - 10:  
functions and commands,
  - 11:  
elementary files;
- and Chapter IV, B;

## (d) Chapter V:

printer and standard print-outs.';

## 11. Article 18 shall be replaced by the following:

*'Article 18*

1. Where reference is made to the procedure laid down in this Article, the Commission shall be assisted by a committee composed of the representatives of the Member States and chaired by the representative of the Commission.

2. The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148(2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

3. (a) The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.

(b) If the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.

If, on the expiry of a period of three months from the date of referral to the Council, the Council has not acted, the proposed measures shall be adopted by the Commission.';

12. Annex IB, as contained in the Annex to the present Regulation, is hereby added.

*Article 2*

1. (a) 24 months from the date of publication in the *Official Journal of the European Communities* of the act to be adopted pursuant to Article 17(2) of Regulation (EEC) No 3821/85, as amended by this Regulation, vehicles put into service for the first time must be fitted with recording equipment in accordance with the requirements of Annex IB to Regulation (EEC) No 3821/85.

(b) As from the date of entry into force of the provisions of subparagraph (a), vehicles used for the carriage of persons containing more than eight seats apart from the driver's seat and having a maximum weight exceeding 10 tonnes, and also vehicles used for the carriage of goods having a maximum weight exceeding 12 tonnes, registered for the first time as from 1 January 1996, shall in so far as the transmission of signals to the recording equipment with which they are fitted is exclusively electrical, satisfy the requirements of Annex IB to Regulation (EEC) No 3821/85 when the equipment in question is replaced.

2. Member States shall take the necessary measures to ensure that they are able to issue driver cards no later than 21 months following the date of publication of the act referred to in paragraph 1(a).

3. In the event that 12 months after the date of publication of the act referred to in paragraph 1, EC type-approval has not been granted to any item of recording equipment which conforms to the requirements of Annex IB to Regulation (EEC) No 3821/85, the Commission shall submit a proposal to the Council for an extension of the deadline laid down in paragraphs 1 and 2.

4. Drivers who, before the date laid down in paragraph 2, drive vehicles fitted with recording equipment conforming to the requirements of Annex IB to Regulation (EEC) No 3821/85 for which the competent authorities have not yet been able to issue a driver card shall at the end of their daily work period print out the information concerning the various periods of time recorded by the recording equipment and shall indicate their identification details on the print-out (name and driving licence number), and sign it.

*Article 3*

Directive 88/599/EEC is hereby amended as follows:

1. Article 3(2) shall be replaced by the following:

2. The elements of roadside checks are:

- daily driving periods, breaks and daily rest periods; in the case of clear indications of irregularities, also the preceding days' record sheets which have to be carried on board the vehicle in accordance with Article 15(7) of Regulation (EEC) No 3821/85 as amended by Regulation (EC) No 2135/98(\*) and/or the data stored for the same period on the driver card and/or in the memory of the recording equipment in conformity with Annex IB,
- for the period referred to in Article 15(7) of Regulation (EEC) No 3821/85, any cases where the vehicle's authorised speed is exceeded, to be defined as being any periods of more than 1 minute during which the vehicle's speed exceeds 90 km/h for category N<sub>3</sub> vehicles or 105 km/h for category M<sub>3</sub> vehicles (categories N<sub>3</sub> and M<sub>3</sub> being as defined in Annex I to Directive 70/156/EEC)(\*\*),
- where appropriate, momentary speeds attained by the vehicle as recorded by the recording equipment in no more than the previous 24 hours' use of the vehicle,
- last weekly rest period, where appropriate,

- correct functioning of the recording equipment (determination of possible misuse of the equipment and/or the driver card and/or record sheets) or, where appropriate, presence of the documents referred to in Article 14(5) of Regulation (EEC) No 3820/85.

(\*) Council Regulation (EC) No 2135/98 of 24 September 1998 amending Regulation (EEC) No 3821/85 on recording equipment in road transport and Directive 88/599/EEC concerning the procedures for applying Regulations (EEC) No 3820/85 and (EEC) No 3821/85 (OJ L 274, 9.10.1998, p. 1).

(\*\*) Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers (OJ L 42, 23.2.1970, p. 1). Directive as last amended by Directive 97/27/EC (OJ L 233, 25.8.1997, p. 1).';

2. Article 4(3) shall be replaced by the following:

3. For the purposes of this Article, checks carried out at the premises of the competent authorities, on the basis of relevant documents and/or data handed over by undertakings at the request of the said authorities, shall have the same status as checks carried out at the premises of undertakings.'

