

VDO Guide for Light Commercial Vehicles

Everything you need to know about the EU Mobility Package, smart tachographs and the new obligations for companies and drivers



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Why does this issue now also affect you?

Starting July 1, 2026, light commercial vehicles such as transporters, delivery trucks and vans with a gross vehicle weight exceeding 2.5 tons must be equipped with a second-generation smart tachograph when used for cross-border freight transport. For many companies, this is a completely new requirement.

This also entails new obligations for vehicle owners, fleet managers and drivers: the use of driver and company cards, the recording of driving times, rest periods and working times, the digital archiving of tachograph data – and, above all, the timely retrofitting of vehicles.

This guide is intended to assist you with this transition and provide a concise overview of the most important questions and answers regarding the new tachograph requirement.



What is the EU Mobility Package – and why is it important?

The EU Mobility Package is a collection of regulations adopted in 2020 to create uniform rules for commercial transport across Europe.

The aim is to:

- / Increase road safety
- / Ensure fair competition in the transport industry
- / Improve working conditions for drivers across Europe

The introduction of mandatory tachographs for light commercial vehicles in cross-border traffic is part of the final implementation phase of this package. This means that smaller vehicles are now also included in the regulatory system, which previously applied primarily to large trucks.

What does this guide offer you?

Our guide answers the most important questions about:

- / The new tachograph requirement from 2026
- / Retrofitting your vehicles
- / The technology behind the tachograph and how to use it
- / Your obligations during inspections

The content of this guide was put together by VDO experts who deal with the legal requirements and technical solutions every day. The goal is to make it as easy as possible for you to get started with the subject – in a practical, understandable and reliable way.

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01 TACHOGRAPHS FOR LIGHT COMMERCIAL VEHICLES – EVERY- THING ABOUT THE INSTALLATION



1 What is a tachograph and what is it used for?

A tachograph is a digital control device that is installed in commercial vehicles to automatically record the driving times, rest periods and working times of drivers. It serves to ensure compliance with legal regulations and promotes safety and fairness on the roads.

The device records, among other things:

- / Driving times, breaks and rest periods
- / Working and standby times
- / Distances traveled
- / Speeds
- / Border crossings
- / Vehicle and driver card data

The second-version smart tachograph– i.e. from DTCO 4.1 and up – also offers functions for automatic position identification, remote monitoring by authorities (DSRC), and for integration into digital fleet management systems. The recorded data must be archived by the company and presented during checks by authorities.

In short: The tachograph is a **key tool for legally compliant documentation of driving and working times** – and therefore an important component for legally compliant and efficient vehicle use in commercial transport.

2 Which tachograph must be installed in light commercial vehicles?

The current devices belong to the second version of the second generation of digital tachographs. They are also referred to as second-version smart tachographs or G2V2. These are required by law and can be identified by their extended functions in accordance with EU Regulation (EU) 2016/799 in its most recent version.

The **VDO DTCO 4.1** was one of the first smart second-version tachographs that met all legal requirements by mid-2023. It features the following functions:

- / **Automatic recording** of border crossings via GNSS (satellite positioning)
- / **DSRC interface** for remote checks by control authorities as vehicles pass by
- / Support for compliance with **cabotage and worker posting requirements**
- / **Event and fault recording** with time stamp
- / Intelligent sensor technology for **tamper detection**
- / **Updateable** for future EU regulatory requirements

The DTCO is not only legally compliant, but also offers clear advantages for everyday use thanks to its digital interfaces and connection to fleet management systems such as VDO Fleet – from automatic data collection to simplified archiving.

3 Who is affected by the tachograph requirement?

The obligation to install the second version of the smart tachograph applies to all **light commercial vehicles in commercial use** with a **maximum permissible weight exceeding 2.5 tons (including trailers or semi-trailers)** that are used **in cross-border freight transport or in so-called cabotage operations** – i.e., domestic freight transport by a foreign transport company without a registered office or branch in the country concerned.

Regardless of this, the tachograph requirement continues to apply to vehicles designed or permanently intended for the transport of more than nine people (including the driver).



Important!

The deadline for the installation is July 1, 2026!

4 Are there any exceptions to this rule?

Exempt from the tachograph requirement are, for example, journeys for own-account transport, provided that driving is not the driver's main activity.

In addition, special regulations apply to so-called third countries, i.e. countries outside the European Union. Many of these countries have signed an agreement with the EU known as AETR (European Agreement Concerning the Work of Crews of Vehicles Engaged in International Road Transport). This agreement requires vehicles from AETR signatory countries operating in EU member states to comply with the regulations on working times and rest periods for drivers and to record these times.

