Safeguarding commercial traffic by respecting regulations and fostering road safety.
History & Foundation – newest version EFAS SE
More than 15 years of experience in Digital Tachographs

1999
First full functioning prototype of EFAS
(Predecessor TRION-Technology AG)

2003
DG 100 cooperation with Grundig
(Predecessor ELCON-mobiility)

2008
EFAS 3 – compliant to EU-Regulations
(Predecessor EFKON AG)

2011
EFAS 4 – Tachograph
(intelic GmbH)

2013
EFAS 4.2 – 2nd Generation EU Tachograph
(intelic GmbH)

2014
EFAS 4 RUS – Tachograph with NCM Kryptomodule / GLONASS
(intelic GmbH)

2017
EFAS 4 SE – Tachograph
Symbolic BT-Dongle
(intelic GmbH)

2017
EFAS BT-Dongle
(intelic GmbH)

2017
EFAS DRIVE
APP
(intelic GmbH)
Digital Tachograph – EFAS 4SE

Highlights of Intellic Digital Tachograph EFAS 4SE

ISORE
- iCounter calculates driving and rest times per shift, per week and fortnightly
- Also while driving iCounter informs the driver about actual status and upcoming necessary change of activity
- iCounter supports efficient routing, logistics and disposition

1-Minute Rule
Drivers can optimize their driving time day by day.
Activity per minute is calculated according to the EU-Regulation 1266/2009.

One4all
- High flexible and adjustable digital tachograph for various vehicle types
  - Automatic Setup Wizard simplifies the CAN bus parametrization once the tachograph is plugged
  - The EFAS Service Tool (EST) software enables easy adjustment of parameters. EST is free of charge to all EFAS workshops
  - Wide range power supply supports all vehicle types (12V and 24V) and simplifies warehouse management

High performance and improved handling
- Enhanced usability, software functionality and CAN connectivity
  - EFAS 4SE supports rapid data download time
  - Rapid card reading and writing and quick card release
  - Easy change of language (e.g. switch to default language by pressing only one button)
  - Enhanced manual entry supports the driver and saves time

Connectivity and compatibility
- Standardized remote download of FMS data via second CAN interface (telematics and fleet management)
- Standard tachograph service interface, easy accessible at tachograph front side with protective cap
- Engine speed input (RPM), alternatively usable as IM's input with adjustable switching threshold
- Full compatibility with all leading accessory tools and workshop equipment
Digital Tachograph – EFAS 4SE
Technical data sheet

Special features
- iCounter calculates driving/rest times per shift/week/fortnight. Even while driving, it informs the driver about upcoming change of activity and their duration.
- 1-Minute Rule - activity per minute is calculated according to the EU-Regulation 1366/2009
- Comprehensive implementation of EU-Regulation 1366/2009
- Supports Fleet Management System (FMS) interface (Version 2 or higher)
- Remote data download via vehicle bus
- Automatic setup assistant
- Exchange of printer module w/o new calibration

Interfaces
- Parameters can be set via different interfaces
- Interface for motion sensor
- CAN interface for connecting to the onboard electronics
- CAN interface to vary IMS-modal
- Second CAN interface for adaptation of telematics and fleet management systems (e.g. for remote download via FMS)
- Configurable K-line interface and info-interface
- 6-pin standard front interface for calibration, diagnosis and data download, compatible with leading 3rd-party tools and devices
- Engine speed input (RPM), alternatively usable as IMS-input with adjustable switching threshold
- Three speed-pulse-outputs (one of them independent configurable)
- Two digital status inputs D1/D2 (coding of user specific events)
- Signal interface for output of tachograph warnings

Vehicle Integration
- Standard CAN bus communication according to ISO 16844 (Road vehicles – tachograph systems)
- CAN ISO 15765 (Diagnostic communication over Controller Area Network)
- Automatic CAN bus adaptation at installation
- Adjustable CAN speed (250, 560 kbps). CAN MIX operation – 1/29-bit identifier
- Switchable CAN termination integrated (120Ω)
- K-Line/RS 232 with diagnostic functions according to ISO 14229 (UDS - Unified diagnostic services) and ISO 14230 (Diagnostic communication over K-Line)

System features
- 128 x 24 pixel Dot-Matrix Display which allows to display 2x16 characters
- 2 automatically controlled card readers
- Standard radio slot size according to ISO 7736
- Maximum state of the art protection against manipulation
- Maximum system reliability
- Conforms with EU certification standards
- High-precision real time clock
- Parameters can be set via different interfaces

