HOW TO CHECK DRIVERS USING A DIGITAL TACHOGRAPH ?

José PISCITELLI
Luxembourg

José Piscitelli
Customs & Excises HQ
Department of Security Affairs
Road Transport
P.Box. 1605 *(Place de la Gare, 26)*
L - 1016 LUXEMBOURG
Tel. : (+352) 290 191 241
Fax : (+352) 290 191 238
E-mail : jose.piscitelli@do.etat.lu

... ... even after the enlargement and considering the AETR countries

Content of a complet AETR roadside check:

- **Recording equipment / Control device** (Visual or technical check: Approval, Installation plaque/calibration, seals, manipulations...)

- ***Status of the WS card (lost, stolen...)***

- **Identification of the driver** (against the used Driver card and/or the printouts)
- **Status of the DC (lost, stolen...)**

- **Driving and rest periods / Activities**

Data from the Vehicle unit (VU) (Daily activities, Events, Speed (Speed limiter), Technical data)
  - By download
  - By printout

Data from the Driver card (DC) (Daily activities... / Events)
  - By download trough the VU
  - By download from a card reader
  - By printout through the VU

Recording Equipment / Control device

RECORDING EQUIPMENT IN THE VEHICULE

Interface for downloading and services

Driver card
Control card
Workshop card
Company card

Motion Sensor Kitas II

Printout

COMPANY CARD   UNITED KINGDOM
GB

WORKSHOP CARD UNITED KINGDOM
GB

CONTROL CARD   UNITED KINGDOM
GB

DRIVER CARD   UNITED KINGDOM
GB
1. Roadstar
2. John
3. 06/27/1963
4a. 05/06/2003.   4b. 05/06/2008
4c. Nat. Tachograph Card Authority
4d. EU 3547263DC
5a. A30021550X1
5b. D13425617787
7.
8. 37, Mainstreet, GB-London B24 8TA

In case of suspicion (e.g. when sensor faults, internal faults, motion data error, security breach attempt, multiple power supply interruptions...., have been registered as faults or events by the VU) at least the Sensor seal might be checked - which actually is not easy to find...

Example of a motion sensor seal

MAN L2000

Motionsensor

Motionsensor

MAN L2000

MAN M2000

Motionsensor

MAN M2000

Motionsensor

Motionsensor

SETRA S319UL

Maintanance cover

Maintanance cover

SETRA S319UL

INSTALLATION & CALLIBRATION

WORKSHOP

Logiciel

Carte d'Atelier

Systèmes de Service

The Workshop card

- ❑ Very powerful – High risk for manipulations

- ❑ In case of suspicion: Checking the status of the card (lost / stolen) – (Need for an access to TACHOnet)

Monitoring of the Implementation
of Digital Tachograph
MIDT

Typ 1381.2072000001
No. 00005454
Jahr 805

28.02.2006 14:31 (UTC)

Mustermann8
Christian8
FIN/10000000000000 9 6
30.04.2007

Mustermann9
Christian9
FIN/10000000000000 9 7
30.04.2007

WDB1234567F123456
J8007

SiemensVDO Automotive
AG
H.-Hertz-Str.45 78052

1381.2072000001
e1-84
0000005454
2005

147771122?
e1 175
14.04.2005

workshop20

address20

30.04.2007

16.11.2005 (3)
WDB1234567F123456
J8007
7 250 Imp/km
7 250 Imp/km
3 325 mm
315 80 R22.5
90km/h
501 - 1 200

16.11.2005 15:30
workshop20

VDO KIENZLE
94154 RUNGIS

N° d'agrément AW94

Date d'installation   10.06.01

10275   Trs: imp/km

3250

date de la mesure l et V   10 . 01 .02

Pneumatiques   315 /70 R22,5

VDO Kienzle GmbH D-78052 Villingen-Schwenningen
Typ 1318.27
No. 2613075
Jahr C96

e 1

Website : www.eu-digitaltachograph.org
E-mail : secretariat@eu-digitaltachograph.org

UNECE Symbols used in the approval marks of Contracting Parties to

(05/11/04)

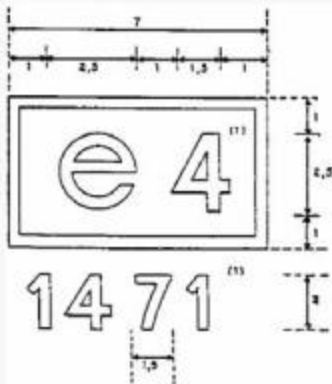| UNECE Symbol	Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions (1958 Agreement)	European Agreement concerning the Work of Crews of Vehicles engaged in International Road Transport (AETR)
E 1	Germany	Germany
E 2	France	France
E 3	Italy	Italy
E 4	Netherlands	Netherlands
E 5	Sweden	Sweden
E 6	Belgium	Belgium
E 7	Hungary	Hungary
E 8	Czech Republic	Czech Republic
E 9	Spain	Spain
E 10	Yugoslavia	Yugoslavia
E 11	United Kingdom	United Kingdom
E 12	Austria	Austria
E 13	Luxembourg	Luxembourg
E 14	Switzerland	Switzerland
E 15	---	---
E 16	Norway	Norway
E 17	Finland	Finland
E 18	Denmark	Denmark
E 19	Romania	Romania
E 20	Poland	Poland
E 21	Portugal	Portugal
E 22	Russian Federation	Russian Federation
E 23	Greece	Greece
E 24	Ireland 2/	Ireland
E 25	Croatia	Croatia
E 26	Slovenia	Slovenia
E 27	Slovakia	Slovakia
E 28	Belarus	Belarus
E 29	Estonia	Estonia
E 30		Republic of Moldova
E 31	Bosnia and Herzegovina	Bosnia and Herzegovina
E 32	Latvia	Latvia
E 33		Liechtenstein
E 34	Bulgaria	Bulgaria
E 35		Kazakhstan
E 36	Lithuania	Lithuania
E 37	Turkey	Turkey
E 38		Turkmenistan
E 39	Azerbaijan	Azerbaijan
E 40	The former Yugoslav Republic of Macedonia	The former Yugoslav Republic of Macedonia
E 41		Andorra
E 42	European Community 3/	
E 43	Japan	
E 44		Uzbekistan
E 45	Australia	
E 46	Ukraine	
E 47	Republic of South Africa	
E 48	New Zealand	
E 49	Cyprus 2/	Cyprus
E 50	Malta 2/	Malta
E 51	Republic of Korea 4/	
Total:	41 Parties (+ Ireland, Cyprus and Malta - by virtue of EC accession)	43 Parties

14 71

TYPE APPROVED VU's UNTIL NOW

SOME VISIBLE SECURITY ELEMENTS

SOME VISIBLE SECURITY ELEMENTS

USE OF THE DIGITAL TACHOGRAPH

Monitoring of the Implementation of Digital Tachograph MIDT

Display, 16-digits

Interface for downloading Service-Interface

Printer

Button to release the printer drawer

12:50   ☉   75km/h
o▣ 123456.7km ▣∅

Buttons for Smartcard ejection

Buttons for driver 1 & 2 activities

Central sealing

Slot 1 & 2 for Smartcards

Navigation button

USE OF THE DIGITAL TACHOGRAPH

Driver Card

Identification / Status

COMMUNITY MODEL TACHOGRAPH CARDS

FRONT

REVERSE

DRIVER CARD
MEMBER STATE
TARJETA DEL CONDUCTOR
FØRERKORT
FAHRERKARTE
ΚΑΡΤΑ ΟΔΗΓΟΥ
DRIVER CARD
CARTE DE CONDUCTEUR
CARTA TACHIMETRO
CARTÃO DO CONDUTOR
BESTUURDERSKAART
CARTÃO DE CONDUTOR
KULJETTAJAKORTTI
FÖRARKORT