However, the AETR Agreement does not specify which technical device must be used to record these times. Therefore, there is currently no legal obligation to install second-version smart tachographs (G2V2) in these vehicles.

For further information, visit the VDO portal at my.vdo.com or the EU Commission's website.

VDO Information Portal
[my.VDO.com](https://my.vdo.com)



EU Commission Website
eur-lex.europa.eu



If you would like to stay up to date on the latest information from the transport industry, the world of VDO, or news related to the EU Mobility Package, please register with the

VDO Information Portal –
[my.VDO.com](https://my.vdo.com)



EXAMPLE

If a vehicle registered in the EU is traveling on the PL-UA-PL route, it is not necessary to use a new G2V2 tachograph after crossing the PL-UA border. However, on the UA-PL route, it is necessary to comply with the requirements of the EU Mobility Package when crossing the border into the European Union. Therefore, such a vehicle should be equipped with a G2V2 tachograph.

If the vehicle is registered in a third country and is performing such a journey (PL-UA-PL) in accordance with AETR rules, this means that the rules of the AETR Agreement apply to the entire route, regardless of whether it is a PL-UA or UA-PL route. In such a case, it is not necessary to have a second-version smart tachograph on board.



VDO recommends that all vehicles registered in EU member states and used in international transport be equipped with the latest G2V2 tachograph, regardless of the routes they travel.

5 I carry out non-commercial transport. Do I have to retrofit the tachograph?

No. The obligation to retrofit a smart tachograph of the second version only applies to light commercial vehicles such as small transporters and vans used commercially in cross-border transport. Anyone who only carries out non-commercial transport – for example, for private purposes, volunteer work, or without an economic background – is not affected by the regulation.

Important: The distinction between commercial and non-commercial use is not based solely on the type of vehicle, but on the purpose of the transport. As soon as a vehicle is used for cross-border economic activities – e.g., on behalf of a customer, for handling goods, or for services in return for payment – it is considered to be used for commercial purposes, and the new regulations will apply from July 1, 2026.

6 Can I have the tachograph installed in any country in Europe?

Indeed, you can!

Please note that the cost of installing the tachograph may vary from country to country.

7 Do vehicles that only drive within the country they are registered in have to install tachographs?

No. Vehicles that are not used in cross-border transport are currently not required to install a tachograph. However, it may be advisable to consider installation, as a new tachograph significantly simplifies the recording of working hours for drivers and the scheduling of vehicles.

8 Where can I have my tachograph installed?

We recommend that you have your tachographs installed in a VDO-certified workshop.

It is advisable to contact the selected workshop in advance to arrange a suitable appointment.



Visit our
Partnerfinder

fleet.vdo.com/partnerfinder

9 How much does it cost to install a tachograph and where can I purchase the device?

The price for installing a tachograph at VDO Partner Workshops varies depending on the vehicle and tachograph model, as well as the country. The price usually includes a complete service (installation of the device, installation of the speed sensor, and calibration). The device itself is purchased from official VDO distribution partners; its price is set by the supplier and is added to the installation and calibration costs.





VDO PARTNERFINDER

VDO

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187km

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Specification

Our recommendation!

Before having the tachograph installed at one of the workshops in our partner network, we recommend that you contact the workshop in advance by telephone. This will allow you to arrange a suitable time slot, find out the details and scope of the installation, and obtain a quote.



Important!

Please note that when installing the tachograph, the speed sensor and GNSS antenna must also be installed. Calibration is also required, which is completed by printing an installation sticker. This sticker confirms that the certification process for the tachograph has been carried out correctly.

10 How long does it take to install a tachograph?

The estimated time required to install a tachograph and a GNSS antenna, including the installation of the speed sensor or an M1N1 adapter (depending on the vehicle) as well as calibration, is several hours, provided that no unforeseen circumstances arise. In such a case, the vehicle may be out of service for several days.

In view of the upcoming deadline, we recommend planning and carrying out the installation well in advance.

Retrofitting is a complex process, the duration of which depends on various factors, such as the vehicle model and the structural requirements. The time required should therefore be assessed individually in each case.



02 TACHOGRAPHS FOR LIGHT COMMERCIAL VEHICLES – OTHER IMPORTANT QUESTIONS



1 What are the consequences of not having a tachograph in a vehicle?

The lack of a tachograph constitutes a serious offense that can result in heavy fines during an inspection.

It should be noted that penalties may vary depending on where the offense occurred.



Important!

In Italy, the fine for not having the required tachograph can range from 831 to 3,328 euros, while in Germany, the fine can be up to 1,500 euros!