Language features
- Automatic detection of the cardholder’s national language
- 27 languages installed
- Additional languages available can be loaded on request
- Display messages shown as floating text
- Easy change of language

Technical data
- Dimensions of front panel (W x H): 186 mm x 58 mm
- Protection class of device front after installation: IP54
- Protection class of device rear: IP40
- Operational temperature range: -25°C to +80°C
- Storage temperature range: -40°C to +85°C
- Operational printer temperature: -10°C to +60°C
- Weight: 1079 g
The Digital Tachograph EFAS

Front View
- Service Interface
- Red LED
- Display
- Printer Module
- Card Key 1
- Card Slot 1
- Cursor Keys
- Card Key 2
- Card Slot 2

Rontom Automotive

Rear View
- Assembly Frame
- Seal
- Connector Panel
- Connection Label
- Opening Cap
- Type Label
- Cover
The Tachograph System

Fleet Owner

Driver

Workshop

Enforcement
EFAS Standard Packaging Units

- scope of delivery
  - EFAS tachograph; including EFAS printer and roll of certified EFAS tachograph-paper
  - User-manual and Quick Guide
  - Assembly-frame for mounting into DIN-slot; wo assembly-brackets for removal from DIN-slot
  - Protection-cover for rear connectors incl. screw, seal and seal-fastener
  - Rubber-cover for the rear screw thread
  - Environmental-friendly cardboard box

Environmental sound cardboard box of 6 units

Environmental sound cardboard single box

Label with version and serial number

EFAS Digital Tachograph

Accessories for installation and sealing
Tachograph Eco-System - Smart Tachograph

New Smart Tacho carries ALL technical features for an EC-wide Sat based Truck Tolling System

EFAS conforming to Common Criteria 4+
EFAS Cryptocontroller  CC 5+

“digital tachographs record activities of drivers to ensure compliance to social legislation”

Driver’s Activities
Social Regulation
Secure Recording

On board Weighing System
Store number of Axels (**)

Digital Tachograph

SMART CARDS
- Driver
- Company
- Garage
- Police

GPS (**)
Vehicle Unit (Cockpit)
ITS Interface (**) (optional)
Remote Enforcement (**) (Vehicle Front)
Road Enforcement

Motion Sensor (Gearbox)

Special Indicator

(*)... since October 1st, 2012    (**)... from March, 2nd, 2019 (est.)
Integration of Smart Tachograph 2019

Smart Integration of Smart Tachograph gives a variety of Design and Ergonomics benefits
EFAS Service Tool (EST)

- Easy to use software tool for workshop professionals
- Running on Windows or Android (coming soon) platform
- Connect with EFAS via serial cable or wireless (coming soon)

Features (Excerpt)

- Configuration of EFAS Tachographs
- Setting of vehicle parameters
- Diagnostics and Test Routines
- Software update of EFAS Tachographs
- Pairing with motion-sensor
- Management of configuration profiles
- Multilanguage support

(*) DTC: Diagnostic Trouble Code
Installation and Integration

**Installation**
- Install and seal MotionSensor
- Install, wire and seal EFAS
- EFAS is powered and online

**Activation**
- Put in workshop-card
- Enter PIN, EFAS will be activated
- EFAS is activated

**Calibration**
- Determine k- & w-Factor
- Enter parameters and pair with sensor
  - w-, k- and l-factor
  - Tire size
  - Max. speed & odometer
  - Time & date
  - Next calibration date
  - Nation, LPN & VIN

**Parameterization**
- Connect EFAS with EFAS Service Tool
- Set parameters and run test routines
- EFAS is calibrated

**Warranty**
- Obtain EFAS Warranty Certificate
- Apply installation plaque at vehicle
- EFAS is integrated with vehicle
- Ready to drive
EFAS Accessories and Spare Parts

- EFAS Paper
- EFAS Seal
- EFAS Assembly Frame
- EFAS Printer
- EFAS Seal Fastener
- EFAS Front Interface Cover
- EFAS Battery
- EFAS Washer
- EFAS Connector Panel Cap
- EFAS Interface Cable
- EFAS Removal Clamps
- EFAS Rubber Puffer
Approval and Certification Processes (Summary)

