

PEREX 4.0 – Upgrade of the Walloon traffic centre

Overview

Located at the heart of the motorway network near Namur, at the Daussouix interchange, PEREX, the Walloon traffic centre manages and monitors traffic on motorways and the main Walloon roads, as well as the operation of electromechanical and telecommunications equipment. Most of the equipment, software, databases and applications were installed when it opened almost 20 years ago. Even if updates and adaptations were made over the years, the system no longer met current IT standards, which had repercussions on traffic management and mobility.

In addition to completely modernizing the equipment of the road traffic centre and that installed on the road network, it was decided to create a similar centre to ensure control and surveillance of the condition of the rivers and waterways network and its hydraulic works (locks, dams, elevators, ...). This new centre for rivers will be an integral part of the PEREX 4.0 centre in Daussouix. IT and electromechanical equipment will therefore be partly shared.

Objectives

Like all European road networks, the Walloon motorway network faces congestion problems, either recurrent congestion mainly linked to daily journeys from home to work or seasonal congestion linked to special events.

In addition to this balance between infrastructure capacity and demand for road mobility, there are specific problems linked to network operation:

- road safety risks linked to special configuration of the infrastructure: e.g. tunnel sections, engineering structures, significant slopes ...
- risks linked to climatic conditions (heavy rain, fog, etc.) and management of winter viability;
- road works or related to equipment, both in terms of safety and capacity reduction;
- incident and emergency management;
- management of heavy goods vehicles: heavy snowfall, occupation of motorway areas, border closure;
- management of air pollution alerts.

The traffic centre aims to gather information in order to coordinate operating actions and to inform drivers.

Project description

The implementation of PEREX 4.0 is a large project spanning several years and which will also depend on the deployment of specific equipment on the network.

The 1st phase includes the definition of the functionalities of the centre leading to the implementation of a new operation aid system as well as the development of a new traffic database aiming at integrating existing counting data (loops) and complete them with data from external sources.



Member States involved

Inside the ITS corridor Arc Atlantique, PEREX is part of a network of traffic centres, which exchange information and work together to implement traffic management plans. Many events require cross-border cooperation with neighboring countries: major road works, adverse weather conditions, closing of borders, special events... Main partners are Flanders, The Netherlands and France.

Implementation schedule

2017

- Studies: design of the building and functionalities;

2018

- Constructing works for the extension of the building;
- Procurement procedures for operating aid and data management systems;

2019

- New operating room for traffic management;
- Designing of systems;

2020

- Implementation of systems;
- Data processing, validation, integration.



Budget

Action promoter:

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

Project costs covered:

- The costs of the 1st phase are estimated at 5 000 k€; SOFICO will benefit from a support of 500 k€, in the frame of Arc Atlantique 3.

Results expected

The objective of a traffic centre is to detect incidents as quickly and precisely as possible in order to inform and respond in the most efficient way.

The renewal and development of the centre's equipment concerns the heart of the system. They relate to data collection, information processing and traffic management procedures.

Concretely, the expected results are part of the Arc Atlantique 3 perspective to improve traffic flow, reduce CO2 emissions and increase road safety.

Geographical Location

Wallonia spreads across the southern half of Belgium. The traffic centre is situated at the intersection of the A4 (E411) going from the North to the South and the A15 (E42) from the East to the West. It benefits from a strategical position at the heart of the West European motorway network.



Contact People

Philippe LEMOINE

Service public de Wallonie
Mobilité et Infrastructures

Direction de l'Exploitation des Réseaux routiers
Rue Del'Grète, 22 - 5020 DAUSSOULX

philippe.lemoine@spw.wallonie.be

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www.its-platform.eu