2 Where and how can drivers receive training after the tachograph has been installed?

After installing a tachograph, drivers can register on the VDO training platform using the QR code on the front of the DTCO 4.1a (or higher) and complete a virtual driver training course there. These online training courses provide valuable initial information and additional content.



Complete the training course on how to use the tachograph here.

Important:

These trainings, however, do not replace training by an experienced trainer on site. For comprehensive instruction, drivers should also take advantage of local training opportunities.



Visit our
VDO Information Portal:

fleet.vdo.com/myvdo-portal/



3 What to do if the tachograph malfunctions?

Please contact a VDO Partner Workshop of your choice to have the defect evaluated.



Visit our
Partnerfinder

fleet.vdo.com/partnerfinder

4 How often does a tachograph need to be calibrated?

Calibration must be performed **no later than 2 years** after the date of the last calibration. It is also required after any repair, fitting of wheels with a different wheel size, or a change of license plate. If you are unsure whether or when calibration is required, we recommend that you contact a VDO Partner Workshop.

5 What possibilities does Bluetooth offer in tachographs?

The smart tachographs DTCO 4.1a and higher have an integrated **Bluetooth interface** that enables a secure wireless connection to mobile devices such as **smartphones or tablets**.

In combination with the **VDO Fleet App**, this opens up new possibilities for convenient and mobile data use:

- / **Archiving:** Download tachograph and driver card data for secure storage in VDO Fleet Tachograph Management
- / **Reminders:** Notification function for compliance with legal download deadlines
- / **Monitoring:** Real-time display of vehicle and driver data via VDO Fleet Maps and display of driver availability
- / **Access to functions:** Management of manual entries, use of DTCO functions and overview of driving times and rest periods directly in the app

The VDO Fleet App can be downloaded from the App Store and Google Play.

Download
from the
APP STORE!



Now in
**GOOGLE
PLAY!**



6 Do I have to enter any border crossing manually, or does the tachograph do this automatically?

Starting with release 4.1a, the DTCO automatically records the time of border crossings. No manual entry is necessary.



Important!

It is important to note that only the G2V2 driver card – recognizable in Germany by the identification number 4 0030 above the chip – enables automatic recording of border crossings on the driver card.



7 How do I download data from a tachograph?

VDO offers solutions for downloading, archiving and analyzing tachograph data. Fast downloading and easy archiving are possible, for example, with the DLK Smart Download Key, which allows data from DTCO tachographs and driver cards to be easily read and saved. Alternatively, the VDO Fleet App enables mobile access to tachograph data – anytime, anywhere. With the soon-to-be-available VDO Link, a plug & play solution directly on the tachograph, data download is even fully automatic. Additional services such as Track & Trace are available to keep vehicle positions in view at all times.

8 Does the tachograph record the position during loading and unloading?

The tachograph allows drivers to enter and confirm information in real time when the vehicle is being loaded or unloaded, or when both processes are taking place simultaneously. The position of the vehicle is then recorded.



