

AT A GLANCE: THE KILOMETER CHARGE FOR HGVS IN BELGIUM

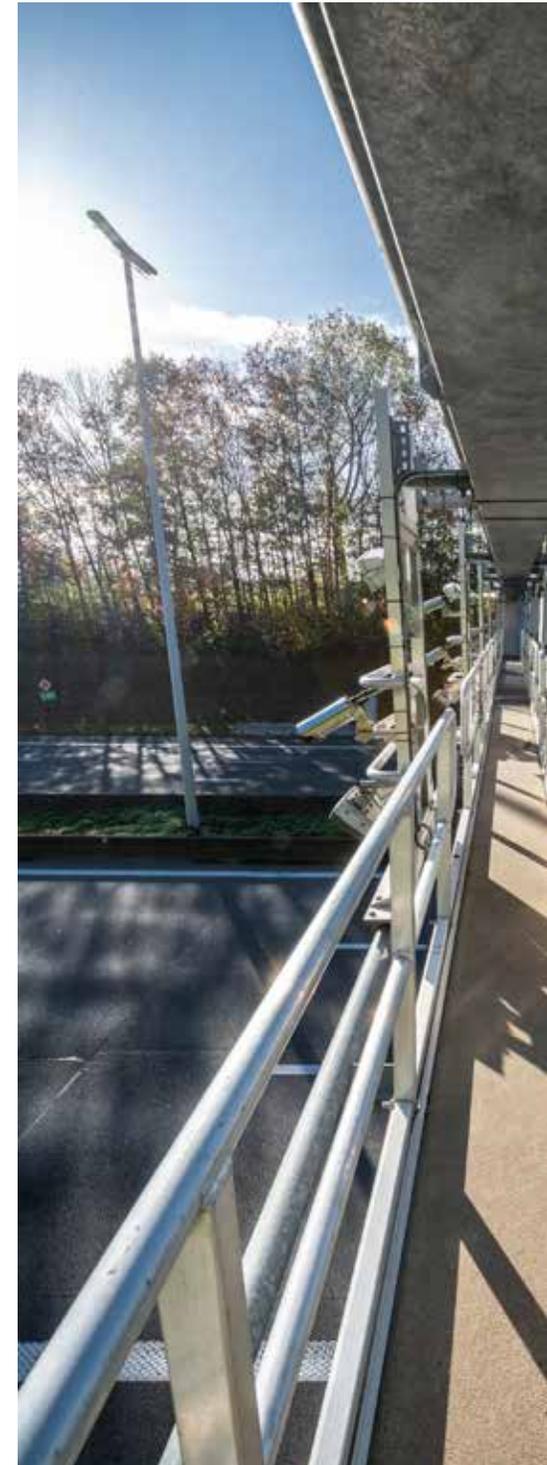


INTRODUCTION



On 1st April 2016 the three regions in Belgium - Flanders, Wallonia and Brussels - introduced a Kilometer Charge for Heavy Goods Vehicles of +3.5 tons, and the semi-trailer pulling trucks with a combined weight of more than 3.5 tons (category N1 with body code BC). The rationale behind the measure is to make the owner pay for the use of the vehicle, rather than for the mere possession of it.

Working to a strict time schedule, the regional governments created Viapass as the coordinating body not only to oversee the charging system being built, but also to orchestrate and monitor all activities and act as the central hub of the regions, private service companies and users.





THE SYSTEM

The Kilometer Charge in Belgium is the first nationwide Global Navigation Satellite System (GNSS) for electronic toll charging in Europe. It was built according a DBFMO contract (design, build, finance, manage and operate).

The system functions without any physical toll gates hindering the flow of traffic. Instead, every HGV of more than 3.5 tons* using on the roads in Belgium needs to be equipped with an On Board Unit (OBU). Through a GPS module the OBU is in constant contact with satellites, and every kilometer driven is precisely and permanently calculated. Subsequently, the kilometers covered on tolls roads are being processed after regular periods of time. This system ensures that the truck owner only pays for the distance he has driven, and no more. Only the roads with a tariff higher than 0 are taken into account on the invoice.

* and N1/BC semi-trailer

THE OBU: THE LINK

The Viapass system is the first fully GNSS-supported electronic toll charging system, without any barriers or physical control points. In order to comply with regulations, all Heavy Goods Vehicles of +3.5 tons need to be equipped with an On Board Unit.

