

Commission Implementing Regulation (EU) 2016/799

of 18 March 2016

implementing Regulation (EU) No 165/2014 of the European Parliament and of the Council laying down the requirements for the construction, testing, installation, operation and repair of tachographs and their components

ANNEX I C

Requirements for construction, testing, installation, and inspection

Appendix 4

PRINTOUTS

1.GENERALITIES

Each printout is built up by chaining various data blocks, possibly identified with a block identifier.

A data block contains one or more records, possibly identified with a record identifier.

PRT_001

When a block identifier immediately precedes a record identifier, the record identifier is not printed.

PRT_002

In the case where a data item is unknown, or must not be printed for data access rights reasons, spaces are printed instead.

PRT_003

If the content of a complete line is unknown, or need not to be printed, then the complete line is omitted.

PRT_004

Numerical data fields are printed right aligned, with a space separator for thousands and millions, and without leading zeros.

PRT_005

String data fields are printed left aligned and filled up with spaces to data item length, or truncated to data item length when needed (names and addresses).

PRT_006

In case of a line-break due to a long text a special character (dot at middle line-height, ‘•’) should be printed as first character in the new line.

2.DATA BLOCKS SPECIFICATION

In this chapter the following format notation conventions have been used:

Characters printed in **bold** denote plain text to be printed (printing remains in normal characters),

Normal characters denote variables (pictograms or data) to be replaced by their values for printing,

Variable names have been padded with underscores to show the data item length available for the variable,

Dates are specified with a ‘dd/mm/yyyy’ (day, month, year) format. A ‘dd.mm.yyyy’ format may also be used,

The term ‘card identification’ denotes the composition of: the type of card through a card pictograms combination, the card issuing Member State code, a forward slash character and the card number with the replacement index and the renewal index separated with a space:

P		Issuing Member State code	First 14 characters of card number (possibly including a consecutive index)	Replacement index

PRT_007Printouts shall use the following data blocks and/or data records, in accordance with the following meanings and formats:

					
--	---	---	---	---	---

Block or record number
Meaning

Data Format

1 **Date and time at which the document is printed.**

▼ dd/mm/yyyy hh:mm (UTC)

2 **Type of printout.**

Block identifier

Printout pictogram combination (see App. 3), Speed limiting device setting (Over speeding printout only)

-----▼-----
Picto xxx km/h

3 **Card holder identification.**

Block identifier. P= people pictogram

Card holder surname

Card holder first name(s) (if any)

Card identification

Card expiry date (if any) and Card generation number (GEN 1 or GEN 2) (*)

-----P-----
P Last_Name_____
First_Name_____
Card_Identification_____

dd/mm/yyyy - GEN 2

In the case where the card is a non-personal card, and holds no card holder surname, the company or workshop or control body name shall be printed instead.

(*) The card generation number can only be printed by smart tachograph.

4 **Vehicle identification.**

Block identifier

VIN

Registering Member State and VRN

-----A-----
A VIN_____
Nat/VRN_____

5 **VU identification.**

Block identifier

VU manufacturer's name

VU part number

VU generation number (*)

-----B-----
B VU_Manufacturer_____
VU_Part_Number_____
GEN 2

(*) The card generation number can only be printed by smart tachograph.

6 **Last calibration of the tachograph**

Block identifier

Workshop name

Workshop card identification

Date of the calibration

-----T-----
T Last_Name_____
Card_Identification_____
T dd/mm/yyyy



Image not found or type unknown

7 **Last control (by a control officer)**

Block identifier

Controller's card identification

Control date, time and type

```

-----@-----
Card_Identification_____
@ dd/mm/yyyy hh:mm ppppp

```

Type of the control: Up to five pictograms. The type of control can be (a combination) of:

■: Card downloading, ▼: VU downloading, ▼: printing, □: Displaying, †: Roadside calibration checking

8 **Driver activities stored on a card in order of occurrence**

Block identifier

Enquiry date (calendar day subject of the printout) + Daily card presence counter

```

-----@-----
dd/mm/yyyy   xxx

```

8a Out of scope condition in the beginning of this day (leave blank if no out of scope condition open)

```

-----OUT-----

```

8.1 Period during which the card was not inserted

8.1a Record identifier (start of period)

8.1b Unknown period. Start time, duration

8.1c Activity manually entered.