*Article 4*

This Regulation shall enter into force on the day following its publication in the *Official Journal of the European Communities*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 24 September 1998.

*For the Council*

*The President*

J. FARNLEITNER

## ANNEX

## ANNEX I(B)

## REQUIREMENTS FOR CONSTRUCTION, TESTING, INSTALLATION, AND INSPECTION

## I. DEFINITIONS

In this Annex:

(a) **“recording equipment” means:**

the total equipment intended for installation in road vehicles to show, record and store automatically or semi-automatically details of the movement of such vehicles and of certain work periods of their drivers. This equipment includes cables, sensors, an electronic driver information device, one (two) card reader(s) for the insertion of one or two driver memory card(s), an integrated or separate printer, display instruments, facilities for downloading the data memory, facilities to display or print information on demand and facilities for the input of the places where the daily work period begins and ends;

(b) **“data memory” means:**

an electronic storage system built into the recording equipment, capable of storing at least 365 calendar days from the recording equipment. The memory should be protected in such a way as to prevent unauthorised access to and manipulation of the data and detect any such attempt;

(c) **“driver card (with memory)” means:**

a removable information transfer and storage device allocated by the authorities of the Member States to each individual driver for the purposes of identification of the driver and storage of essential data. The format and technical specifications of the driver card (with memory) shall meet the requirements laid down in Chapter IV of this Annex;

(d) **“the constant of the recording equipment” means:**

the numerical characteristic giving the value of the input signal required to show and record a distance travelled of one kilometre; this constant must be expressed either in revolutions per kilometre ( $k = \dots \text{ rev/km}$ ) or in impulses per kilometre ( $k = \dots \text{ imp/km}$ );

(e) **“characteristic coefficient of the vehicle” means:**

the numerical characteristic giving the value of the output signal emitted by the part of the vehicle linking it with the recording equipment (gearbox output shaft or axle) while the vehicle travels a distance of one kilometre under normal test conditions (see Chapter VII(e)). The characteristic coefficient is expressed either in revolutions per kilometre ( $w = \dots \text{ rev/km}$ ) or in impulses per kilometre ( $w = \dots \text{ imp/km}$ );

(f) **“effective circumference of the wheel tyres” means:**

the average of the distances travelled by each of the wheels moving the vehicle (driving wheels) in the course of one complete rotation. The measurement of these distances must be made under normal test conditions (see Chapter VII(e)) and is expressed in the form “ $l = \dots \text{ mm}$ ”; where appropriate measurement of these distances may be based on a theoretical calculation which takes into account the distribution of the maximum authorised weight on the axles;

(g) **“test station card” means:**

a removable data transfer and storage device for use in the card reader of the recording equipment, issued by the authorities of the Member States to their authorised bodies. The test station card identifies the body and allows for testing, calibration and programming of the recording equipment;

(h) **“control card” means:**

a removable data transfer and storage device for use in the card reader of the recording equipment, issued by the authorities of the Member States to competent authorities to get access to the data stored in the data memory or in the driver cards for reading, printing and/or downloading;

(i) **“company data card” means:**

a removable data transfer and storage device issued by the Member State's authorities to the owner of vehicles fitted with recording equipment.

The company data card allows for displaying, downloading and printing of the data stored in the (item of) recording equipment fitted in the company's vehicle(s);

(j) **“calendar day” means:**

a day ranging from 00.00 hours to 24.00 hours. All calendar days relate to UTC time (universal time coordinated);

(k) **“downloading” means:**

copy of a part or of a complete set of data stored in the data memory of the vehicle or in the memory of the driver card.

Downloading may not alter or delete any stored data.

Downloaded data are protected in such a way as to make attempts to data manipulation detectable; origin of downloaded data must be authenticatable.

Downloaded data are kept in a format that can be used by any authorised person;

(l) **“vehicle identification” means:**

number(s) identifying the vehicle on the basis of its VIN and/or its VRN.