1. Surname   2. First name(s)   3. Birth date
4a. Date of start of validity of card
4b. Administrative expiry date of card
4c. Issuing authority
(4d.) No for national administrative purposes
5a. Driving license number   5b. Card number
6. Photograph
7. Signature   (8.) Address

Please return to:
NAME OF AUTHORITY AND ADDRESS

CONTROL CARD
MEMBER STATE
TARJETA DE CONTROL
KONTROLKORT
KONTROLLKARTE
ΚΑΡΤΑ ΕΛΕΓΧΟΥ
CONTROL CARD
CARTE DE CONTROLEUR
CARTA STRUTHA
CARTA DI CONTROLLO
CONTROLEKAART
CARTÃO DE CONTROLO
VALVONTAKORTTI
KONTROLLKORT

1. Control Body (2.) Surname   (3.) First name(s)
4a. Date of start of validity of card
(4b.) Administrative expiry date of card
4c. Issuing authority
(4d.) No for national administrative purposes
5b. Card number
(6.) Photograph
(7.) Signature   8. Address

Please return to:
NAME OF AUTHORITY AND ADDRESS

WORKSHOP CARD
MEMBER STATE
TARJETA DEL CENTRO DE ENSAYO
VÆRKSTEDSKORT
WERKSTATTKARTE
ΚΑΡΤΑ ΚΕΝΤΡΟΥ
WORKSHOP CARD
CARTE D'ATELIER
CARTA CEAPA KIND
CARTA DELL'OFFICINA
WERKPLAATSKAART
CARTÃO DO CENTRO DE ENSAIO
TESTAUSASEMAKORTTILA
WERKSTADSKORT

1. Workshop Name (2.) Surname (3.) First name(s)
4a. Date of start of validity of card
4b. Administrative expiry date of card
4c. Issuing authority
(4d.) No for national administrative purposes
5b. Card number

(7.) Signature   8. Address

Please return to:
NAME OF AUTHORITY AND ADDRESS

COMPANY CARD
MEMBER STATE
TARJETA DE LA EMPRESA
VIRKSOMHEDSKORT
UNTERNEHMENSKARTE
ΚΑΡΤΑ ΕΠΙΧΕΙΡΗΣΗΣ
COMPANY CARD
CARTE D'ENTREPRISE
CARTA COMHLACHTA
CARTA DELL'AZIENDA
BEDRIJFSKAART
CARTÃO DE EMPRESA
YRITYSKORTTILA
FÖRETAGSKORT

1. Company Name (2.) Surname (3.) First name(s)
4a. Date of start of validity of card
4b. Administrative expiry date of card
4c. Issuing authority
(4d.) No for national administrative purposes
5b. Card number

(7.) Signature   8. Address

Please return to:
NAME OF AUTHORITY AND ADDRESS

IDENTIFICATION OF THE DRIVER

- **Surname**
- **First name**
- **Birth date**
- **Date start of valid.**
- **Adm. expiry date.**
- **Issuing authority**
- **Driving License N°**

02.10.2005
02.10.2010
SNCT

1000000002D0000

Card Number:

*Important:
Replacement index
(lost / stolen!?)°*

P	▪	x	x	x	/	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Card Pictogram combination	Issuing Member State code					First 14 characters of card number (possibly including a consecutive index)													Replacement index	Renewal index

TACHOnet

Card Issuing Authority

Administrative tasks

System tasks

| Check tachograph card status | First issue of a card | Lost/Stolen card declaration | Malfunctioning card declaration | Suspended card declaration | Logging/Monitoring Management | Statistics Management |

| Lost/Stolen card hand in | Renewal of a card | Exchange of a card | Replacement of a card | Bulk check of issued driver card holders | Users & access rights Management |

within 7 days!!

Enforcement Authority

| Check tachograph card status | Check driver's issued card | Lost/Stolen card declaration | Malfunctioning card declaration |

CHECKING CARD STATUS BY NUMBER

Visualisation de carte - Première Délivrance

Page Principale Card List Debug

Dossier: FIRSTISSUE/9050000010 (19500117136D0000)
Type de carte: Conducteur
Personne: Claude, André Fernand

Utilisateur: RTACLS
Date: 1/2/2006

| Données Personnes | Photo & Scans | Résultats TACHOnet | | Données Carte | CIE |

Carte

Nom Carte	19500117136D0000	Date début validité	11/09/2005		Statut du certificat	VALID
Nom de Dossier	9050000010	Date fin de validité	11/09/2010			
Statut	HandedOver	Date Modification	13/10/2005		Rem	
Statut additionnel		Date Modification			Rem	
Indicateur Blocage	Non bloqué					
Remarque	1ere Carte de Référence					
Archivage						

Payement		Fabrication		Livraison	
Payement	Accepté	Statut de fabrication	Carte produite	Personne Identifiée	Oui
Mode Payement	Cash	Date d'envoi CP	13/09/2005	Type souhaité	Enlèvement
Institut Bancaire		Date Personnalisation	10/10/2005	Site souhaité	SW Sandweiler
Réf Bancaire				Date réception SNCT	13/10/2005
Date Payement				Date de livraison	13/10/2005
Montant	0.0			Type de livraison	Enlèvement
				Site de livraison	KB Kalchesbrück

Cartes (1)

Dossier	Carte	Recept	Délivrée	Personnal.	Validité de	à	Type Del	Site
9050000010	19500117136D0000	Oui	Oui	10/10/2005	11/09/2005	11/09/2010	Enlèvement	KB Kalchesbrück

Historique   Consultation Certificat   Fermer

MODIFICATION OF THE STATUS

Monitoring of the Implementation of Digital Tachograph MIDT

Website : www.eu-digitaltachograph.org
E-mail : secretariat@eu-digitaltachograph.org

Monitoring of the Implementation of Digital Tachograph

CHECKING DRIVER'S ISSUED CARD

Driving & Rest periods / Activities

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

— <u>the record sheets for the current week</u> and, in any event, <u>the sheet for the last day</u> on which he drove during the <u>previous week</u>,

— <u>the driver card if he holds one</u>, and

— <u>print-outs</u> 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 <u>Annex IB</u>, he must be able to produce, whenever an inspecting officer so requests:

— <u>the driver card</u> of which he is the holder,

— the <u>record sheets</u> 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 <u>Annex I</u>.