- Type Approval
  - Security Certification (BSI)
  - Functional Certification (TÜV)
  - Interoperability Certification (JRC)
  - Type Approval (KBA)

- Production & Personalization
  - ISO Certification Subcontractor
  - TS-16949 Certification Subcontractor
  - Personalization Security (KBA)
  - Mass Production

Abbreviations:
- BSI: Federal Office for Information Security
- TÜV: Technischer Überwachungsverein
- JRC: Joint Research Center
- KBA: Federal Motor Transport Authority
- Approval for Organization
- Approval for Device
Worldwide Drive Time Management Regulations (Status Feb. 2017)

- **2014**: Obligation for Retrofit (since 07/2014) EU Regulation
- **2016**: ELD Electronic Logging Device (December 2015) FMCSA N° 395
- **2013**: Digital Tachograph (2013) GNSS (GPS/GLONASS) No.36/2013
- **2018**: E-VDR
- **Local VDR analog/digital**
- **Vehicle Recorder (exp. 2016)** (GPS/Baidu incl. Light, Brake signals) GB 19056/2012
- **VDR EOBR**

VDR – Vehicle Data Recorder
EOBR – Electronic On Board Recorder
**(*) Morocco, Algeria, Tunisia and Jordan – new members of AEIR agreement**
Evolution of EU Tachograph Legislation

- **1985**: EG Reg. 3820/1985, signed 1970
  - **2002**: replaced by EU Reg. 561/2006
- **2006**: EU Reg. 1360/2002 Annex 1B
  - **2010**: amended by EU Reg. 1266/2009 Annex 1B
- **2014**: DTs for AETR
- **2016**: EU Reg. 165/2014
  - **2017**: EU 2016/799 Annex 1C
  - **2019**: EU Dir. 2015/719

**Highlight**
- **Analogue Tachograph**
  - Paper discs
  - Recording of distance
  - Recording of drivers activities
  - Recording of speed
- **Digital Tachograph**
  - GEN 1, Ver. 1
    - Chip-cards
    - High-security device
    - Consistent system throughout Europe
- **Digital Tachograph**
  - GEN 1, Ver. 2 + 3
    - 1-Minute Rule
    - 2nd Source (IM5)
    - New Motion-Sensor
- **Smart Tachograph**
  - GEN 2, Ver. 1
    - GNSS Integration
    - Remote Enforcement (DSRC)
    - ITS Interface
    - Cryptography Update

**Generation**
- **A**
- **GEN 1, Version 1**
- **GEN 1, Version 2 + 3**
- **GEN 2, Version 1**

**Coming into force**
- **1986**
- **05/2006**
- **10/2011**
- **10/2012**
- **02/2014**
- **06/2019**

**Notations**
- IMS: Independent Motion Source
- GNSS: Global Navigation Satellite System
- DSRC: Dedicated Short Range Communication
High quality, high capacity manufacturing

- **EFAS** is manufactured by melecs Austria (plant Győr, Hungary)
- Certified high quality manufacturing (ISO 9001, ISO 14000, TS 16949) under full quality control of Intelic
- High reliability due to zero defect strategy and 100% test coverage
- Flexible processes allow supply of up to 2000 units/week

Local Manufacturing in Turkey

- BAŞARI TEKNOLOJİ is strategically located in the heart of Turkey close to main highways and export routes East-to-West
- Over 10,000m² of factory floor and flexible processes allow supply of up to 1200 units/week
- Certified high quality manufacturing (ISO 9001, ISO 14000) under full quality control of Intelic
- High reliability due to zero defect strategy and 100% test coverage
**Fleet Owner**
- Organize the work so that drivers can abide to social regulation.
- Download driver-cards and mass-memory within time-limits
- Analyse downloaded data for infringements.

**Driver**
- Abide to social regulation.
- May only use his own personalized driver-card.
- Must use his card for all related journeys.
- Shall make manual inputs when necessary.

**Workshop**
- Approve fitters and workshops.
- Keep personalised workshop-cards.
- Calibrate and tachographs according actual test-results.
- Mount installation plagues.
- Seal the digital tachograph.