## II. GENERAL CHARACTERISTICS AND FUNCTIONS OF RECORDING EQUIPMENT

The equipment must be able to record, store, display and print the following:

(a) **recording and storing in the data memory**

1. distance travelled by the vehicle with an accuracy of 1 km;
2. speed of the vehicle;
  - 2.1. momentary speed of the vehicle at a frequency of 1 s for the last 24 hours of use of the vehicle;
  - 2.2. exceeding the authorised speed of the vehicle, defined as any period of more than 1 minute during which the vehicle speed exceeds 90 km/h for N<sub>3</sub> vehicles or 105 km/h for M<sub>3</sub> vehicles (with time, date, maximum speed of the overspeeding, average speed during the period concerned);
3. periods of driving time (times and dates), with an accuracy of 1 minute;
4. other periods of work or of availability (times and dates) with an accuracy of 1 minute;
5. breaks from work and daily rest periods (times and dates) with an accuracy of 1 minute;
6. for electronic recording equipment which is equipment operated by signals transmitted electrically from the distance and speed sensor, any interruption exceeding 100 milliseconds in the power supply of the recording equipment (except lighting), in the power supply of the distance and speed sensor and any interruption in the signal lead to the distance and speed sensor, with date, time, duration and driver card issue number;

7. the driver card issue number with times and dates of insertion and removal;
8. for each driver card that is inserted for the first time after it was used in another item of recording equipment:
  - current driving time since the last break or rest period,
  - driving time for the day after the last rest period of at least eight hours,
  - driving times for the day between two rest periods of at least eight hours for the preceding 27 calendar days with date, time and duration,
  - total of the driving times for the current week and the preceding week and the total of the driving times of the two completed preceding weeks,
  - rest periods of at least eight hours' duration for the day and the preceding 27 calendar days in each case with date, time and duration,
  - the VRN of the vehicles driven;
9. date, time and duration of driving without an inserted or a functioning driver card;
10. data recorded on the places at which the daily work period began and ended;
11. automatically identifiable system faults of the recording equipment with date, time and driver card issue number;
12. faults in the driver card with date and time and driver card issue number;
13. workshop card number of the authorised fitter or workshop with date of at least the last installation inspection and/or periodic inspection of the recording equipment in accordance with Chapter VII(c) and (d);
14. control card number with date of control card insertion and type of control (display, printing, downloading). In case of downloading, period downloaded should be recorded;
15. time adjustment with date, time and card issue number;
16. driving status (single/crew driving — driver/co-driver);

**(b) storing on the driver card**

1. the essential data for the periods listed under point (a)(3), (4) and (5) for a period of at least the last 28 calendar days combined with the "VRN" identification of the vehicle driven and the data under point (a)(10), (14) and (16);
2. the events and faults according to point (a)(6), (11) and (15) with the "VRN" identification of the vehicle driven;
  - 2.1. date and time of insertion and removal of the driver card and distance travelled during the corresponding period;
  - 2.2. date and time of insertion and removal of the co-driver card with issue number;
3. data must be recorded and stored on the driver card in such a way as to rule out any possibility of falsification;

**(c) recording and storing in the case of two drivers**

for vehicles used by two drivers the driving time listed under point (a)(3) must be recorded and stored on the driver card of the driver who is driving the vehicle. The equipment must record and store in the data memory and on the two driver cards simultaneously but distinctly details of the information listed under point (a)(4) and (5);

(d) displaying or printing on request for an authorised user

1. driver card issue number, expiry date of the card;
2. the surname and first name of the driver who is the cardholder;
3. current driving time since the last break or rest period;
4. driving time for the day after the last rest period of at least eight hours;
5. driving times for the day between two rest periods of at least eight hours for the preceding 27 calendar days on which the driver has driven, with date, time and duration;
6. total of the driving times for the current week and the preceding week and the total times for the two completed preceding weeks;
7. the other periods of work and availability;
8. rest periods of at least eight hours' duration for the day and the preceding 27 days in each case with date, time and duration;
9. "VRN" identification of vehicles driven for at least the last 28 calendar days with the distance travelled per vehicle and day, time of first insertion and last removal of the driver card and the time of change of vehicle;
10. time adjustment with date, time and card issue number;
11. interruption of power supply to the recording equipment with date, time, duration and driver card issue number (as defined in point (a)(6));
12. sensor interruption with date, time, duration and driver card issue number (as defined in point (a)(6));
13. the "VIN" and/or "VRN" identification of the vehicle driven;
14. driving without driver card as defined in point (a)(9) for the last 28 calendar days;
15. details of the information stored concerning the driver (as defined in point (c));
16. recorded data on the places where the daily work period began and ended;
17. the automatically identifiable system faults of the recording equipment with date, time and driver card issue number;
18. the faults in the driver card with date and time and driver card issue number;
19. control card number with date of control card insertion and type of control (display, printing, downloading). In the case of downloading, period downloaded should be recorded;
20. exceeding the authorised speed as defined in point (a)(2.2), with date, time and driver card issue number for the current week and in any case including the last day of the previous week;
21. summary reports whereby compliance with Regulations (EEC) No 3820/85 and (EEC) No 3821/85 and Directive 88/599/EEC can be checked.