ACTIVITIES

```
       09:25 11:55 02h30
       11:55 12:34 00h39
       205 177 km;      1
  ------------1------------
  S  /LCR 243
       205 177 km
       12:34 15:11 02h37
       15:11 16:22 01h11
```

KIENZLE

SPEED

ACCELERATION   RALENTI

```
------->>(365)------->
>>15.10.2003 11:10 00h30
  98 km/h 95 km/h (        )
o Rosenz
  Winfried
o█DK /45678901234567 7 8
>>15.11.2002 16:42 00h12
  97 km/h 93 km/h (        )
o Förster
  Thomas
o█D  /98765432109876 5 4
```

Geschwindigkeits-Begrenzer

Speed limiter
Council Directive No 92/6 EEC of 10 February 1992

DOWNLOADING

OF DATA

The ways to get access to the data

- To download VU's and driver card's data to any laptop.
  A control card is needed.
- To print the data from both the VU and the driver card.
  No need to have a control card but without a control card,
  there are restrictions to the access of the VU's data.
- To display the data on the VU's screen (quite difficult)

		No Card	Driver Card	Control Card	Company Card
Print Display		All data with personal identifiers blinded	All own data + Idem No Card	All data	All data except for periods locked by other companies + Idem No Card
Download		Forbidden	Forbidden	All data	All data except for periods locked by other companies

VU Data Downloading Physical Elements

VU Data Downloading
Physical Elements (Alternate Solutions)

CAN Bus

IDE

Company card

VU

Connection of IDE to a CAN connector,

Remote download from company premises (GSM based for example)

$\Rightarrow$ Company card in IDE

$\Rightarrow$ Allow VU to be "Multi-User" :one user using standard MMI and one user (company only) connected through back connector

$\Rightarrow$ Security principles can remain the same

Monitoring of the Implementation
of Digital Tachograph
MIDT

Downloadkey

LEDs für
Speicherkapazität

Status

USB interface

Download Interface

6-pin Stecker

Language configuration

Language	English ▼
File name format	Rest of Europe ▼

Data blocks

- ○ Complete Mass Memory
- ● Selection
  - ☑ Overview data
  - ☐ Detailed Speed
  - ☑ Events and Faults
  - ☑ Technical Data
  - ☑ Activities
  - ☐ Card Download
  - ☐ Siemens VDO Download

Period

- ○ Since last download
- ○ From
  - [   ] to [   ]
- ● Last
  - [22] days

  [Calendar]

[Apply]

Vehicle

VIN: WDB1234567F123456 ▼   VRN: JB007 ▼

Annual overview 2005 / 2006

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec.
Jan.
Feb.
March

M_20051130_1518_   JB007_WDB1234567F123456.DDD: Overview, Activities, Techn

VU Data Downloading correspondence
VU Data storage - Download Messages

Equipment Identification

VU:
- Manufacturer Name, Address,
- Part number,
- Serial number,
- ...son,
- ...nfacture,
- ...mber,
- ...rement range,
- ...ion date
- ...t,
- ...mber.
- ...ion date

Periodic inspection
- ...ntification:
- ...ddress,
- ...ber and expiry date,
- ...tification:
- ..., ...N & Registration country,
- Vehicle characteristics:
  - w, l, speed limit.
- Time adjustment. Old and new values

Repair

Data blocks

- ○ Complete Mass Memory
- ● Selection
  - ☑ Overview data
  - ☐ Detailed Speed
  - ☑ Events and Faults
  - ☑ Technical Data
  - ☑ Activities
  - ☐ Card Download

Company data locks
Date & time, In Out
Company Card number, Name, Address

Drivers identification
Per insertion/withdrawal cycle:
- Driver name, first name,
- Card number, nation, expiry date,
- Insertion date & time, slot, odometer,
- Previously used vehicle:
  - VRN & Nation
  - Withdrawal date & time,
- Withdrawal date & time, odometer.

Activity data
Per activity:
- Card inserted (Yes/No),
- Slot (Driver/Co-Driver),
- Crew (Yes/No),
- Activity code Dr/Wk/Av/Re,
- Date & time start or duration

Location
Driver card number, date & time,
- Country, region,
- Odometer

Midnight Odometer
- Date, Odometer

Speed (24 hours)
- per second

Control activity
Date & time, Control card number, Type

Events
Per event:
- Dr. and Co-Dr. Card numbers at start and end,
- Date & time start and end,
- Nr of similar events this day.

Time adjustments
Per event:
Workshop card number,
- Date & time old and new settings;

Overspeed
- Date of last speed control,
- Date of first event and Nr of events since,
Per longest event on a day:
Card numbers,
- Date & time start and end,
- Maximum and average speeds,
- Nr of similar events this day.

Faults
Per fault:
- Dr. and Co-Dr. card numbers at start and end,
- Date & time start, end

Download control
Last download date and time,
Company identification:
- Name, Card number, Download software version

Security elements

VU Data Downloading correspondence
VU Data storage - Download Messages

Monitoring of the Implementation of Digital Tachograph MIDT

Equipment Identification
VU:
    Manufacturer Name, Address,
    Part number,
    Serial number,
    ...son,
    ...ufacture,
    ...mber,
    ...rement range,
    ...ion date
    ...t,
    ...mber.
    ...ion date

Periodic inspection
    ...dentification:
    ...ddress,
    ...ber and expiry date,
    ...tification:
    ..., VRN & Registration country,
    Vehicle characteristics:
      w, l, speed limit.
    Time adjustment. Old and new values

Repair

Company data locks
Date & time, In Out
    Company Card number, Name, Address

Drivers identification
Per insertion/withdrawal cycle:
    Driver name, first name,
    Card number, nation, expiry date,
    Insertion date & time, slot, odometer,
    Previously used vehicle:
      VRN & Nation
      Withdrawal date & time,
    Withdrawal date & time, odometer.

Activity data
Per activity:
    Card inserted (Yes/No),
    Slot (Driver/Co-Driver),
    Crew (Yes/No),
    Activity code Dr/Wk/Av/Re,
    Date & time start or duration.

Location
Driver card number, date & time,
    Country, region,
    Odometer

Midnight Odometer
Date, Odometer

Speed (24 hours)
    per second

Control activity
Date & time, Control card number, Type

Events
Per event:
    Dr. and Co-Dr. Card numbers at start and end,
    Date & time start and end,
    Nr of similar events this day.

Time adjustments
Per event:
    Workshop card number,
    Date & time old and new settings,

Overspeed
    Date of last speed control,
    Date of first event and Nr of events since,
Per longest event on a day:
    Card numbers,
    Date & time start and end,
    Maximum and average speeds,
    Nr of similar events this day.

Faults
Per fault:
    Dr. and Co-Dr. card numbers at start and end,
    Date & time start, end

Download control
Last download date and time,
Company identification:
    Name, Card number, Download software version

Security elements

Data blocks
○ Complete Mass Memory
● Selection
  ☑ Overview data
  ☐ Detailed Speed
  ☑ Events and Faults
  ☑ Technical Data
  ☑ Activities
  ☐ Card Download

E-mail : secretariat@eu-digitaltachograph.org

Monitoring of the Implementation of Digital Tachograph

VU Data Downloading correspondence
VU Data storage - Download Messages

Equipment Identification
VU:
- Manufacturer Name, Address,
- Part number,
- Serial number,

(...sson,
...ufacture,
...mber,
...rement range,
...ion date

...r,
...mber.
...ion date

Periodic inspection
...e,
...identification:
...ddress,
...ber and expiry date,

...tification:
..., VRN & Registration country,
- Vehicle characteristics:
  - w, l, speed limit.
- Time adjustment. Old and new values

Repair

Data blocks
- ○ Complete Mass Memory
- ● Selection
  - ☑ Overview data
  - ☐ Detailed Speed
  - ☑ Events and Faults
  - ☑ Technical Data
  - ☑ Activities
  - ☐ Card Download

Drivers identification
Per insertion/withdrawal cycle:
Driver name, first name,
- Card number, nation, expiry date,
- Insertion date & time, slot, odometer,
- Previously used vehicle:
  - VRN & Nation
  - Withdrawal date & time,
- Withdrawal date & time, odometer.