Activity pictogram, start time, duration

```

-----
?      hh:mm hh:mm
A      hh:mm hh:mm

```

8.2 Card insertion in slot S

Record identifier; S = Slot pictogram

Vehicle registering Member State and VRN

Vehicle odometer at card insertion

```

-----S-----
A Nat/VRN_____
x xxx xxx km

```

8.3 Activity (while card was inserted)

Activity pictogram, start time, duration, crew status (crew pictogram if CREW, blanks if SINGLE).

```

A      hh:mm hh:mm @@

```

8.3a Specific condition. Time of entry, specific condition pictogram (or pictogram combination).

```

hh:mm ---pppp---

```

8.4 Card withdrawal

Vehicle odometer and distance travelled since last insertion for which odometer is known

```

x xxx xxx km; x xxx km

```

9 **Driver activities stored in a VU per slot in chronological order**

Block identifier

Enquiry date (calendar day subject of the printout)

Vehicle odometer at 00:00 and 24:00

```

-----@-----
dd/mm/yyyy
x xxx xxx - x xxx xxx km

```

10 **Activities carried in slot S**

Block identifier

10a Out of scope condition in the beginning of this day (leave blank if no out of scope condition open)

10.1 Period where no card is inserted in slot S

Record identifier.

No Card inserted

Vehicle odometer at beginning of period

10.2 Card insertion

Card insertion Record identifier

Driver's name

```

-----S-----
-----OUT-----

```

```

-----
@ @ ---
x xxx xxx km

```

```

-----
@ Last_Name_____

```

Driver's first name
 Driver's Card identification
 Card expiry date (if any) and Card generation number (GEN 1 or GEN 2) (*)
 Registering MS and VRN of previous vehicle used
 Date and time of card withdrawal from previous vehicle
 Blank line
 Vehicle odometer at card insertion, Manual entry of driver activities flag (M if yes, Blank if No).
 If no card insertion of a driver card happened on the day for which the printout is done then for block 10.2 the odometer data reading from the last available card insertion before that day shall be used.

First_Name_____
 Card_Identification_____
 dd/mm/yyyy - GEN 2
 A→Nat/VRN_____
 dd/mm/yyyy hh:mm
 x xxx xxx km M

10.3 Activity
 Activity pictogram, start time, duration, crew Status (crew pictogram if CREW, blanks if SINGLE).

A hh:mm hh:mm @@

10.3a Specific condition. Time of entry, specific condition pictogram (or pictogram combination).

hh:mm ---pppp---

10.4 Card withdrawal or End of 'No Card' period

Vehicle odometer at card withdrawal or at end of 'no card' period and distance travelled since insertion, or since beginning of the 'No Card' period.

x xxx xxx km; x xxx km

(*) The card generation number can only be printed by smart tachograph.

11 Daily summary

Block identifier

-----Σ-----

11.1 VU summary of periods without card in driver slot

Block identifier

1@---

11.2 VU summary of periods without card in co-driver slot

Block identifier

2@---

11.3 VU daily summary per driver

Record identifier

Driver's surname

Driver's first name(s)

Driver's card identification

 @ Last_Name_____
 First_Name_____
 Card_Identification_____

11.4 Entry of place where a daily work period begins and/or ends
 pi=location begin / end pictogram, time, country, region,
 longitude of the recorded position
 latitude of the recorded position
 timestamp when position was determined
 Odometer

pihh:mm Cou Reg
 lon ±DDD°MM.M'
 lat ± DD°MM.M'
 hh:mm
 x xxx xxx km ◀

11.5 Entry of place where a daily work period begins and/or ends
 and after 3 hours continuous driving time

time

longitude of the recorded position

latitude of the recorded position

timestamp when position was determined

Odometer

pinh:mm
 lon ± DDD°MM.M'
 lat ± DD°MM.M'
 hh:mm
 x xxx xxx km ◀

11.6 Activity totals (from a card)

Total driving duration, distance travelled

Total working and availability duration

Total resting and unknown duration

Total duration of crew activities

@ hh:mm x xxx km
 * hh:mm □ hh:mm
 † hh:mm ? hh:mm
 @@ hh:mm

11.7 Activity totals (periods without card driver slot)

Total driving duration, distance travelled

Total working and availability duration

@ hh:mm x xxx km
 * hh:mm □ hh:mm

11.8	<i>Activity totals (periods without card co-driver slot)</i>	
	Total working and availability duration	⌘ hh:mm □ hh:mm
	Total resting duration	↳ hh:mm
11.9	<i>Activity totals (per driver both slots included)</i>	
	Total driving duration, distance travelled	⊗ hh:mm × xxx km
	Total working and availability duration	⌘ hh:mm □ hh:mm
	Total resting duration	↳ hh:mm
	Total duration of crew activities	⊗⊗ hh:mm

