**PTV OPTIMA**

the mind of movement

# TRAFFIC INFORMATION ON YOUR FINGERTIPS!

# ROMANIA ADOPTS REAL-TIME SOLUTION



Whilst on the DN2A between Hârşova and Crucea the traffic is flowing despite construction sites, cars on Şoseaua Mihai Bravu in Bucharest are moving at a snail's pace this Saturday. TrafficGuide.ro enables traffic information on your fingertips! It's an internet portal which provides real-time information on traffic across Romania. The technology, which bundles the necessary data and assesses its validity before harmonising it, is PTV Optima, a tool which enables dynamic traffic forecasting.
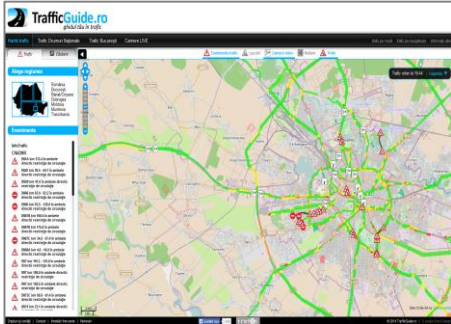


Be it construction sites, roadblocks, traffic jams or accidents - on TrafficGuide.ro, road users can access information about both the current situation on the roads and the average speed at which traffic is moving. The information platform covers all national routes, motorways and Bucharest's main thoroughfares. The

Romanian traffic information portal has been sponsored by the European Union and developed by ELSOL - Electronic Solutions, an engineering and consulting firm which specialises in ITS solutions and is working together with ITS Romania to implement intelligent traffic systems in Romania.

PTV OPTIMA AS A DATA HUB
"Our aim was to be able to map traffic information across Romania and to give network operators the ability to observe their road network and manage traffic events using a web-based interface", reports Sorin Dumitrescu, Managing Director at ELSOL.

## PROJECT OVERVIEW

- Project name: Traffic Information System Romania
- Purchaser: ELSOL – Electronic Solutions SRL, Romania
- PTV Group's role: Main contractor
- Implementation period: 15.12 2011 – 01.02.2013

TrafficGuide.ro informs about the current traffic state. In the background, PTV Optima processes the data and offers additional opportunities for real-time traffic management.

"The project covers 250,000 links, monitoring a total of around 80,000 kilometres of road." It was this scale that prompted the company to look for a solution which could obtain traffic data from several different sources and in a variety of data formats and data protocols. Furthermore, it was necessary that the solution should be able to broadcast traffic data automatically, with a minimum of effort, across a multitude of information channels, sorted according to geographical relevance. PTV Optima fulfilled these requirements.

COMPILATION AND HARMONISATION
To map traffic information in real time, PTV Optima collects data using Floating Car Data (FCD), Automatic Number Plate Recognition (ANPR), detector information and reports of accidents and construction sites from the relevant sources. This data is then compared, validated, harmonised and merged. The data sources are dynamically weighted during the harmonisation process to facilitate adaptation to local circumstances. Thanks to these solutions, PTV Optima can provide traffic managers with a comprehensive picture of speed, traffic densities and congestion across their traffic network. Vehicles equipped with RDS-TMC navigation and

Location Tables (LT), developed by EL-SOL, will receive the information within five minutes direct to the driver's cabin. "Thanks to the open framework and the intensive training that PTV Group and its sister company SISTeMA provided, we are now able to independently connect new data sources and additional data suppliers to our system", says Sorin Dumitrescu. "It has lived up to our expecta-

tions in every respect!" ELSOL also values the long-term opportunities to extend the system: "With PTV Optima, you can forecast traffic up to 60 minutes in advance", comments Sorin Dumitrescu. "At present, our plan to add this module as an extension to our system has not yet become a reality - but it's something we're extremely keen to do." ∎

### The Architecture of Romania's Traffic Information System