### III. CONSTRUCTION AND FUNCTIONAL REQUIREMENTS FOR RECORDING EQUIPMENT

(a) General points

- 1.1. Any inclusion in or connection to the recording equipment of any device, or devices, approved or otherwise, must not interfere with, or be capable of interfering with, the proper operation of the recording equipment. The recording equipment must be submitted for approval complete with any such included devices.

1.2. The recording equipment must be capable of operating correctly in all the climatic conditions normally encountered in Community territory.

2. *Materials*

2.1. All the constituent parts of the recording equipment must be made of materials of sufficient stability and mechanical strength and with stable electrical and magnetic characteristics.

2.2. Any modification in a constituent part of the equipment or in the nature of the materials used for its manufacture must, before being used, be submitted for approval to the authority which granted type-approval for the recording equipment.

3. *Measurement of distance travelled*

The distance travelled may be measured and recorded either:

- so as to include both forward and reverse movements, or
- so as to include only forward movement.

Any recording of reversing movements must on no account affect the clarity and accuracy of the other recordings.

4. *Measurement of speed*

4.1. The range of speed measurement must be as stated in the type-approval certificate.

4.2. The natural frequency and the damping of the measuring device must be such that the instruments showing and recording the speed can, within the range of measurements, follow acceleration changes of up to 2 m/s<sup>2</sup>, within the limits of accepted tolerances.

5. *Measurement of time (clock)*

Time is digital. Update is performed (if necessary) at the authorised workshop. The internal clock time is UTC. The driver can change the offset of the time displayed on the display screen.

5.1. The measurement of time is effected automatically in the recording equipment.

5.2. The clock time in the memory can be reset only when an authorised workshop card is inserted.

6. *Lighting and protection*

6.1. The visual instruments of the equipment must be provided with adequate non-dazzling lighting.

6.2. For normal conditions of use, all the internal parts of the equipment must be protected against damp and dust. In addition, they must be made tamper-proof by means of casings capable of being sealed.

6.3. Protection against electrical interference and magnetic fields must be provided complying with standards for electronics in vehicles.

6.4. The cables connecting the recording equipment to the transmitter must be protected by electronic monitoring, such as signal encryption, capable of detecting the presence within that part of the system of any device, not otherwise necessary for the correct operation of the recording equipment, which is capable of preventing the accurate operation of the recording equipment by any short circuit, interruption or modification of the electronic data from the speed and distance sensor, or by the duplication of any other approved devices, when that device is connected and put into operation.

6.5. The total system, including the connections to the speed and distance sensor must be tamper-proof.

6.6. The recording equipment must self-detect faults.

**(b) Visual instruments**

Indications must be visible from outside the recording equipment and give a clear, plain and unambiguous reading including where there are two drivers.

The display instrument must enable the information referred to in Chapter II(d) to be displayed on request. The request can take place selectively or sequentially.

**(c) Warning signals**

1. A warning to the driver of at least 30 seconds if the vehicle is driven:

- without the driver card in place,
- with a malfunctioning card,
- with the driver card in the wrong slot,
- when the recording equipment has detected one or more cases of internal malfunctioning, in particular those referred to in Chapter II(d)(17) and (18),
- above the speed limit as defined in Chapter II(a)(2.2).

2. A warning to the driver before exceeding four and a half hours driving time per period of driving time and nine hours daily driving time, 15 minutes before and at the time of exceeding the limit.

3. A warning to the driver, 15 minutes before and at the time of failing to observe the required eight hours daily rest period within the last 24 hours.

4. Additional warnings may be installed at the request of the vehicle owner.

5. *Format of the warnings*

Warnings may be either auditory or visual, or a combination of both and must be clearly recognisable by the user.