Activity data
Per activity:
- Card inserted (Yes/No),
- Slot (Driver/Co-Driver),
- Crew (Yes/No),
- Activity code Dr/Wk/Av/Re,
- Date & time start or duration.

Location
- Driver card number, date & time,
- Country, region,
- Odometer

Midnight Odometer
Date, Odometer

Speed (24 hours)
per second

Company data locks
Date & time, In Out
- Company Card number, Name, Address

Control activity
Date & time, Control card number, Type

Events
Per event:
- Dr. and Co-Dr. Card numbers at start and end,
- Date & time start and end,
- Nr of similar events this day.

Time adjustments
Per event:
Workshop card number,
- Date & time old and new settings,

Overspeed
- Date of last speed control,
- Date of first event and Nr of events since,
Per longest event on a day:
Card numbers,
- Date & time start and end,
- Maximum and average speeds,
- Nr of similar events this day.

Faults
Per fault:
- Dr. and Co-Dr. card numbers at start and end,
- Date & time start, end

Download control
Last download date and time,
Company identification:
- Name, Card number, Download software version

Security elements

VU Data Downloading correspondence
VU Data storage - Download Messages

Equipment Identification
VU:
 Manufacturer Name, Address,
 Part number,
 Serial number,
 Software version,
 Date of manufacture,
 Approval number,
 Speed measurement range,
 First installation date
Sensor:
 Serial number,
 Approval number.
 First installation date

Installation/Periodic inspection
Date and time,
 Test station identification:
  Name, Address,
  Card number and expiry date,
 k,
 Vehicle identification:
  VIN, VRN & Registration country,
 Vehicle characteristics:
  w, l, speed limit.
 Time adjustment. Old and new values

Repair

Company data locks
Date & time, In Out
 Company Card number, Name, Address

Drivers identification
Per insertion/withdrawal cycle:
 Driver name, first name,
 Card number, nation, expiry date,
 Insertion date & time, slot, odometer,
 Previously used vehicle:

Data blocks
 ○ Complete Mass Memo
 ● Selection
  ☑ Overview data
  ☐ Detailed Speed
  ☑ Events and Faults
  ☑ Technical Data
  ☑ Activities
  ☐ Card Download

Midnight Odometer
Date, Odometer

Speed (24 hours)
 per second

Control activity
 Date & time, Control card number, Type

Events
Per event:
 Dr. and Co-Dr. Card numbers at start and end,
  Date & time start and end,
  Nr of similar events this day.

Time adjustments
Per event:
 Workshop card number,
  Date & time old and new settings;

Overspeed
 Date of last speed control,
 Date of first event and Nr of events since,
Per longest event on a day:
 Card numbers,
 Date & time start and end,
 Maximum and average speeds,
 Nr of similar events this day.

Faults
Per fault:
 Dr. and Co-Dr. card numbers at start and end,
 Date & time start, end

Download control
Last download date and time,
Company identification:
 Name, Card number, Download software version

Security elements

Monitoring of the Implementation of Digital Tachograph
MIDT

EQUIPMENT
&
SOFTWARE

Die Datenübernahme erfolgt u.a. vom **Schaublattleser**,

vom handelsüblichen **Scanner**,
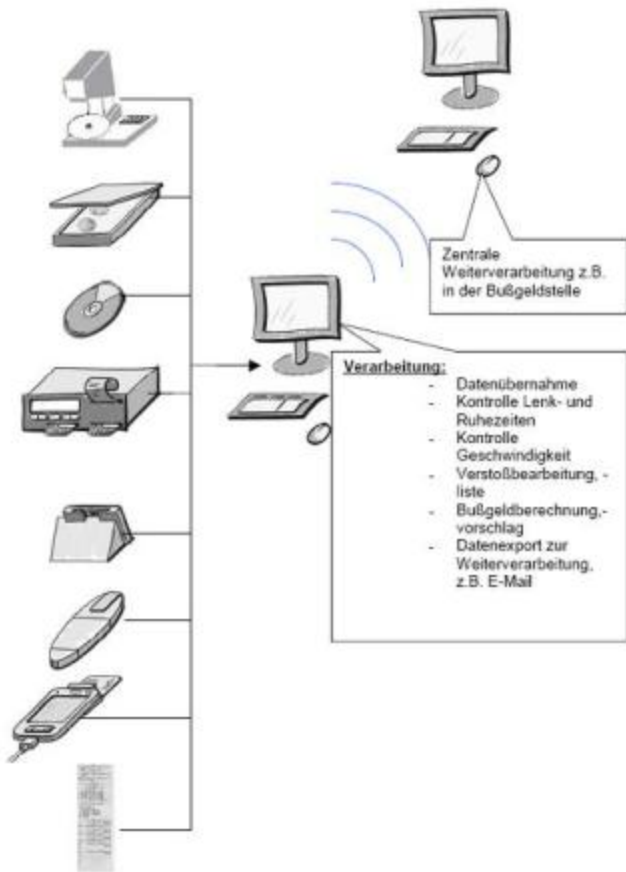
von auf CD archivierte Daten,

für Stichproben durch Auslesen des, per Funk oder Downloadkabel verbundenen, digitalen **Kontrollgerätes**,

mittels **Kartenlesegerät**,

durch Datenübernahme mittels **Downloadkey**,

oder vom PDA = Personal Digital Assistant als einfache kleine Lösung für den operativen Einsatz in der Fahrzeugkontrolle

oder direkt vom Tagesausdruck des digitalen **Kontrollgerätes**

Zentrale Weiterverarbeitung z.B. in der Bußgeldstelle

Verarbeitung:
- Datenübernahme
- Kontrolle Lenk- und Ruhezeiten
- Kontrolle Geschwindigkeit
- Verstoßbearbeitung, -liste
- Bußgeldberechnung,-vorschlag
- Datenexport zur Weiterverarbeitung, z.B. E-Mail

ZA-PSK/PDA Douanes-Contróles sur Route

Straßenkontrolle

- Übernahme, Bearbeitung und Kontrolle der Daten
- Prüfen der Geschwindigkeitsübertretungen
- Verstoßübersicht und Anzeigenerstellung/ Ampelfunktion
- Grafische Übersichtsliste

ZA-PSK/PDA

Monitoring of the Implementation
of Digital Tachograph
MIDT

EQUIPMENT
&
SOFTWARE

Auswahl der Variante im Programm

	Auswerten über VDO Sensor 1 Schaublatt-Leser
Schaublatt-Leser	
Schaublatt-Scanner	Auswerten über AGfa 1, 3 oder 6 Schaublatt-VDO Scanner
Fahrerkarte	Auswerten einer Fahrerkarte aus dem Digitalen Kontrollgerät
Digitales Kontrollgerät	Auswerten über Direktanschluß einer Fahrzeugeinheit (FE)
Download-Datei	Auswerten, Analysieren und Übernahme einer Datei aus dem Digitalen Kontrollgerät (Data, Downloaddatei/Bin)
	Scannen Tageausdruck Digitales Kontrollgerät

Beispiel Datenübernahme vom Scanner

Beispiel Datenübernahme von der Fahrerkarte (Kartenleser)

Egal welche Form der Daten-
übernahme Sie benötigen - alle
Varianten werden Ihnen in einem
Programm angeboten. Sie wählen
Ihre Variante aus.