When a daily printout is required for the current day, daily summary information is computed with available data at the time of the printout.

12	<i>Events and/or faults stored on a card</i>	
12.1	Block identifier last 5 'Events and Faults' from a card	-----!⌘-----
12.2	Block identifier all recorded 'Events' on a card	-----!□-----
12.3	Block identifier all recorded 'Faults' on a card	-----×□-----
12.4	<i>Event and/or Fault record</i>	
	Record identifier	-----
	Event/fault pictogram, record purpose, date time of start,	Pic (p) dd/mm/yyyy hh:mm
	Additional event/fault code (if any), duration	!xx hh:mm
	Registering Member State & VRN of vehicle in which the event or fault occurred	A Nat/VRN_____
13	<i>Events and/or faults stored or on-going in a VU</i>	
13.1	Block identifier last 5 'Events and Faults' from VU	-----!⌘A-----
13.2	Block identifier all recorded or on-going 'Events' in a VU	-----!A-----
13.3	Block identifier all recorded or on-going 'Faults' in a VU	-----×A-----
13.4	<i>Event and/or fault record</i>	
	Record identifier	-----
	Event/fault pictogram, record purpose, date time of start,	Pic (p) dd/mm/yyyy hh:mm
	Additional event/fault code (if any), No of similar events this day, duration	!xx (xxx) hh:mm
	Identification of the cards inserted at start or end of the event or fault (up to 4 lines without repeating twice the same card numbers)	Card_Identification_____ Card_Identification_____ Card_Identification_____ Card_Identification_____
	Case where no card was inserted	□---
	Manufacturer specific data	< Literal><ErrorCode>

The record purpose (p) is a numerical code explaining why the event or fault was recorded, coded in accordance with the data element EventFaultRecordPurpose.

The **Literal** is a tachograph manufacturer specific literal with 12 characters maximum.

The **ErrorCode** is a tachograph manufacturer specific error code with 12 characters maximum.

- 14 **VU Identification**
 Block identifier
 VU manufacturer name
 VU manufacturer address
 VU part number
 VU approval number
 VU serial number
 VU year of manufacture
 VU software version and installation date

-----B-----
 B Name _____
 Address _____
 PartNumber _____
 Apprv _____
 S/N _____
 YYYY
 V xxxx dd/mm/yyyy

15 **Sensor identification**

Block identifier

-----I-----

15.1 **Pairing record**

- Sensor serial number
 Sensor approval number
 Sensor pairing date

I S/N _____
 Apprv _____
 dd/mm/yyyy hh:mm

16 **GNSS identification**

Block identifier

-----G-----

16.1 **Coupling record**

- External GNSS facility serial number
 External GNSS facility approval number
 External GNSS facility coupling date

G S/N _____
 Apprv _____
 dd/mm/yyyy hh:mm

17 **Calibration data**

Block identifier

-----T-----

17.1 **Calibration record**

- Record identifier
 Workshop having performed the calibration
 Workshop address
 Workshop card identification
 Workshop card expiry date
 Blank line
 Calibration date + calibration purpose
 VIN
 Registering Member State & VRN
 Characteristic coefficient of vehicle
 Constant of the recording equipment
 Effective circumference of wheel tyres
 Size of tyres mounted
 Speed limiting device setting
 Old and new odometer values

 T Workshop_name _____
 Workshop_address _____
 Card_Identification _____
 dd/mm/yyyy

 T dd/mm/yyyy (p)
 A VIN _____
 Nat/VRN _____
 w xx xxx Imp/km
 k xx xxx Imp/km
 l xx xxx mm
 • TyreSize _____
 > xxx km/h
 x xxx xxx - x xxx xxx km

The calibration purpose (p) is a numerical code explaining why these calibration parameters were recorded, coded in accordance with the data element CalibrationPurpose.