**(d) Memory**

1. The periods of time referred to in Chapter II(a)(3), (4) and (5) must be stored whenever there is any change of activity or status.

2. The period of driving time must always be stored automatically when the vehicle is in motion.

3. The other periods of time as indicated in Article 15(3), second indent (b), (c) and (d) of the Regulation must always be stored separately through the operation where necessary of an activity selection device.

**(e) Markings**

1. The following details must appear on the instrument face of the recording equipment:

- near the figure indicating the distance, the unit of measurement of distance, indicated by the abbreviation “km”,
- near the figure showing the speed, the entry “km/h”.

2. The descriptive plaque must be visible on the recording equipment and must show the following details:
  - name and address of the manufacturer of the equipment,
  - manufacturer's number and year of manufacture of the equipment,
  - approval mark for the recording equipment type,
  - the constant of the recording equipment in the form "k = . . . rev/km" or "k = . . . imp/km",
  - optionally, the range of speed measurements, in the form indicated in 1.

This information may also be shown on demand by the recording equipment.

(f) **Maximum tolerances (display and recording instruments)**

1. The maximum tolerances relate to distance travelled, speed and time and are measured on the dynamometer before installation and, under the circumstances referred to in Chapter VII, on installation, during periodic inspection and in use.
2. The maximum tolerances set out in 1 are valid for extreme temperatures corresponding to climatic conditions normally encountered in Community territory.

#### IV. CARDS WITH MEMORY

##### A. DRIVER CARD (WITH MEMORY)

###### 1. **Insertion/removal**

The recording equipment must be so designed that the driver card (with memory) is locked in position on its proper insertion into the card reader and that the relevant driver card data are automatically stored in the data memory of the recording equipment. The release of the driver card may function only when the vehicle is stationary and after the relevant data have been stored on the driver card.

###### 2. **Memory capacity of the driver card**

The capacity of the driver card must be sufficient to store at least 28 calendar days of data referred to in Chapter II(c) for the actual driver. Should the data card be full the new data will replace the oldest data.

###### 3. **Visible data**

Page 1 will contain:

- (a) the words "Driver card" printed in large type in the official language or languages of the Member State issuing the card;

"Driver card" in the other official languages of the Community, printed to form the background of the licence:

es: TARJETA DEL CONDUCTOR  
dk: FØRERKORT  
de: FAHRERKARTE  
el: ΚΑΡΤΑ ΟΔΗΓΟΥ  
en: DRIVER CARD  
fr: CARTE DE CONDUCTEUR  
ga: CÁRTA TIOMÁNAÍ

it:	CARTA DEL CONDUCENTE
nl:	BESTUURDESKAART
pt:	CARTÃO DE CONDUTOR
fi:	KULJETTAJAKORTTI
sv:	FÖRARKORT;

(b) the name of the Member States issuing the card (optional);

(c) the distinguishing sign of the Member States issuing the card, printed in negative in a blue rectangle and encircled by 12 yellow stars; the distinguishing signs shall be as follows:

B	Belgium
DK	Denmark
D	Germany
GR	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	The Netherlands
A	Austria
P	Portugal
FIN	Finland
S	Sweden
UK	The United Kingdom

(d) information specific to the card issued, numbered as follows:

1. surname of the holder;
2. first name(s) of the holder;
3. date and place of birth;
4. (a) date of issue of the card;  
(b) date of expiry of the card;  
(c) the name of the issuing authority (may be printed on page 2);  
(d) a different number from the one under heading 5, for administrative purposes (optional);
5. (a) driving licence number including number of replacement issue;  
(b) driver card issue number including index number of replacement issue;
6. photograph of the holder;
7. signature of the holder;
8. normal place of residence, or postal address of the holder (optional).

The data referred to in 1, 2, 3, 4(b) and 5(a) and (b) will also be stored in the driver card memory.

Page 2 will contain:

- (a) an explanation of the numbered items which appear on pages 1 and 2 of the card;

- (b) with the specific written agreement of the holder, information which is not related to the administration of the driver card may also be added, such addition will not alter in any way the use of the model as a driver card.

**COMMUNITY MODEL DRIVER CARD**

Page 1

	<b>DRIVER CARD</b>	<b>MEMBER STATE</b>
	1.	
	2.	
	3.	
6.	4a.	4c.
	4b.	(4d.)
	5a.	
	5b.	
	7.	
	(8.)	