**General**
- Digital tachographs are security devices and may not be manipulated or misused in any way.
- Digital tachographs have to be installed in all vehicles in scope of the regulation.
Overview of EFAS Advantages

Compliance
- Compliant with all relevant legal requirements
- Compatible with all approved motion-sensors and tachograph-cards
- Fulfilling all required technical standards

Investment Protection
- Ease of operation and handling
- Efficient service and maintenance support
- High quality device with cutting edge technology and performance

Added Value
- Driver support to comply with social regulation
- Highly flexible device for easy installation
- Comprehensive access and connectivity to current and recorded data.

Frequently heard from users
„EFAS, to me the best digital tachograph!“
EFAS – Compliance approved

Type Approval
- Security Certification according Common Criteria 3.1 EAL 4+
- Complete Tachograph Type Approval including Functional and Interoperability Certificate
- Compatible with all approved cards and motion-sensors

Legal Compliance
- One-Minute Rule
- IMS – Independent Motion Source for vehicle with and without(*) CAN-Bus
- Supports all types of motion-sensors (ISO 16844-3)
- Compliance with EU-Regulations 1360/2002 and 1266/2009

Technical Compliance
- Compliant with all relevant tachograph calibration devices
- Compliant to remote download standards and direct download tools.
- Compliant to industrial vehicle bus standards (CAN-Bus, k-Line) and diagnostics standards.
EFAS – Unique and Outstanding Product Features

- **Usability**
  - Optimized user guidance directs easily to functions in menu
  - Adjustable audible feedback alerts driver
  - Setup wizard eases installation and calibration processes
  - Easily replaceable printer (patented)

- **Flexibility**
  - “ONE 4 ALL”: single version for comprehensive truck configurations reduces storage cost and improve availability
  - Software driven product architecture enables update services in case of changes in regulations

- **Expansion capabilities**
  - “Multiple Devices in Digital Tachograph Case”: Patented sub-device-host-slot opens device integration for future systems (e.g. eCall, Fleet management, Tolling)
EFAS Training Equipment

“Intelic provides Master Training in accordance with European Regulation 3821/85 Annex 1B as well as appropriate Training Equipment like EFAS Training Unit, Training Box and Training Tower”

**EFAS Training Unit**

Full EFAS unit with training keys for training and education purpose
- EFAS 4 Training Unit
- user-manual, quick guide
- EFAS Tachograph paper
- Accessories and installation parts

**EFAS Training Box**

Durable and hard-wearing case containing all equipment for EFAS specific training
- EFAS 4 Training Unit
- Handbook
- Additional paper
- Driver and Workshop Test Cards

“Participants receive a certificate”
The Impulse CAN converter (ICC) provides signal for independent motion source (IMS) for digital tachographs according to EU Regulation 1266/2009.

IMS is mandatory for commercial vehicles initially registered after September 2012.

The MTC adapter connects speed signal from odometer or other appropriate sensors like wheel- or ABS-sensors to tachograph IMS input.
EFAS Russian Version

**External Glonass Antenna**
- SMB or FAKRA connector

**Crypto-Module**
- Integrated in EFAS Russia

**Motion Sensor**
- acc. Russian regulation
  - Motion Sensor required
  - but no utilization of security functions

**Characteristics of EFAS Russia**
- Compliant to Russian **Regulation N°36** of 13th February 2013
- Based on EU **certified** EFAS-4 Tachographs
- Identical design and functionality as EFAS-4
- **Compatible** to existing EU tools (calibration, download etc.)
- Includes **crypto-module** incl. GLONASS

**Production and Provision in Russia**
- Manufacturing equal to EFAS 4
- **Installation of Crypto Module in Russian Assembly Line.**
- **Delivery from Russian** manufacturer
- Russian Authority **approved**
Intellics references of success

RUSSIAN SPACEPORT BAikonur

more OEM references...

OEM line feeding of Russian
OE commercial vehicle manufacturer:

OEM line feeding of Turkish
OE commercial vehicle manufacturer:

Intellics success for the prestigious project tender Baikonur:

“All ground vehicles of spaceport Baikonur are equipped with Intellics digital tachograph EFAS.”
Service and Support

**Training**
- Train the Trainer concept
- Master Training
- Workshop-training
- Product Training
- Equipment for training and education
- Documentation and teaching material

**Support**
- EFAS Service Tool
- Handbook for guidance of staff
- Support portal with answers to frequently asked questions
- Knowledge base
- Mail or telephone support for dealer experts

**Warranty Administration**
- Printout of warranty certificate
- Application form for RMA including RMA number and address stickers
- Request for Software update
## Training for your individual needs