Von der Variante abhängige
Informationen, wie z.B. Geschwindig-
keiten bei der Datenübernahme vom
Kontrollgerät oder Fahrerdetails bei
der Fahrerkarte, stehen selbst-
verständlich zusätzlich zur Ver-
fügung.

ZAMK erkennt eigenständig den
Scheibentyp und die Position auf
dem Scanner.

Bis maximal 6 Scheiben können
gleichzeitig von einem handels-
üblichen Gerät übernommen
werden.

Sie haben alle Daten auf einem Blick.
Fehler auf den Schaublättern können
sofort manuell korrigiert werden.

Das Programm ermittelt automatisch
die Hardwareschnittstelle bzw.
Portnummer des Geräteanschlusses.

Alle auf der Karte gespeicherten
Daten stehen zur Auswertung zur
Verfügung.

Über [   ] kann die Karten-
zulassung via Internet geprüft
werden

Die Informationen zu Lenk- und
Ruhezeiten werden unabhängig von
der Import Variante in gleicher Weise
für die weitere Bearbeitung
aufbereitet.

Monitoring of the Implementation of Digital Tachograph MIDT

EQUIPMENT & SOFTWARE

Für das gewählten Tag / Schaublatt haben Sie alle notwendigen Informationen auf einen Blick inhaltlich und strukturell in unterschiedliche Register unterteilt.

Unabhängig vom Medium der Datenbereitstellung werden die Daten in gleicher Weise verwaltet und gespeichert.

Für die Informationsdarstellung haben Sie verschiedene Möglichkeiten in Registern strukturiert zur Auswahl.

In den verschiedenen Registern stehen Ihnen komfortable Bearbeitungsfunktionen zur Verfügung.

Die Ereignisanzeige erfolgt in Form

- einer Tabelle
- als Zeitstrahlgrafik
- als Schaublattgrafik
- als Geschwindigkeitsprofil.

Zusätzlich haben Sie die Möglichkeiten, ergänzend zu den Arbeitszeitverstößen, auch formelle Verstöße zum Kontrollvorgang bzw. zum Schaublatt auszuwählen.

Die möglichen Formverstöße verwalten Sie eigenständig in den Stammdaten. "Standardverstöße" stehen Ihnen nach der Installation des Programms sofort zur Verfügung.

Zur Einschätzung des Fahrverhaltens bietet Ihnen ZAMIK eine Lenkzeitgrafik mit den durchschnittlichen Fahrge-schwindigkeiten

EQUIPMENT & SOFTWARE

Mit dieser Funktion erfolgt die Überprüfung der gespeicherten Daten mit den Sozialvorschriften für den Straßenverkehr und die Feststellung der Abweichungen von gesetzlichen Normen als Verstoß.

Individuelle Toleranzen werden entsprechend Ihrer Vorgaben berücksichtigt.

Bei notwendiger Verfolgung dieser Verstöße werden diese in ein Aktenzeichen überführt und für die Bußgeldberechnung in ZA, AZK bzw. für den Export an ein weiterverarbeitendes Programm zur Verfügung gestellt.

In drei einfachen Schritten kommen Sie zu einer Verstoß Auswertung:

1. Sie legen Prüfvariante, Betriebsstätte und ggf. Fahrer und Zeitraum fest.

2. Starten Sie die Prüfung

3. Drucken Sie die Verstoßliste

4. optional: Überführung in ein Aktenzeichen

Bei Bedarf können die Ereignisse bzw. die Verstöße sofort nach der Prüfung exportiert werden, als Formate stehen u.a. CSV, XLS, DBF, TXT zur Verfügung

Monitoring of the Implementation of Digital Tachograph
MIDT

Übersicht Ereignisse

EQUIPMENT & SOFTWARE

Zeitstrahlübersicht

Jederzeit und sofort eine komplexe Übersicht zu den relevanten Daten

Monitoring of the Implementation
of Digital Tachograph
MIDT

EQUIPMENT
&
SOFTWARE

Dieses Programm bietet die
detaillierte Überprüfung von
Fahrtabläufen im Vergleich zwischen
den gespeicherten Daten und einer
mittels Routenplaner erstellten
Vergleichsroute.

Auch für die Überprüfung der Fahrt
bei Verdachtsmomenten, im Hinblick
auf mögliche Manipulationen am EG-
Kontrollgerät bzw. an den
Schaublättern, ist der Einsatz der
Routenkontrolle sinnvoll.

Anhand der gespeicherten
Informationen werden die Abfahrts-,
Halte- und Ankunftspunkte unter
Nutzung von MAP Point hinterlegt.

Nach Ermittlung der Routendaten
erfolgt die Gegenüberstellung der
Fahrzeiten und Kilometer

Die Wegstrecke des Schaublattes
wird durch das MAP-Programm im
Detail ausgewertet und angezeigt.
Die Routenstrecke kann transparent
ausgedruckt werden.

Wichtig
Im Lieferumfang von ZAMIK ist das Interface
zu MS - MAPPOINT enthalten. Die Lizenz für
MS - MP ist nicht Bestandteil des Liefer-
umfangs. Beachten Sie auch die erweiterten
Systemvoraussetzungen durch MS - MP
bedingt.
(17" Monitor, CD-LW und erhöhter
Speicherbedarf auf der Festplatte)

Website : www.eu-digitaltachograph.org
E-mail : secretariat@eu-digitaltachograph.org

EQUIPMENT
&
SOFTWARE

Monitoring of the Implementation of Digital Tachograph
MIDT

71   Beispiel Verstoßliste - Word - Textbausteine ohne Anschreiben (Auszug)

72   Beispiel Verstoßliste - Word - Textbausteine ohne Anschreiben (Auszug)

EQUIPMENT
&
SOFTWARE

90 **Anzeige Muster I**

Contrôleur : M. Guy ░░░░░░░
Lieu : Bureau

Contrôle en cours :

Imprimer

Lecture fichier carte
Lecture fichier tachy
Déchargement tachy

OCTET | **Contrôle** | Entreprise | Conducteurs | Véhicules | **Utilitaires** | **Quitter**

0   2

Ex + For

Description | Lieu | Bulletin de contrôle

Liste des contrôles
R 30 GS 18/01/2005 F 5949 WS 49
R 30 GS 02/03/2005 F 586 PHS 75
R 30 GS 18/01/2005 F4314 XY 49
E 30 GL 14/02/2006

Contrôle en entreprise

Contrôleur

Civilité   M.

Prénom   Guy

Nom   ░░░░░░░

Fonction ou Grade   Inspecteur ppl.