Page 2

	1. Surname	2. Name	3. Date and place of birth
	4a. Card issuing date		
	4b. Administrative expiry date of card		
	4c. Issuing authority		
	(4d.) No for national administrative purposes		
	5a. Driving licence number	5b. Driver card number	
	6. Photograph		
	7. Signature	(8.) Address	
Please return to:			
<b>NAME OF AUTHORITY AND ADDRESS</b>			

**SPECIMEN COMMUNITY MODEL DRIVER CARD: BELGIAN CARD**  
(For information)

	<b>BESTUURDESKAART</b>	<b>KONINKRIJK BELGIË</b>
	1. Ruyter	
	2. Georges	
	3. 01.04.73	Milano
6. FOTO	4a. 01.07.98	4c. B-9000 Gent
	4b. 30.06.03	
	5a. DA 003 360	
	5b. 11 ABC 334455	
	7.	

	<b>CARTE DE CONDUCTEUR</b>	<b>ROYAUME DE BELGIQUE</b>
	1. Jeanneaux	
	2. Herald	
	3. 01.03.74	B-7000 Mons
6. PHOTO	4a. 01.09.98	4c. B-1180 Uccle
	4b. 30.08.03	
	5a. DB 004 380	
	5b. 11 ABD 223344	
	7.	

#### 4. Standards

The driver card and recording equipment must conform to the following standards:

- ISO 7810,
- ISO 7816-1,
- ISO 7816-2,
- ISO 7816-3,
- draft ISO 7816-4,
- draft ISO 10373,
- the detailed functional specifications defined within systems of identification cards intended for use in surface transport.

#### 5. Security, including data protection

The various components of the driver card are intended to exclude any falsification or tampering and to detect any attempt of that kind.

**6. Temperature range**

The driver card must be capable of operating correctly in all the climatic conditions normally encountered in Community territory.

**7. Lifetime**

The card must be capable of operating correctly for a five-year period if used within the environmental and electrical specifications.

**8. Electrical characteristics**

The electrical characteristics of the card must correspond to the specifications applicable to electronics in vehicles.

**9. Logical structure of the driver card**

The logical structure of the card must be defined in such a way as to guarantee its proper operation and its compatibility with any recording equipment complying with this Annex.

**10. Functions and commands**

The card's functions and commands must cover all the functions referred to in Chapter I(c) and Chapter II(b).

**11. Elementary files**

The specifications of elementary files must be within the framework of the standards referred to in 4.

**12. Special provisions**

After consulting the Commission, Member States may add colours or markings, such as national symbols and security features, without prejudice to the other provisions of this Annex.

**B. TEST STATION CARD (WITH MEMORY), CONTROL CARD (WITH MEMORY) AND COMPANY DATA CARD (WITH MEMORY)**

The specifications of the test station, control and company data cards (with memory) must be such that they operate correctly when used as provided for in Chapter I(g), (h) and (i) and are compatible with any recording equipment complying with this Annex. The structure of the cards must be so designed as to give access only to the authorised user and only for the exercise of the functions which each card is intended to fulfil.

**V. PRINTER AND STANDARD PRINT-OUTS**

1. Printers must be so designed as to produce the print-outs referred to in Chapter II(d) with a degree of definition likely to avoid any ambiguity when they are read. Print-outs must remain clearly legible and identifiable under normal conditions of storage for at least one year.

They must retain their dimensions and recordings under normal conditions of humidity and temperature.

It must also be possible to add handwritten notes, such as the driver's signature, to these documents.

2. The minimum capacity of print-outs, whatever their form, must be sufficient to allow the printing of the information referred to in Chapter II(d).

If several print-outs have to be linked together to increase printing capacity, the links between the various documents must be made in such a way that there are no breaks in the data at the points linked which could jeopardise interpretation of the data.

## VI. INSTALLATION OF RECORDING EQUIPMENT

## (a) Installation

1. The recording equipment must be protected against accidental damage.
2. It must be possible for authorised agents to adapt the constant of the recording equipment to the characteristic coefficient of the vehicle by means of a suitable device, to be known as an adaptor.

Vehicles with two or more axle ratios must be fitted with a switch device whereby these various ratios will automatically be brought into line with the ratio for which the equipment has been adapted to the vehicle by the adaptor.

