

# Monitoring of HGV traffic on the Walloon motorway network

## Overview

Wallonia, the Southern part of Belgium is at the centre of a very busy road network in Western Europe. Its motorways are part of 3 different European corridors. Much of the traffic consists of heavy goods vehicles which serve the major ports of the North Sea and establish links with industrial areas. Road authorities want to have an accurate knowledge of the traffic in the daily operation of the network in order to calibrate their interventions in case of disruption and to be able to better inform and guide the users. The information gathered is also needed for overall management, e.g. the operation of the toll system per kilometer for HGV and the maintenance programming.

## Objectives

The project aims at the implementation of new or updated detection equipment on the network and of systems for data collection and data processing. The main goal is to improve operational excellence and cost-efficiency from a road operator / traffic manager perspective. On the other hand, this implementation will also contribute to the improvement of RTTI services, especially regarding traffic conditions. The collected data will not only be used at an operational level but also for network management, e.g. control of overloaded trucks, monitoring of the use of the toll network, traffic simulations,...



## Project description

The motorways of Wallonia record a very high and increasing traffic density, with a significant percentage of heavy goods vehicles. The road absorbs 80% of the transport of goods. In this context, it is important to have a thorough knowledge of traffic and related parameters such as the routes taken by heavy goods vehicles.

The project is based on the deployment of 60 bi-directional counting loop stations, which represent an infrastructure investment aiming at completing the coverage of the network or at updating outdated stations, as well as 5 weigh-in-motion stations, which will be used for the preselection of vehicles to be taken to static scales and later possibly for issuing automatic fines for overloaded vehicles.

The project also includes the acquisition and processing of floating car data from HGV's on-board units. They will be used to identify the routes taken and to analyze specific points, included outside the motorways (transfer of traffic). This will also give the opportunity to validate the data and see how they can be used in a complementary way with counting loops.

## Member States involved

The management of HGV traffic requires cross-border cooperation with neighbouring countries inside the Arc Atlantique corridor (special procedures in case of adverse weather conditions, planification of major road works and events) but also with others like Germany (closing of the borders).

## Implementation schedule

2015 – 2016

- Implementation of counting loop and weigh-in-motion stations
- Analysis of available floating car data for truck traffic

2017

- Calibration, data processing, validation of data from new stations
- Integration in the operating aid system of the traffic centre

## Budget

Action promoter:

- SOFICO (motorway operator in Belgium – Wallonia) with technical support of Service public de Wallonie

Project costs covered:

- SOFICO will benefit from a support of 882 k€, corresponding to 20% of the investments made in the frame of Arc Atlantique 2.

## Results expected

These new detectors will improve knowledge of traffic levels on more than 50% of the Walloon motorways (450 km) and provide parameters such as speed, flow, type of vehicles. Linked to the information obtained via floating car data, they will allow to anticipate congestion and to better evaluate the consequences of an accident or of a construction site, especially the transfer of traffic towards the secondary network. These elements are particularly sensitive in the context of the introduction of a toll for heavy goods vehicles since 1st April 2016.

From the point of view of the user, PEREX will be able, on the basis of this information, to have a more precise view to take the most appropriate measures and to improve real-time information in the framework of harmonized trans-European services.

Finally, the motorway manager will be able to better plan places and times where maintenance operations have to take place.

## Geographical Location

The project is implemented on the Walloon motorways, of which A4 and A3 are part of the European Core Network.



## Contact People

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