03 DSRC, TELEMATICS AND GNSS



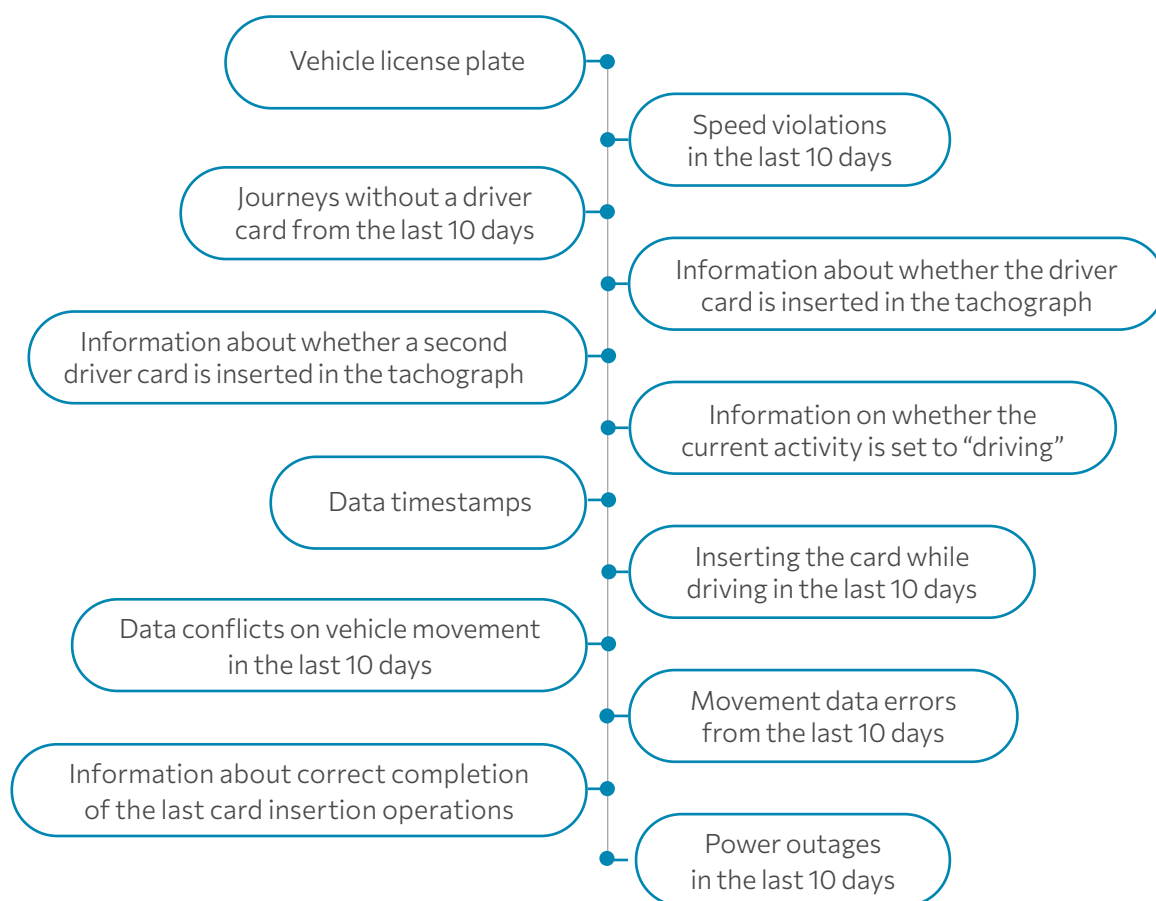
1 What is DSRC?

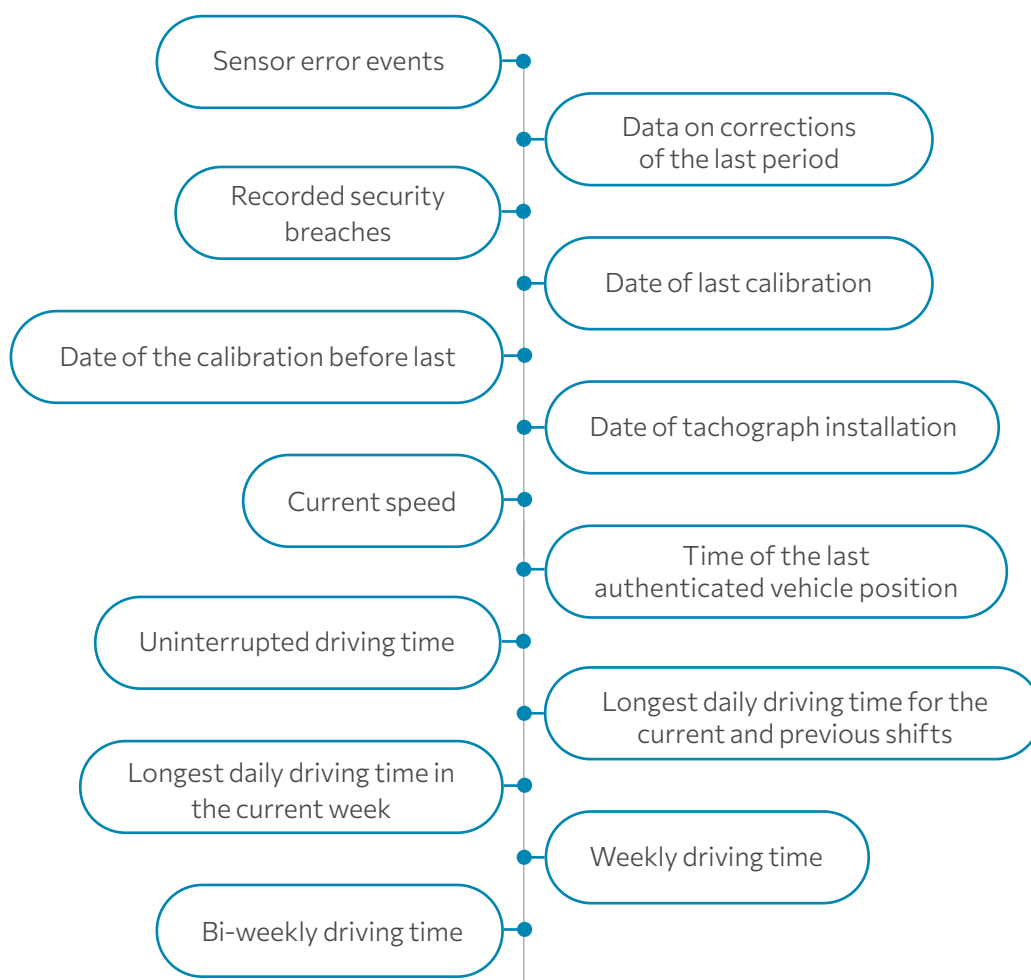
DSRC is short for Dedicated Short-Range Communication and is a short-range communication technology consisting of a vehicle transmitter and a DSRC receiver antenna.