## (b) Installation plaque

After the equipment has been checked on installation, an installation plaque which is clearly visible must be affixed on, in or beside the equipment. After every inspection by an approved fitter or workshop requiring a change in the calibration of the installation, a new plaque must be affixed in place of the previous one.

The plaque must bear at least the following details:

- name, address or trade name of the approved fitter or workshop,
- characteristic coefficient of the vehicle, in the form “ $w = \dots \text{ rev/km}$ ” or “ $w = \dots \text{ imp/km}$ ”,
- effective circumference of the wheel tyres in the form “ $l = \dots \text{ mm}$ ”,
- the date on which the characteristic coefficient of the vehicle was determined and the effective circumference of the wheel tyres measured,
- the last eight digits of the chassis number of the vehicle.

## (c) Sealing

1. The following parts must be sealed:
  - (a) any connection which, if disconnected, would cause undetectable alterations to be made or data to be lost;
  - (b) any cover giving access to the circuits or mechanisms, any alteration of which would affect the proper operation of the recording equipment or which would allow unauthorised alteration of the equipment's characteristics;
  - (c) the installation plaque, unless it is attached in such a way that it cannot be removed without the markings thereon being destroyed.
2. In all cases, the location of the seals must be mentioned on the type-approval certificate and their effectiveness tested as part of the type-approval procedures.
3. The seals mentioned in 1(b) may be removed:
  - in case of emergency,
  - to install, to adjust or to repair a speed limitation device or any other device contributing to road safety, provided that the recording equipment continues to function reliably and correctly and is resealed by an approved fitter or workshop (in accordance with Chapter VII) immediately after fitting the speed limitation device or any other device contributing to road safety or within seven days in other cases.

On each occasion that these seals are broken a written statement giving the reasons for such action must be prepared and made available to the competent authority.

## VII. CHECKS AND INSPECTIONS

**(a) Approval of test stations (fitters and workshops)**

The Member States will nominate the bodies to carry out the checks and inspections.

**(b) Certification of new or repaired instruments**

Every individual device, whether new or repaired, must be certified in respect of its proper operation and the accuracy of its readings and recordings, within the limits laid down in Chapter III(f)(1) by means of sealing in accordance with Chapter VI(c)(1) or equivalent digital information in the data memory of the recording equipment.

**(c) Installation inspection and programming**

1. When being fitted to a vehicle, the recording equipment and the whole installation must comply with the provisions relating to maximum tolerances laid down in Chapter III(f)(2).
2. The following programming of the recording equipment must be carried out:
  - the date of the installation test,
  - the universal time coordinated (UTC),
  - the “VIN” and “VRN” vehicle identification,
  - the number of the workshop card of the approved fitter or approved workshop.

**(d) Periodic inspections**

1. Periodic inspections of the equipment fitted to vehicles must take place after any repair of the equipment or after any alteration of the characteristic coefficient of the vehicle or of the effective circumference of the tyres or at least once within two years of the last inspection; they may be carried out in conjunction with roadworthiness tests on vehicles.

These inspections must include at least the following checks:

- that the recording equipment is working properly, including the downloading of data to and from the workshop card,
  - that compliance with the provisions of Chapter III(f)(2) on the maximum tolerances on installation is ensured,
  - that the recording equipment carries the type-approval mark,
  - that the installation plaque is affixed,
  - that the seals on the equipment and on the other parts of the installation are intact,
  - the actual circumference of the tyres.
2. The following programming of the recording equipment must be carried out:
    - the date of the periodic inspection,
    - the universal time coordinated (UTC),
    - the “VIN” and “VRN” vehicle identification,
    - the number of the card of the approved workshop.
  3. Such inspections must include replacement of the installation plaque or equivalent digital information in the data memory of the recording equipment.

(e) **Measurement of errors**

The measurement of errors on installation and during use must be carried out under the following conditions, which are to be regarded as constituting standard test conditions:

- vehicle unladen, in normal running order,
  - tyre pressures in accordance with the manufacturer's instructions,
  - tyre wear within the limits allowed by national law,
  - vehicle movement: the vehicle must advance under its own engine power in a straight line on level ground and at a speed of  $50 \pm 5$  km/h. The measuring distance must be at least 1 000 m,
  - provided that it is of comparable accuracy, an appropriate dynamometer may also be used for the test.'
-