

Variable speed limits and ramp metering on the access to the Bordeaux ring road

Overview

DIR Atlantique is implementing progressively a ramp-metering system in the Bordeaux ring-road. The main objective is to improve traffic flows on this road during peaks hours.

This project is part of the dynamic traffic management program of the Bordeaux ring-road and the main access roads to Bordeaux (A62, A63, A10, N89) called Alienor II.

The project is co-funded by the Ministry for the Ecological and Inclusive Transition, the European Union, the Department of Gironde and Bordeaux Métropole.



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Objectives

General background

This project aims to:

- Enhance traffic flows
- Enhance road safety
- Reduce travel times
- Reduce air pollution

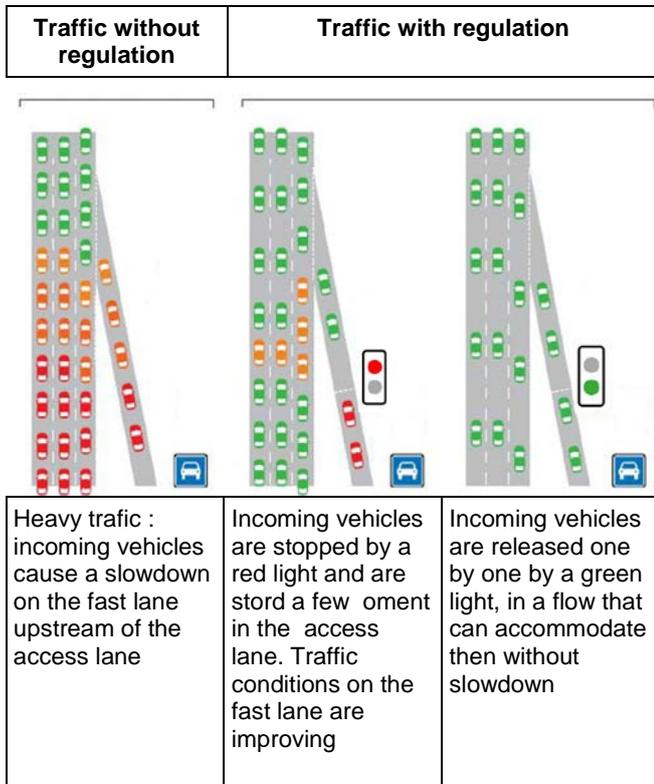
road) in order to regulate the ring-road access to incoming cars when the traffic density is increasing. With very short stop on the access ramp, cars will be inserted more easily, one by one.

The pace of the traffic light will vary depending on access lane flow. If congestion occurs, regulation will stop to prevent the access ramp from being saturated and a traffic jam on the urban road network.

Project description

Traffic lights have been deployed in 17 access lanes from 7 interchanges (60% of the South and East ring

Each access ramp is independent from each other, but will be operate in relation with the other upstream access ramps. The entire system is supervised by the traffic control center (CIGT) located in Lormont



Results expected

Ramp metering will make travel times more reliable in the urban area and will generate time savings for road users.

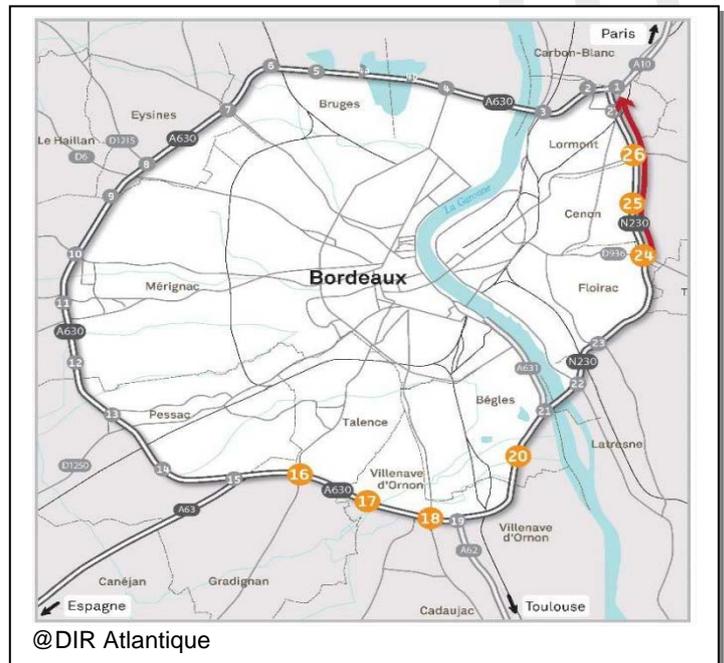
These benefits are estimated from feedbacks in Paris, Nantes, Grenoble and from traffic simulation models.

Ramp metering also reduces the emissions of polluting gases such as CO₂, NO_x and fine particles (PM₁₀) by reducing the number of stops and restarts.

Finally, it will enhance the safety of car users as the road insertion one to one reduce the risk of collision on the ring road. Likewise, more fluidity mitigates the risk of rear impacts.

Geographical Location

Ramp-metering has been implemented on 17 access roads from 7 interchanges. (n° 16,17,18,20,24,25,26).



Member States involved:

France DIT

Implementation schedule

Start date:2017
End date:2019

Budget

Action promoter: France DIT

Total project cost covered by this Decision: 2 760k€

EU contribution 20 %: 552k€

Percentage of EU support: 20 %

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