ANNEX I C

Requirements for construction, testing, installation, and inspection

2. GENERAL CHARACTERISTICS AND FUNCTIONS OF THE RECORDING EQUIPMENT

2.1 **General characteristics**

The purpose of the recording equipment is to record, store, display, print, and output data related to driver activities.

Any vehicle fitted with the recording equipment complying with the provisions of this Annex, must include a speed display and an odometer. These functions may be included within the recording equipment.

(1) The recording equipment includes cables, a motion sensor, and a vehicle unit.

(2) The interface between motion sensors and vehicle units shall comply with the requirements specified in Appendix 11.

(3) The vehicle unit shall be connected to global navigation satellite system(s), as specified in Appendix 12.

(4) The vehicle unit shall communicate with remote early detection communication readers, as specified in Appendix 14.

(5) The vehicle unit may include an ITS interface, which is specified in Appendix 13

The recording equipment may be connected to other facilities through additional interfaces and/or through the optional ITS interface.

(6) Any inclusion in or connection to the recording equipment of any function, device, or devices, approved or otherwise, shall not interfere with, or be capable of interfering with, the proper and secure operation of the recording equipment and the provisions of this Regulation.

Recording equipment users identify themselves to the equipment via tachograph cards.

(7) The recording equipment provides selective access rights to data and functions according to user's type and/or identity.

The recording equipment records and stores data in its data memory, in the remote communication facility and in tachograph cards.

This is done in accordance with Directive 95/46/EC of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data[(1)], with Directive 2002/58/EC of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector[(2)] and in compliance with Article 7 of Regulation (EU) No. 165/2014.

2.2 **Functions**

(8) The recording equipment shall ensure the following functions:

— monitoring cards insertions and withdrawals,
— speed, distance and position measurement,
— time measurement,
— monitoring driver activities,

— monitoring driving status,
— drivers manual entries:
  — entry of places where daily work periods begin and/or end,
  — manual entry of driver activities,
  — entry of specific conditions,
— company locks management,
— monitoring control activities,
— detection of events and/or faults,
— built-in and self-tests,
— reading from data memory,
— recording and storing in data memory,
— reading from tachograph cards,
— recording and storing in tachograph cards,
— displaying,
— printing,
— warning,
— data downloading to external media,
— remote communication for targeted roadside checks,
— output data to additional facilities,
— calibration,
— roadside calibration check,
— time adjustment.

2.3 **Modes of operation**

(9) The recording equipment shall possess four modes of operation:
— operational mode,
— control mode,
— calibration mode,
— company mode.

(10) The recording equipment shall switch to the following mode of operation according to the valid tachograph cards inserted into the card interface devices. In order to determine the mode of operation, the tachograph card generation is irrelevant, provided the inserted card is valid. A first generation workshop card shall always be considered as non-valid when it is inserted in a second generation VU.

Mode of operation		**Driver slot**				
		No card	**Driver card**	**Control card**	**Workshop card**	**Company card**
Co-driver slot	No card	Operational	Operational	Control	Calibration	Company
	Driver card	Operational	Operational	Control	Calibration	Company
	Control card	Control	Control	Control[a]	Operational	Operational
	Workshop card	Calibration	Calibration	Operational	Calibration[a]	Operational

a In these situations the recording equipment shall use only the tachograph card inserted in the driver slot.

	Company card	Company	Company	Operational	Operational	Company[a]

a In these situations the recording equipment shall use only the tachograph card inserted in the driver slot.

(11) The recording equipment shall ignore non-valid cards inserted, except displaying, printing or downloading data held on an expired card which shall be possible.

(12) All functions listed in 2.2. shall work in any mode of operation with the following exceptions:

— the calibration function is accessible in the calibration mode only,

— the roadside calibration checking function is accessible in the control mode only,

— the company locks management function is accessible in the company mode only,

— the monitoring of control activities function is operational in the control mode only,

— The downloading function is not accessible in the operational mode (except as provided for in requirement 193), and except downloading a driver card when no other card type is inserted into the VU.

(13) The recording equipment can output any data to display, printer or external interfaces with the following exceptions:

— in the operational mode, any personal identification (surname and first name(s)) not corresponding to a tachograph card inserted shall be blanked and any card number not corresponding to a tachograph card inserted shall be partially blanked (every odd character — from left to right — shall be blanked),

— in the company mode, driver related data (requirements 102, 105 and 108) can be output only for periods where no lock exists or no other company holds a lock (as identified by the first 13 digits of the company card number),

— when no card is inserted in the recording equipment, driver related data can be output only for the current and 8 previous calendar days,

— personal data originating from the VU shall not be output through ITS interface of the VU unless the consent of the driver to whom the data relates is verified,

— **[**[F1]the vehicle units have a normal operations validity period of 15 years, starting with the vehicle unit certificates effective date, but vehicle units can be used for additional 3 months, for data downloading only.**]**

Textual Amendments

F1 Substituted by Commission Implementing Regulation (EU) 2018/502 of 28 February 2018 amending Implementing Regulation (EU) 2016/799 laying down the requirements for the construction, testing, installation, operation and repair of tachographs and their components (Text with EEA relevance).

2.4 Security

[[F1]The system security aims at protecting the data memory in such a way as to prevent unauthorised access to and manipulation of the data and detecting any such attempts, protecting the integrity and authenticity of data exchanged between the motion sensor and the vehicle unit, protecting the integrity and authenticity of data exchanged between the recording equipment and the tachograph cards, protecting the integrity and authenticity of data exchanged between the vehicle unit and the external GNSS facility, if any, protecting the confidentiality, integrity and authenticity of data exchanged through the remote early detection communication for control purposes, and verifying the integrity and authenticity of data downloaded.**]**

(14) In order to achieve the system security, the following components shall meet the security requirements specified in their Protection Profiles, as required in Appendix 10:

— vehicle unit,

— tachograph card,

— motion sensor,

— external GNSS facility (this Profile is only needed and applicable for the external GNSS variant).

(**1**) OJ L 281, 23.11.1995, p.31.

(**2**) OJ L 201, 31.7.2002, p.37

Changes to legislation:
There are outstanding changes not yet made to Commission Implementing Regulation (EU) 2016/799. Any changes that have already been made to the legislation appear in the content and are referenced with annotations.
View outstanding changes

Changes and effects yet to be applied to the whole legislation item and associated provisions

- Signature words omitted by S.I. 2019/453 reg. 110
- Annex 1C modified by S.I. 2023/739 reg. 3Sch.