<table>
<thead>
<tr>
<th>Master Training</th>
<th>Product Training</th>
<th>Individual Training</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target</strong></td>
<td>enables participants to train workshop professionals, so that they can perform all legally relevant practical tasks in accordance with CR (EU) No. 3821/85, Annex 1b, and its various amendments *)</td>
<td>Individually agreed topics on Digital Tachograph legislation as well as hands-on product training for workshops, dealers, trainers or support and sales staff</td>
</tr>
<tr>
<td>Duration</td>
<td>2 days (2 * 8 hours net)</td>
<td>Individual</td>
</tr>
<tr>
<td><strong>Topics</strong></td>
<td></td>
<td>Individual choices of topics and technical depth of lessons</td>
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<tr>
<td>• EU regulation 3821/85 and amendments</td>
<td>• Digital Tachograph EFAS</td>
<td></td>
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<tr>
<td>• Components of the recording equipment</td>
<td>• EFAS Service Tool</td>
<td></td>
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<tr>
<td>• Data download and archiving</td>
<td>• Application Examples</td>
<td></td>
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<tr>
<td>• Printing and interpretation of printouts</td>
<td>• EFAS Service Portal</td>
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<tr>
<td>• Calibration and regular inspection</td>
<td>• Practical exercises</td>
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<td>• Detecting manipulations</td>
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<td>• Maintenance issues</td>
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<td>• Warranty handling</td>
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<td>• Practical exercises</td>
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<tr>
<td><strong>Skills</strong></td>
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<tr>
<td><strong>Attendees</strong></td>
<td>automotive electrician, automotive mechanics or a comparable profession in the field of automotive</td>
<td>Depending on individual setup from newcomers to experts</td>
</tr>
<tr>
<td><strong>Certificate</strong></td>
<td>“Training of the trainers course” on Digital Tachographs</td>
<td>Digital Tachograph EFAS</td>
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Tachograph Technology
System Interfaces

**Connector Panel**

- Power Supply: 8 – 32 V
- Ignition: vehicle signal
- Illumination: vehicle signal (PWM)
- Motion Sensor: ISO 16844-3
- Velocity: Digital pulses
- Serial Interfaces: K-Line, Info Interface
- Status Output: Digital inputs
- Warning Output: Configurable output

**EFAS Tachograph**

- Diagnostics: ISO 14230-1, KWP2000
- Download: RS232, 115200 Baud

**Front Interface**

- Connection Label

**Connector Panel**

- Connection Label
Rear Connections / Connector Label

**D-Connector**
- Status and Warning Output
- Speed Output (conf.)
- Serial Outputs (k-Line, Info)

**C-Connector**
- Second CAN-Bus (CAN-C)
- CAN-C Termination Y/N
- RPM Output

**B-Connector**
- Motion Sensor Interface
- Speed Output
- Impulse Output

**A-Connector**
- Power & Ignition
- Illumination
- Primary CAN-Bus (CAN-A)

---

**Connector Pinouts**

**D-Connector**
- D1: Status 1
- D2: Status 2
- D3: not connected
- D4: Warning OUT
- D5: not connected
- D6: V-Imp. (conf.)
- D7: Serial D7
- D8: Serial D8

**C-Connector**
- C1: not connected
- C2: not connected
- C3: Engine RPM
- C4: not connected
- C5: CAN High (C)
- C6: CAN Gnd. (C)
- C7: CAN Low (C)
- C8: CAN Term. (C)

**B-Connector**
- B1: Sensor +
- B2: Sensor -
- B3: Sensor Pulse
- B4: Sensor Data
- B5: not connected
- B6: V-Impulse
- B7: V-Impulse
- B8: 4 Imp./m

**A-Connector**
- A1: Battery + (30)
- A2: Illum. (58)
- A3: Ignition (15)
- A4: CAN High (A)
- A5: Battery - (31a)
- A6: Ground (31)
- A7: CAN Gnd. (A)
- A8: CAN Low (A)

---

**CAN-A Termination**

**Motion Sensor Power Supply**
- $U_o = 10V$, $I_o = 31.2mA$, $P_o = 0.31W$
- $L_o = 10mH$, $C_o = 29nF$

---

**DO NOT DISCONNECT WITHOUT WORKSHOP CARD!**

**PLEASE SEE SERVICE MANUAL FOR DETAILS.**
EFAS 4 - Technical Data (Excerpt)

**Power Supply**
- Power supply range: 8 – 32 V
- Power consumption with odometer supply: 70mA (24V wiring) and 120mA (12V wiring)
- Power consumption on standby below 3mA (without motion-sensor supply)