The device records the licence number plate, the exhaust Euro standard and the Gross Vehicle Weight. Each kilometer driven is precisely registered. After a period, all toll kilometers are added and a bill with the charge due is sent to the truck owner.

Before using the OBU, the truck owner or driver must key in data about the truck: GVW, exhaust Euro standard and license plate number. Once the OBU has this 'personal stamp', it tracks the routes being driven. The driver just has to keep an eye on the little LEDs on the box. If they are green, all systems are functioning. If there is a red LED, it means there is something wrong. It could be that "the minimum balance of the prepaid toll has been reached, an invalid payment means has been used, the identification data might be wrong, or there is a technical fault. In this case, the driver should phone the service provider for guidance, or for directions to a service station where they can top up the OBU with an additional prepaid toll, or exchange the OBU for a new one through a distribution machine.



In the above scenario, the service providers play an important role. They distribute the OBUs to the fleet owners. If truck owners need OBUs, they need to contact one of the several service providers who cover the Belgian market. The providers make the necessary contractual arrangements with the owners and send them their OBUs. They also calculate the kilometers driven and collect the toll due. Subsequently they transfer this money to the regions according to the exact number of kilometers driven in each individual region. The complete system is monitored by Viapass.

The system developed and realized by Viapass has been much applauded by Europe. In the short term, all European toll systems will be based on similar principles. The ultimate goal is for a truck driver to be able to drive throughout Europe using a single OBU. With the launch of its system in Belgium, Viapass has laid the foundation stone of the European Electronic Toll Service (EETS).

All the accredited service providers can be found on the website of Viapass at www.viapass.be/en/practical-info

Depending on the model and the service provider, the OBU can differ in appearance.

COLOURED LEDS to check the correct functioning of the OBU. If the LED is green, all data about the truck has been correctly keyed-in and there is enough toll credit to take to the road. If the LED is red, the driver must stop at the first safe stop and contact the call center of the service provider for further instructions

SCREEN. The screen may show the trip information, such as the tariff of the toll road, the kilometers driven, or the remaining toll credit. The screen info is just an indication; the final bill will give the correct figures. In Wallonia, the on-screen tariff indication always excludes VAT, which will be added in the final bill.

FUNCTION KEYS depending on the model the OBU can have keys to switch on the device, to wake it up after hibernation, to switch between languages, or other functions.

ENFORCEMENT

A payment system can only be fair and effective if it is backed by a sophisticated enforcement system. The backbone of the enforcement system is three-pronged, consisting of control devices on gantries at the main traffic axes, on movable tripods and control vans. The gantry cameras monitor the bulk of the traffic on the main roads. The tripod-mounted cameras can be moved to any road to monitor vehicles. And the vans drive around so that enforcement agents can stop vehicles if there is an infringement. Each control point is equipped with four different types of equipment:

- An ANPR camera to check and verify the identity of the truck and the owner
- A laser sensor to measure the size of the vehicle and verify whether it is a lorry or a passenger vehicle
- A normal camera to take a picture of the truck
- A microwave communication beacon to read the vehicle parameters stored in the OBU

If a truck passes a control point (gantry, tripod or van) without being in compliance with the regulations, the cameras transmit the identity of the truck the time and location to the verification centre.

The gantry



Movable tripods



Control vans





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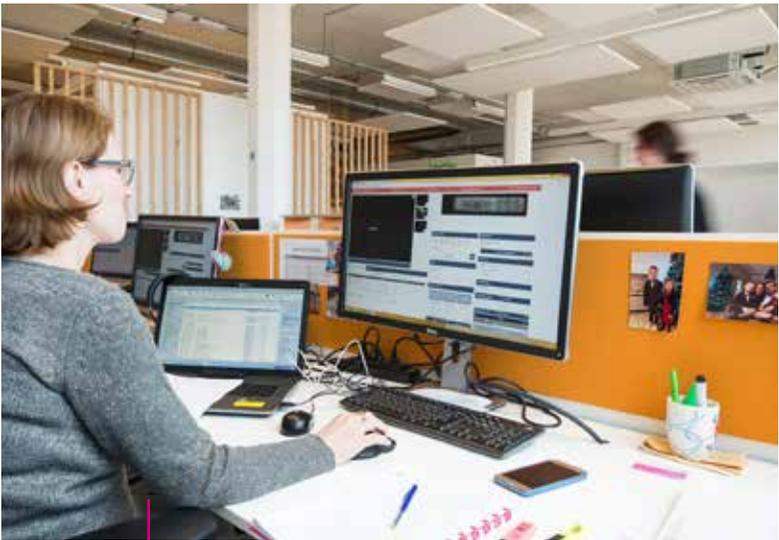
IR Flash