Matricule

Date du contrôle   14/02/2006   16:30

Début de la période contrôlée   10/02/2006

Entreprise

Résumé

Nombre de conducteurs   0   Nombre de véhicules   2

Nombre de journées   Nombre d'infractions   0

Créer
Modifier
Supprimer

Ouvrir
Cloturer

Valider
Annuler

Lecture des données d'une carte conducteur

Identification | Caractéristiques | Evènements - Anomalies | Listes | Détail des activités

Type de carte   Conducteur   France

Numéro

Délivrée par   CHRONOSERVICES

Délivrée le   08/01/2002

Validité   08/01/2002   au   08/01/2007

Prénom   Yohann

Nom

Date de naissance   10/04/2002

Activité   Début   08/04/2002   06:47
                Fin   30/08/2002   19:56

Date déchargement   08/05/2002

Permis   0000000000000000   France

Délivré par   Préfecture

Langue   Français

Vérification des signatures   Non signés

Inter.Chronoservices   Etat indéterminé

○ Affecter ces données à un nouveau conducteur

○ Affecter ces données à un conducteur de la liste :

✔ Valider   ✘ Annuler

Lecture des données d'une carte conducteur

Identification | Caractéristiques | **Evènements - Anomalies** | Listes | Détail des activités

☑ Evènements   ☑ Anomalies

Heure de début	Heure de fin	Catégorie	Type d'évènement
▶ 05/10/2004 14:35	05/10/2004 14:35	Anomalie	(00) - Absence d'informations compléme
08/10/2004 14:35	08/10/2004 14:35	Evènement	(00) - Absence d'informations compléme
08/10/2004 14:35	08/10/2004 14:35	Anomalie	(00) - Absence d'informations compléme

⊙ Affecter ces données à un nouveau conducteur

○ Affecter ces données à un conducteur de la liste : [▼]

✓ Valider   ✗ Annuler

Lecture des données d'une carte conducteur

Identification | Caractéristiques | Evènements - Anomalies | Listes | Détail des activités

Période 08/04/2002 08:47 | 30/08/2002 21:56 | Nombre de jours 146

sam.-24/08

dim.-25/08

lun.-26/08

mar.-27/08

mer.-28/08 — 154h54

jeu.-29/08 — 10h47

ven.-30/08 — 11h51

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 00

○ Affecter ces données à un nouveau conducteur

○ Affecter ces données à un conducteur de la liste :

✓ Valider   ✗ Annuler

THE PRINTOUTS

People

Company
Controller
Driver
Workshop/test station
Manufacturer

Equipment

Driver slot
Co-driver slot
Card
Clock
Display
External storage
Power supply
Printer/printout
Sensor
Tyre size
Vehicle/vehicle unit

Activities

Available
Driving
Rest
Work
Break
Unknown

24h

BASIC PICTOGRAMS: 38

PICTOGRAM COMBINATIONS: 46

BASIC PICTOGRAMS

People	Actions	Modes of operation
Company		Company mode
Controller	Control	Control mode
Driver	Driver	Operational mode
Workshop/test station	Inspection/calibration	Calibration mode
Manufacturer		

Activities	Duration
Available	Current availability period
Driving	Continuous driving time
Rest	Current rest period
Work	Current work period
Break	Cumulative break time
Unknown	

Equipment	Functions
Driver slot	
Co-driver slot	
Card	
Clock	
Display	Displaying
External storage	Downloading
Power supply	
Printer/printout	Printing
Sensor	
Tyre size	
Vehicle/vehicle unit	

BASIC PICTOGRAMS

Specific conditions

OUT   Out of scope

Ferry/train crossing

Miscellaneous

!	Events	✕	Faults
▮▶	Start of daily work period	▶▮	End of daily work period
●	Location	M	Manual entry of driver activities
🔒	Security	⋁	Speed
🕒	Time	∑	Total/summary

Qualifiers

24h   Daily

| Weekly

‖   Two weeks

✦   From or to

PICTOGRAM COMBINATIONS

Miscellaneous

▣◆	Control place		
◆▯	Location start of daily work period	▶▮◆	Location end of daily work period
☉→	From time	→☉	To time
♙→	From vehicle		
OUT→	Out of scope begin	→OUT	Out of scope end

Cards

☉▤	Driver card
⌂▤	Company card
▯▤	Control card
▼▤	Workshop card
▤---	No card

Driving

☉☉	Crew driving
☉▏	Driving time for one week
☉▏▏	Driving time for two weeks

Printouts

24h▤▼	Driver activities from card daily printout
24h♙▼	Driver activities from VU daily printout
!×▤▼	Events and faults from card printout
!×♙▼	Events and faults from VU printout
▼☉▼	Technical data printout
≫▼	Over speeding printout

PICTOGRAM COMBINATIONS

Events

! ▬	Insertion of a non valid card
! ▬▬	Card conflict
! ⊙⊙	Time overlap
! ⊙▬	Driving without an appropriate card
! ▬⊙	Card insertion while driving
! ▬Ａ	Last card session not correctly closed
⟩⟩	Over speeding
! †	Power supply interruption
! Ⴈ	Motion data error
! ⋒	Security breach
! ⊙	Time adjustment (by workshop)
⟩▢	Over speeding control

Faults

× ▬1	Card fault (driver slot)
× ▬2	Card fault (co-driver slot)
× ▢	Display fault
× ∓	Downloading fault
× ▼	Printer fault
× Ⴈ	Sensor fault
× Ａ	VU internal fault

Manual entries procedure

▶?◀	Still same daily work period?
◀?	End of previous work period?
◀✦?	Confirm or enter location of end of work period
⊙▶?	Enter start time
✦▶?	Enter location of start of work period.

Note: Additional pictogram combinations to form printout block or record identifiers are defined in Appendix 4.

DEFAULT DISPLAY

Activities

- ☑ Available
- ☉ Driving
- ⌐ Rest
- ✳ Work
- ‖ Break
- ? Unknown

People

- ⌂ Company
- ☐ Controller
- ☉ Driver
- ⊤ Workshop/test station
- ⊟ Manufacturer

`12:50♦  ☉   75km/h`
`☉⌐ 123456,7km ⊟☑`

Default display	
Local time	hh:mm
Mode of operation	☉
Information related to the driver	1 Dhhhmm ‖hhhmm
Information related to the co-driver	2 Dhhhmm
Out of scope condition opened	OUT

DISPLAY DURING DRIVING

Driver's continuous driving time and cumulative break time

Information related to the co-driver.

Exceeding continuous driving time

DISPLAY DURING DRIVING

10:30	🔋	0km/h
✗	000456,7km	▢

VU not activated.

12:10 ●	▢	0km/h
OUT	123456,7km	

Out of scope

12:10 ●	⊙ ÷	45km/h
⊙▪	123456,7km	▪▢

12:10 ●	÷	45km/h
	123456,7km	

Not enough power supply during driving

MAIN MENU OF THE TACHOGRAPH

Driver 1/2:
- Daily printout / Events (by chosen day)

Vehicle:
- Daily printout / Events / Speed (by chosen day)
- Technical data

Driver 1/2:
- Location Start & End

Vehicle:
- Driving out of scope
- Transfer Ferryboat / Train
- Changing local time
- Adjusting UTC time

Driver 1/2:
- Daily printout / Events (by chosen day) / Driving time

Vehicle:
- Daily printout / Events / Speed (by chosen day)
- Technical data
- Company logged in

PRINTOUTS

Printouts are only possible if:

- the vehicle doesn't drive.
- the contact key is turned on,
- there is enough paper available

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.

DIFFERENT PRINTOUTS
(from 00:00 to 24:00)

There are 6 types of printouts:

- 2 relate to drivers' activities: one comes from the VU, the other one from the driver card;

- 2 relate to events and faults: one from the VU, the other one from the driver card;

- 1 concerns technical data (vehicle, VU, etc…)

- 1 concerns over speeding.