18	Time adjustment	
	Block identifier	-----@-----
18.1	Time adjustment record	
	Record identifier	-----
	Old date and time	!@ dd/mm/yyyy hh:mm
	New date and time	@ dd/mm/yyyy hh:mm
	Workshop having performed the time adjustment	T Workshop_name_____
	Workshop address	Workshop_address_____
	Workshop card identification	Card_Identification_____
	Workshop card expiry date	dd/mm/yyyy
19	Most recent event and Fault recorded in the VU	
	Block identifier	-----!xA-----
	Most recent event date time	! dd/mm/yyyy hh:mm
	Most recent fault date time	x dd/mm/yyyy hh:mm
20	Over speeding control information	
	Block identifier	----->>-----
	Date and time of last OVER SPEEDING CONTROL	>@dd/mm/yyyy hh:mm
	Date/time of first over speeding and number of over speeding events since	>>dd/mm/yyyy hh:mm (nnn)
21	Over speeding record	
21.1	Block identifier 'First over speeding after the last calibration'	----->>T-----
21.2	Block identifier 'The 5 most serious over the last 365 days'	----->>(365)-----
21.3	Block identifier 'The most serious for each of the last 10 days of occurrence'	----->>(10)-----
21.4	Record identifier	-----
	Date time and duration	>>dd/mm/yyyy hh:mm hh:mm
	Max and average speeds, No. of similar events this day	xxx km/h xxx km/h (xxx)
	Driver's surname	@ Last_Name_____
	Driver's first name(s)	First_Name_____
	Driver card identification	Card_Identification_____
21.5	If no over speeding record exists in a block	>>---
22	Hand-written information	
	Block identifier	-----
22.1	Control Place	• @
22.2	Controller's signature	
22.3	From time	@+ +@
22.4	To time	
22.5	Driver's signature	@ @

'Hand-written information'; Insert enough blank lines above a hand-written item, to be able to actually write the required information or to put a signature.

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Most recent cards inserted in VU

Block identifier
- 23.1

Inserted Card

Record identifier

Type of card, Generation, Version, Manufacturer (*)

Card Identification

Card Serial Number

Date and time of last card insertion
- (*) (everything in one line)

with

type of card: Pictogram, one character + space

gen: GEN1 or GEN2, 4 characters + space

version: up to 10 characters

MC: manufacturer code, 3 characters

----- 888 -----

T <gen> <version> <MC>

Card Identification

Card Serial Number

dd/mm/yyyy hh:mm

3.PRINTOUT SPECIFICATIONS

In this chapter the following notation conventions have been used:

N	Print block or record number N
N	Print block or record number N repeated as many times as necessary
X/Y	Print blocks or records X and/or Y as needed, and repeating as many times as necessary.

3.1. Driver Activities from Card Daily Printout

PRT_008The driver activities from card daily printout shall be in accordance with the following format:

1	Date and time at which the document is printed
2	Type of printout
3	Controller identification (if a control card is inserted in the VU)
3	Driver identification (from card subject of the printout + GEN)
4	Vehicle identification (vehicle from which printout is taken)
5	VU identification (VU from which printout is taken + GEN)
6	Last calibration of this VU
7	Last control the inspected driver has been subject to
8	Driver activities delimiter
8a	Out of scope condition in the beginning of this day
8.1a/8.1b/8.1c/8.2/8.3/8.3a/8.4	Activities of the driver in order of occurrence
11	Daily summary delimiter
11.4	Places entered in chronological order

11.5	Positions after 3 hours accumulated driving time in chronological order
11.6	Activity totals
12.1	Events or faults from card delimiter
12.4	Event/Fault records (Last 5 events or faults stored in the card)
13.1	Events or faults from VU delimiter
13.4	Event/Fault records (Last 5 events or faults stored or on-going in the VU)
22.1	Control place
22.2	Controller's signature
22.5	Driver's signature

3.2. Driver Activities from VU Daily Printout

PRT_009The driver activities from VU daily printout shall be in accordance with the following format:

