

Traffic System Management

IN CONURBATIONS



Brains for roads

Urban and Inter-Urban Traffic

REFERENCE

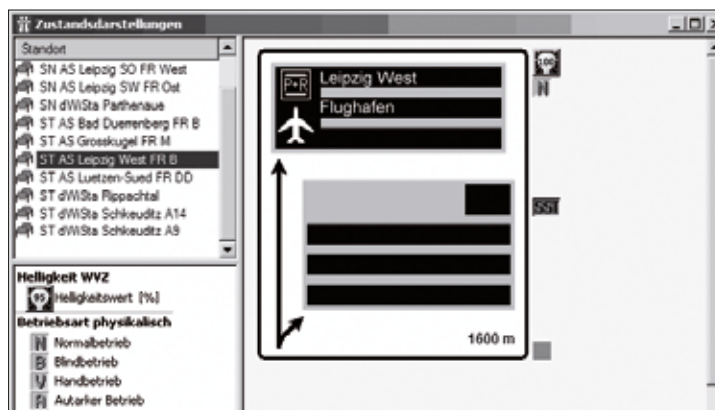
Greater Leipzig VSM

DEGES
German Unity Motorway Planning
and Construction Company
(on behalf of the Free State of Saxony,
Saxony-Anhalt, City of Leipzig)

SAMPLE PROJECT

→ Traffic system management in the Leipzig Conurbation:
Cross-operator rerouting to Leipzig's beltway and influx into the city

DEGES implemented this project as awarding authority for the Free State of Saxony, State of Saxony-Anhalt and the City of Leipzig. The project's objective is to automatically control and optimise traffic on Leipzig's beltway as well as traffic headed into the city of Leipzig according to traffic policy parameters. dWiSta boards (dynamic direction signs with integrated information on congestion) were mounted at main decision points of the network for this purpose. Additional dWiSta were set up as roadside prompts at junctions to provide navigational suggestions for access into the city of Leipzig and to the Park & Ride facilities. A freely programmable Info-board was set up in the city. The acquisition of the traffic situation on the highways and in the city as well as the occupancy of the Park & Ride lots establishes the base data. The consortium Heusch/Boesefeldt GmbH - GEVAS software GmbH was assigned the implementation of Leipzig's traffic management system. The centres in the city of Leipzig were implemented by GEVAS software GmbH. Control centres for the motorways in Saxony-Anhalt and Saxony were realised by Heusch/Boesefeldt GmbH. All centres were connected to each other for optimal overall control in Greater Leipzig. The control units in Saxony and Saxony-Anhalt are coordinated via pre-defined traffic management plans. They are aligned with the demands of the municipal control centres within the framework of (traffic control) strategy management, realising a fully automated cross-operation traffic management system among the three partners involved.



Cross-Operation Strategy Management

- **Strategy alignment**
aligned strategies are implemented in software
- **Combined VMS settings**
coordination of all possible sign settings to avoid conflicting combinations
- **Pictogram definition**
exchange of bitmaps by the operator to define new pictogram content



CHARACTERISTICS

→ Conurbations are characterised by having several responsible operators with different base data. A foundation for the implementation of agreed traffic policy is established by cooperative analysis of the traffic situation in a particular area of responsibility.

Integration and use of standard components

- traffic monitoring
- common data formats and interfaces
- traffic situation analysis
- level of service classification

Implementation through

- application of (traffic control) strategy management
- integration into a workflow management system

Targeted operator support

- automatic transfer of data from partners
- immediate presentation of altered conditions and information
- alarms for changes
- open / closed loop operation
- manual intervention possibilities
- integrated graphical presentation of neighbouring regions
- definition of new pictograms

Automatic exchange of required information through the application of

- IT standards (e.g. Web Services)
- ITS Standards (e.g. Datex II, TLSoverIP)