PRINTOUTS – BLOCK IDENTIFIER

- Type of printout
- Card holder identification (inserted during the printout)
- Card holder identification
- Vehicle identification
- VU identification
- Last calibration of the recording equipment
- Last control (by a control officer)
- Driver activities stored on a card in order of occurrence

DAILY PRINTOUT from the DC

08.04.2005   13:51 (UTC)

Date and time (UTC) at which the document is printed

BLOCK identifier „printout"

Type of printout
Driver activities from card daily printout

24h

BLOCK identifier „control officer" / Card holder identific.

DOUANES

D /45676543234987 3 2

31.10.2008

Card holder surname / first name(s) (if any)

Card identification *(watch the index)*

Card expiry date (if any)

BLOCK identifier „driver" / Card holder identification

Conducteur

Pierre le Chauffeur

D /98653587652987 1 4

08.04.2006

Card holder surname / first name(s) (if any)

Card identification *(watch the index)*

Card expiry date (if any)

BLOCK identifier „vehicle""

ABC67123456349876

D   /K-MD 337

(VIN)

Registering Member State and VRN.

DAILY PRINTOUT from the DC

Monitoring of the Implementation of Digital Tachograph
MIDT

```
·········· 日 ··········
日 Fabricant XYZ
   2357.23344565723
·········· ⊤ ··········
⊤ Atelier XY
⊤▪D   /98765432164729 2 3
⊤ 13.03.2005
·········· ◻ ··········
◻▪ D   /90897867564534 2 3
◻ 05.04.2005   10:52        ⊼
·········· ◘ ··········
   07.04.2005        157
··························
? 00:00   05:00   05h00
✳ 05:00   05:12   00h12
```

BLOCK identifier „VU"

VU manufacturer's name
VU part number

BLOCK identifier „workshop"

Workshop name
Workshop card identification
Date of the (last) calibration

BLOCK identifier „control officer" (Last control)

Controller's card identification
Control date, time and type
Type of the control: Up to four pictograms. The type
can be (a combination) of: Card downloading, VU
downloading, printing, Displaying

BLOCK identifier „driver"
**Driver activities stored on a card in order of
occurrence**

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

Period during which the card was not inserted

Activity **manually** entered
Activity pictogram, start and end time (included),
duration

MANUAL ENTRY OF ACTIVITIES BY DRIVERS (1360/2002 – 6.2)

When, as a result of **being away from the vehicle**, a driver is unable to use the equipment fitted into the vehicle, the periods of time indicated in paragraph 3, second indent **(b), (c) and (d)** below shall be entered on the sheet, either **manually**, by **automatic recording** or **other means**, legibly and without dirtying the sheet

(see also amendment new 3820)

a) under the sign: Driving time

b) under the sign: All other periods of work

c) under the sign: Other periods of availability, namely...

d) under the sign: Breaks in work and daily rest periods

MANUAL ENTRY OF ACTIVITIES BY DRIVERS (1360/2002 – 50 / 50bis)

DAILY PRINTOUT from the DC

Monitoring of the Implementation of Digital Tachograph
MIDT

```
·········· 目 ··········
目 Fabricant XYZ
    2357.23344565723
·········· T ··········
T Atelier XY
T▪D    /98765432164729 2 3
T  13.03.2005
·········· ◻ ··········
◻▪ D    /90897867564534 2 3
◻  05.04.2005   10:52      ⤓
·········· ◻ ··········
    07.04.2005        157
···························
?  00:00   05:00    05h00
✳  05:00   05:12    00h12
```

BLOCK identifier „VU"

VU manufacturer's name
VU part number

BLOCK identifier „workshop"

Workshop name
Workshop card identification
Date of the (last) calibration

BLOCK identifier „control officer" (Last control)

Controller's card identification
Control date, time and type
Type of the control: Up to four pictograms. The type
can be (a combination) of: Card downloading, VU
downloading, printing, Displaying

BLOCK identifier „driver"
**Driver activities stored on a card in order of
occurrence**

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

Period during which the card was not inserted

Activity **manually** entered
Activity pictogram, start and end time (included),
duration

DAILY PRINTOUT from the DC

```
·········· 1 ··········
```

Д D   /K-MD 337   → Vehicle registering Member State and VRN

        1 272 km   → Vehicle odometer at card insertion

☑ 05:12 05:34 00h22   → Activity pictogram, start and end time (included), duration,

☑ 05:34 06:01 00h27   ⊙⊙

☺ 06:01 07:35 01h34   ⊙⊙   → crew status (crew pictogram if CREW, blanks if SINGLE),

⊢ 07:35 07:45 00h10   ⊙⊙

        1 364 km;   92 km

```
·········· ·········· ··········
```

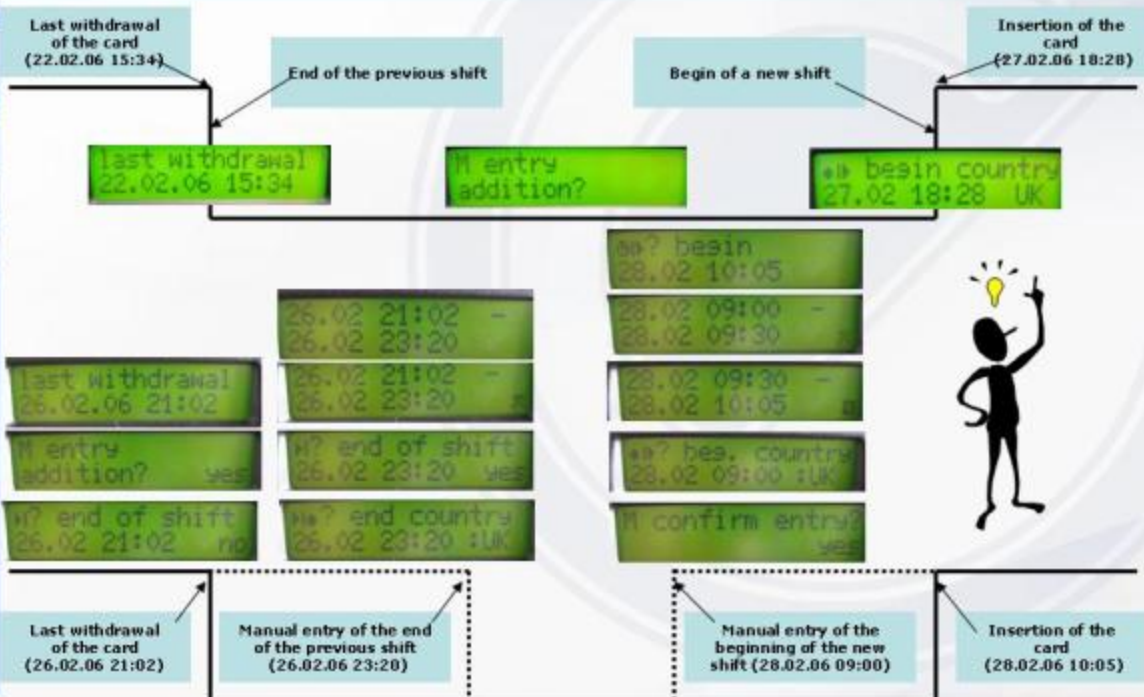? 07:45 08:03 00h18   → Card withdrawal (or End of "No Card" period)

```
·········· 2 ··········
```