An ANPR camera to check and verify the identity of the truck and the owner

A laser sensor to measure the size of the vehicle and verify whether it is a lorry or a passenger vehicle

A microwave communication beacon to read the data of the OBU

2nd flash



The Control Centre

In the control centre, the quality of the pictures and data is verified, after which the controllers check whether the truck has a valid licence plate number, a valid Euro norm or weight, and whether the correct toll has been paid. If the verification centre detects a violation of the regulations, it sends all the data and pictures to the enforcement desk, which is staffed by agents from the three regions. They do a final visual check of the potential infringement. If the truck is found to be in violation of the kilometer charge regulations, the agents send a fine to the owner of the truck. Fines can only be issued by regional agents, not by private companies. Depending on the gravity of the infraction, fines can vary between 100 and 1,000 euros.



SATELLIC SERVICE POINTS

Sometimes, truck drivers drive through Belgium at short notice. They therefore cannot wait a couple of days for their OBU to be sent to them. However, drivers can get an OBU from a distribution machine on the fly from one of the more than 100 service points that have been established at the Belgian borders and within the country. Satellic, the 'home service provider' of the Belgian kilometer charge, is responsible for all OBUs distributed through a machine.

Drivers simply have to key in the main data about their truck, and prepay or guarantee an initial toll charge in cash or by card. This takes no more than 10 minutes. So these service point accounts are designed for ease of use and drivers entering Belgium can quickly continue their journey. Pay attention though: accounts with incomplete data will be detected and the OBU will be blocked.

If you want to return a Satellic OBU you received from this service provider or through a distribution machine, you can also do this through the distribution machine. You put in the OBU, key in your PIN code and follow the instructions on the machine. The remaining toll credit on the OBU and the deposit you paid upfront will then be transferred to your bank account.

WHO ARE THE ACTORS IN THE SYSTEM ?

The Kilometer Charge in Belgium has three main actors:

VIAPASS

Viapass is the interregional entity that coordinates, controls and communicates on the kilometer charge in Belgium. It is the administrative governmental body that controls the service providers, ensures that deadlines are respected, communicates the regulations and updates of the system, and coordinates the enforcement between the regions and sometimes other players such as radio specialists (IBPT or the Belgian Institute for Postal Services and Telecommunications) and anti-fraud agencies. The interregional entity therefore acts as the central hub connecting the political level, the service providers and the users.



THE REGIONS

The Flemish, Walloon and Brussels Capital Regions are the toll chargers. Since they are responsible for mobility and specific taxes, they collect the toll that has been charged in their region on the basis of the kilometers driven on toll roads.

They make the political decisions, decide which roads will be subject to a charge, and the tariffs for each class of vehicle. These rates depend on the GVW, the Euro norm and the type of road. The heavier and more polluting the truck, the higher the rate per kilometer on toll roads. Regions can adapt the rates and the designation of toll roads twice a year.

If users are not compliant with the toll regulations, they can get fined by the regional control agents.



THE (ACCREDITED) SERVICE PROVIDERS

These private firms collect the toll on behalf of the regions through the OBUs they put on the market. All OBUs have been thoroughly tested and accredited by Viapass to ensure they are properly calibrated and charge the same amount of toll per kilometer, and can be monitored. What differs is the service model the providers offer their clients. Some cover more countries with their OBU, some have more flexible payment methods, or offer services such as track & trace and fleet management.

The service providers must transfer, without delay, the toll collected for each region. This is calculated on a pro rata basis according to the kilometers driven on toll roads in each region. The service providers receive a fee for their services.



VIAPASS
Rue De Koninckstraat 40, b19
B-1080 Brussels
Belgium
contact@viapass.be
www.viapass.be

Viapass