1	Date and time at which the document is printed
2	Type of printout
3	Card holder identification (for all cards inserted in VU + GEN)
4	Vehicle identification (vehicle from which printout is taken)
5	VU identification (VU from which printout is taken + GEN)
6	Last calibration of this VU
7	Last control on this tachograph
9	Driver activities delimiter
10	Driver slot delimiter (slot 1)
10a	Out of scope condition in the beginning of this day
10.1 / 10.2 / 10.3 / 10.3a / 10.4	Activities in chronological order (driver slot)
10	Co-driver slot delimiter (slot 2)
10a	Out of scope condition in the beginning of this day
10.1 / 10.2 / 10.3 / 10.3a / 10.4	Activities in chronological order (co-driver slot)
11	Daily summary delimiter
11.1	Summary of periods without card in driver slot
11.4	Places entered in chronological order
11.5	Positions after 3 hours accumulated driving time in chronological order
11.7	Activity totals
11.2	Summary of periods without card in co-driver slot
11.4	Places entered in chronological order

11.5	Positions after 3 hours accumulated driving time in chronological order
11.8	Activity totals
11.3	Summary of activities for a driver both slots included
11.4	Places entered by this driver in chronological order
11.5	Positions after 3 hours accumulated driving time in chronological order
11.9	Activity totals for this driver
13.1	Events faults delimiter
13.4	Event/Fault records (Last 5 events or faults stored or on-going in the VU)
22.1	Control place
22.2	Controller's signature
22.3	From time (space available for a driver without a card to indicate
22.4	To time which periods are relevant to himself)
22.5	Driver's signature

3.3. Events and Faults from Card Printout

PRT_010The events and faults from card printout shall be in accordance with the following format:

1	Date and time at which the document is printed
2	Type of printout
3	Controller identification (if a control card is inserted in the VU + GEN)
3	Driver identification (from card subject of the printout)
4	Vehicle identification (vehicle from which printout is taken)
12.2	Events delimiter
12.4	Event records (all events stored on the card)
12.3	Faults delimiter
12.4	Fault records (all faults stored on the card)
22.1	Control place
22.2	Controller's signature
22.5	Driver's signature

3.4. Events and Faults from VU Printout

PRT_011The events and faults from VU printout shall be in accordance with the following format:

1	Date and time at which the document is printed
2	Type of printout
3	Card holder identification (for all cards inserted in VU + GEN)
4	Vehicle identification (vehicle from which printout is taken)
13.2	Events delimiter
13.4	Event records (All Events stored or on-going in the VU)
13.3	Faults delimiter
13.4	Fault records (All Faults stored or on-going in the VU)
22.1	Control place
22.2	Controller's signature
22.5	Driver's signature

3.5. Technical data Printout

PRT_012The technical data printout shall be in accordance with the following format:

1	Date and time at which the document is printed
2	Type of printout
3	Card holder identification (for all cards inserted in VU + GEN)
4	Vehicle identification (vehicle from which printout is taken)
14	VU identification
15	Sensor identification
15.1	Sensor Pairing data (all data available in chronological order)
16	GNSS identification
16.1	External GNSS facility coupling data (all data available in chronological order)
17	Calibration data delimiter
17.1	Calibration records (all records available in chronological order)
18	Time adjustment delimiter
18.1	Time adjustment records (all records available from time adjustment and from calibration data records)
19	Most recent event and Fault recorded in the VU

3.6. Over speeding Printout

PRT_013The over speeding printout shall be in accordance with the following format:

1	Date and time at which the document is printed
2	Type of printout
3	Card holder identification (for all cards inserted in VU + GEN)
4	Vehicle identification (vehicle from which printout is taken)
20	Over speeding control information
21.1	Over speeding data identifier
21.4/21.5	First over speeding after the last calibration
21.2	Over speeding data identifier
21.4/21.5	The 5 most serious over speeding events over the last 365 days
21.3	Over speeding data identifier
21.4/21.5	The most serious over speeding for each of the last 10 days of occurrence
22.1	Control place
22.2	Controller's signature
22.5	Driver's signature

3.7. Historic of inserted cards

PRT_014 The historic of inserted cards printout shall be in accordance with the following format:

1	Date and time at which the document is printed
2	Type of printout
3	Card holder identifications (of all cards inserted in the VU)
23	Most recent card inserted in the VU
23.1	Inserted cards (up to 88 records)
12.3	Faults delimiter