This technology is used by control authorities in Europe to pre-select vehicles for inspections. When data is read by special DSRC antennas that can be mounted on gantries or vehicles, a data packet containing 25 parameters is sent within a few seconds. Since August 19, 2024, control authorities must have the appropriate DSRC receivers in order to increase the efficiency of checks.

2 What information is transmitted via the DSRC system?

Short-range DSRC technology was introduced in 2019 with the first version of smart tachographs. It now transmits 25 pieces of information on the following topics:





3 Does the tachograph work with the telematics systems already installed in the vehicle?

The new DTCOs are designed to be compatible with most telematics systems currently installed. However, additional configuration or hardware adjustments may be necessary.

4 Are there special telematics devices for smart tachographs?

Yes. Telematics solutions such as Remote DL 4G and various services for downloading and archiving data are already available. In the future, the new VDO Link will also be available, which works according to the plug & play principle: It does not need to be permanently installed, can be used on the go, and is plugged directly into the front interface of the tachograph.



5 What is GNSS and what is it used for?

GNSS stands for Global Navigation Satellite System – a global satellite positioning system that includes Galileo, among others. GNSS is used in the second version of the smart tachograph to automatically record certain vehicle positions, for example:

- / The **start and end points** of a working day
- / All **border crossings** in cross-border traffic
- / The **location** when loading and/or unloading processes are recorded

The recording of this position data is required by law and helps authorities to check EU control requirements – such as those relating to cabotage or posting of workers – more easily and automatically.



Important!

The GNSS function works independently of the driver – it is activated automatically as soon as the vehicle is equipped with a smart tachograph of the second version.

04 NEW OBLIGATIONS FOR COMPANIES AND DRIVERS



1 What new obligations arise for companies from the EU Mobility Package?

For companies and fleet operators whose fleets consist entirely or partly of light commercial vehicles, small transporters and vans, the following new obligations apply to cross-border freight transport:

- / Installation and calibration of the DTCO by a certified workshop
- / Activation of the company lock with the company card
- / Route planning in accordance with Regulation (EC) No. 561/2006
- / Complete recording and archiving of driving and rest times
- / Regular download of vehicle and driver data to a suitable archiving system
- / Minimum storage of this data for twelve months
- / Training for drivers on the correct use of the device
- / Compliance with international regulations on posting, cabotage and working hours

2 What obligations must drivers of light commercial vehicles now fulfill?

Drivers will also have new obligations from July 1, 2026:

- / Application for and carrying of a valid driver card
- / Daily recording of driving times and rest periods as well as working and standby times
- / Manually recording activities that are not automatically recorded
- / Assisting with the regular download of tachograph and driver card data
- / Cooperating with checks by national authorities
- / Complying with EU regulations on working hours and cabotage rules
- / Regularly checking the tachograph function
- / Participating in training courses on safe and compliant use

05 **DRIVING TIMES, REST PERIODS AND WORKING TIMES FOR DRIVERS**



1 What changes does the EU Mobility Package bring for drivers of light commercial vehicles in terms of driving and rest times?

In future, drivers will have to comply with the legally prescribed driving and rest times – just like professional drivers of heavy-duty trucks. Daily and weekly driving times are limited and breaks as well as rest periods must be strictly observed and documented. All these times must be recorded using a tachograph. In addition, new regulations on wage calculation apply: drivers must be paid in accordance with the wage standards of the country in which they are working. This applies, for example, to cabotage or posting of workers – according to the principle of equal pay for equal work in the same place.



More on driving times and rest periods on the EU Commission's website

tinyurl.com/driveresttimes



VDO provides you with a wealth of information, training materials and training courses to prepare you as well as possible for the new requirements – whether you need to learn how to operate the smart tachograph or comply with legal regulations.

For more information, visit our website fleet.vdo.com and our information portal myVDO:



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