Д   D   /K-MD 337

        1 364 km

☑ 08:03 10:24 02h21   ⊙⊙

⊢ 10:24 11:03 00h39   ⊙⊙

        1 364 km;

Card insertion in slot 1 / Record identifier

Vehicle registering Member State and VRN

Vehicle odometer at card insertion

Activity pictogram, start and end time (included), duration,

crew status (crew pictogram if CREW, blanks if SINGLE),

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

Period during which the card was not inserted

Card insertion in slot 2 / Record identifier; 2 = Slot pictogram

Monitoring of the Implementation of Digital Tachograph MIDT

DAILY PRINTOUT from the DC

```
. . . . . . . . . . . . . . . . . . . . . .
?  11:03  11:10  00h07
. . . . . . . . . . 1 . . . . . . . . . . .
Д D  /K-SL 182
            5 157 km
⊙  11:10  13:40  02h30
ⵂ  13:40  14:57  01h17        *
⊙  14:57  15:18  00h21
ⵂ  15:18  16:10  00h52
⊙  16:10  17:38  01h28
        5 408  km;       251 km
. . . . . . . . . . . . . . . . . . . . . .
?  17:38  00:00  06h22
```

Period during which the card was not inserted;
(changing from vehicule K-MD 337 to K-SL 182

Activity pictogram, start and end time (included),
duration,
rest periods of at least one hour are tagged with a
star*

DAILY PRINTOUT from the DC

Printout	Description
-------- Σ --------	BLOCK identifier „Daily summery"
◆▮▶ 05:00 D 1 272 km	Entry of place where a daily work period **begins**. Location begin pictogram, time, country (region), Odometer (K-MD 337 – Slot 1)
▶▮◆ 07:45 D 1 364 km	Entry of place where a daily work period **ends**. Location end pictogram, time, country (region), Odometer (K-MD 337 – Slot 1)
◆▮▶ 08:03 D 1 364 km	Entry of place where a daily work period **begins**. Location begin pictogram, time, country (region), Odometer (K-MD 337 – Slot 2)
▶▮◆ 11:03 D 1 364 km	Entry of place where a daily work period **ends**. Location end pictogram, time, country (region), Odometer (K-MD 337 – Slot 2)
◆▮▶ 11:10 D 5 157 km	Entry of place where a daily work period **begins**. Location begin pictogram, time, country (region), Odometer (K-SL 182 – Slot 1)
▶▮◆ 17:38 D 5 408 km	Entry of place where a daily work period **ends**. Location end pictogram, time, country (region), Odometer (K-SL 182 – Slot 1)
⊙ 05h53 343 km	Activity totals (from a card)
✕ 00h12 ▨ 03h10	Total driving duration, distance travelled
⊢ 02h58 ▨ 11h47	Total working and availability duration
⊙⊙ 05h11	Total resting and unknown duration
	Total duration of crew activities

Monitoring of the Implementation of Digital Tachograph
MIDT

DAILY PRINTOUT from the DC

```
· · · · · · · · ! ✕ ▯ · · · · · · · ·
! ⛽      13.01.2005   08:23
                      00h04
🛠 D    /K-LG 6212
· · · · · · · · · · · · · · · · · · · · · ·
! 🔒    05.02.2005   12:43
!   16                00h01
🛠 D    /K-LG 6212
· · · · · · · · · · · · · · · · · · · · · ·
! ▯⊙   04.03.2005   13:58
                      00h01
🛠 D    /K-LG 6212
· · · · · · · · · · · · · · · · · · · · · ·
✕▯1    10.03.2005   16:03
                      00h01
🛠 D    /K-LG 6212
```

BLOCK identifier last 5 "Events and Faults" from card

Event/fault pictogram „Power supply interruption", date time of start

Record identifier (separation between the last 5 records)

Event/fault pictogram „ Security breach", date time of start

Additional event/fault code (if any), duration

Registering Member State & VRN of vehicle in which the event or fault occurred.

Event/fault pictogram „Card insertion while driving", date time of start

Event/fault pictogram „Card fault (driver slot)", date time of start

DAILY PRINTOUT from the DC

![MIDT logo] Monitoring of the Implementation of Digital Tachograph
MIDT

```
------------------------
!  🔒    23.03.2005  08:13
!  16              01h02
🅰 D    /K-LG 6212
-------- ! ✕🅰 ---------
>>   6  03.02.2005  14:08
                  00h12

   ▯ ----
------------------------
✕▯1 0  04.02.2005  10:15
                  00h04
▯▯ D   /24589675421354 3 2
------------------------
! ▯▯  3  15.03.2005  07:42
        ( 1 )     00h54
▯▯ D   /53253697569812 5 8
```

Event/fault pictogram „Security breach", date time of start

BLOCK identifier last 5 "Events and Faults" from VU

Event/fault pictogram „Over speeding", date time of start

No card

Event/fault pictogram „Card fault (driver slot)", date time of start

Event/fault pictogram „Card insertion while driving", date time of start

Number of simelary events during that day

DAILY PRINTOUT from the DC

```
. . . . . . . . . . . . . . . . . . . . . . .
✕⊺ 4  16.03.2005  16:53
         ( 2 )    00h02
⊙▯ D   /24589675421354 3 2
. . . . . . . . . . . . . . . . . . . . . . .
>>   4  02.04.2005  21:30
         ( 16 )   00h35
⊙▯ D   /24589675421354 3 2
. . . . . . . . . . . . . . . . . . . . . . .
▮◆ _ _ _ _ _ _ _ _ _ _ _ _ _ _
▮  _ _ _ _ _ _ _ _ _ _ _ _ _ _
⊙  _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

Event/fault pictogram „fault downloading", date time of start

Event/fault pictogram „Over speeding", date time of start

Hand-written information

Control Place

Controller's signature

Driver's signature

GETTING DATA VIA DISPLAY

Printout data are also readable (in the cabin of the vehicle)
two lines by two lines (one line printout = two line display),
in the same order
than the way they are shown on the various printouts.

- The evaluation of that data is quite difficult (see impossible)
- It can not be used as evidence for prosecuting

SO THIS SOLUTION WOULD REALLY NOT
BE AN ISSUE FOR ENFORCEMENT

<u>Conclusions of the</u>
Content of a complet AETR roadside check:

- **Recording equipment / Control device** (Visual or technical check: Approval, Installation plaque/calibration, seals, manipulations...) - (Need of a Control card for an effective check)
- ***Status of the WS card (lost, stolen...) -*** (Need for an access to TACHOnet)

- **Identification of the driver** (against the used Driver card and/or the printouts)
- **Status of the DC (lost, stolen...) -** (Need for an access to TACHOnet)

- **Driving and rest periods / Activities** (Need of the record sheets / DC / printouts for the current week and the last day of the previous week...)

Data from the Vehicle unit (VU) (Daily activities, Events, Speed (Speed limiter), Technical data)
- By download (Need of a control card and equipment (Download interface, PC, Software)

- By printout (Need of a control card to get all identities / or a DC for the identification of that driver)

Data from the Driver card (DC) (Daily activities... / Events)
- By download trough the VU (Need of a control card and equipment (Download interface, PC, Software)
- By download from a card reader (Need of equipment (Card reader, PC, Software)

- By printout through the VU (need of a control card to get all other identities)