**Special Features**
- Complete Implementation of EU-Regulation 1266/2009
- Remote Download via EFAS RDD®
- Remote Download via vehicle bus (FMS)
- Easily removable printer module

**Software Protocols**
- Standard CAN Bus: ISO 16844 and SAE J1939
- CAN ISO 15765, K-Line and RS232 with diagnostic function (UDS) according to ISO 14229 and 14230
- Automatic CAN bus adaptation

**Technical Data**
- Dimensions without cover according to the DIN radio slot according to ISO7736
- Dimensions of cover (WxH): 186mm x 58mm
- Protection class of device front after installation: IP54
- Operational temperature: -25°C - 80°C
- Storage temperature: -40°C - 85°C
- Printing temperature: -10°C - 60°C
- Weight: 1.075g
- Protection class of device rear: IP40

**Interfaces**
- Interface for motion sensor and Independent Motion Signal solution
- CAN interface for onboard electronics
- Configurable k-line interfaces
- 6-pin standard front interface
- RPM input
- Second CAN interface, e.g. for adaption of ITS systems
- Three v-impulse outputs (one of them configurable)
- Two digital status inputs D1/D2
- Warning output

**System Features**
- 4 display colors available at request
- 2 automatic card readers
- Maximum system reliability
- Conforms with EU certification standards
- High-precision real time clock
- Exchange of printer and battery w/o recalibration
- Automatic language detection
- 27 languages available, others available for uploading
- Display of floating text
**IMS – Independent Motion Signal**

**General:** Independent signal if vehicle is moving or not.

**Purpose:** Information compared with motion-sensor signal

**Reason:** Manipulation of digital tachographs

**Usage:** Mandated from Oct. 2012 in newly registered vehicles

---

**Standard Implementation**

**CAN-Bus Signal**
- “Front Axle Speed”
- No add. hardware required
- Pure software solution
- Only for vehicles with CAN-bus

**Manufacturer Specific Implementations**

**Competition**
- Additional GPS module
- Requires additional hardware
- Requires additional installation
- **High cost Solution**

**Solution by Intellic**
- Internal Acceleration Sensor
- Already included, no add. hardware
- No installation required
- **Cost efficient solution**
Data Download

**Data Recording**
Digital Tachographs digitally store recorded data on driver-card and on mass-memory of vehicle unit.

**Legal Requirement**
Recorded data has to be periodically downloaded (from vehicle unit and card), analyzed and archived.

**Maximum Period**
Downloading the recorded data from the vehicle unit at least each 90 days and from card at least each 28 days.

**Downloading Card Data**
- Sticks and Tools
- External Reader

**Downloading Mass-Memory**
- Download-sticks & -tools
  - Company Card required

Other means: Remote Data Download

FMS-Standard
FMS Standard – Connectivity

**Full Integration**

- Digital Tachograph EFAS
  - CAN A
- Vehicle Data Network
- Engine
- Gearbox
- FMS Interface
- GPS
- GPRS
- Other sensors

**Direct Download**

- Digital Tachograph EFAS
  - CAN C
- GPS
- GPRS
- Other sensors
- Fleet Management Device

Typical setup in Light Goods Vehicles (LGVs) without vehicle data network. Direct remote download from digital tachograph.

Typical setup in Heavy Goods Vehicles (HGVs) with comprehensive fleet management solution including remote download from tachograph.
Remote Data Download with FMS

1: Authentication
2: Data Download

Characteristics

- Save time and costs by remote download capability:
  - No unnecessary journeys to company base
  - No time lost while waiting for downloads
  - Solution based on industrial "FMS Standard"
  - Extensible by vehicle data, e.g. location, fuel consumption, gear change etc.
Bluetooth & WIFI (coming soon)

EFAS 4+ introduces an advanced printer module with integrated Bluetooth and WiFi connectivity.

Vehicle integration, Parameterization and Test & Software-Update

Download data from card and mass memory.

Driver support to comply with social rules.

Service App  EFAS Service Tool  Download App  Driver App

EFAS Portal  Fleet Portal