

ITS Vienna Region – a regional project that concentrates on gathering valid information about local traffic and transportation, supports the urban traffic management in Vienna, Austria. Within this project, the traffic control center uses PTV Optima as the core engine. PTV Optima automatically processes a wide range of data sources in order to provide a comprehensive view on the current traffic state and on top of that a reliable prediction for up to the next 60 minutes.



# MODERN TRAFFIC MANAGEMENT IN VIENNA REGION

What is the future travel time for the main corridor? How many people are stuck in a traffic jam in the upcoming 30 minutes? To create an efficient and sustainable environment that is citizen-friendly and worth living in, traffic managers have to be able to answer these kind of questions. Hence,

it is not surprising that the general demand for real time and predictive solutions in the mobility sector becomes bigger than ever. A forecast of the expected traffic situation offers valuable information and improves traffic management decisions – helping the operators in their everyday life and in turn helping everyone out on the streets.

### PTV OPTIMA

To receive realistic information, ITS Vienna Region uses PTV Optima - PTV's tool for real-time traffic management. The software combines reliable offline traffic modelling with the available real-time data (like Floating Car Data, ANPR or inductive loop detectors...) and real-time algorithms.





ITS Vienna Region: organizational structure, tasks and use cases

quality information about the traffic situation forms the basis for well-grounded decisions in the operational headquarters. Up-to-date and complete data is crucial for traffic management and traffic control.

This is why ITS Vienna Region relies on

PTV Optima."

**PTV VISUM** 

In terms of offline data provision – "offline" in the sense of information about infrastructure and typical traffic demand – PTV Optima uses a classic traffic demand model by PTV Visum. This model considers all types of road users and their interactions and covers an area of 2,700 km squared, divided into 1,096 zones and respects 149,678 streets, as well as 50,000 traffic arteries in total.

## PROJECT OVERVIEW

- Project name: Regional Traffic Service Vienna
- Purchaser: ITS Vienna Region
- PTV Group's role: Main contractor
- PTV software: PTV Optima, PTV Visum
- Implementation period: 2014 2015

The PTV solution also considers unpredicted traffic delays, as well as known disturbances in the form of accidents or construction sites. By respecting these data sources, PTV Optima calculates and visualizes the current and future traffic situation. The results are updated every seven minutes, improving the benefits of all connected systems like e.g. the national journey planer "AnachB".

#### ITS VIENNA REGION - QUOTE

DI Hans Fiby, Head of ITS Vienna Region, comments on the implementation: "We have been working with PTV products to evaluate the traffic levels in Vienna for many years now. In October 2014, we decided to replace the previous 'PTV Traffic Platform' with PTV Optima, and in doing so, to improve our services. High

#### A SINGLE SOURCE SOLUTION

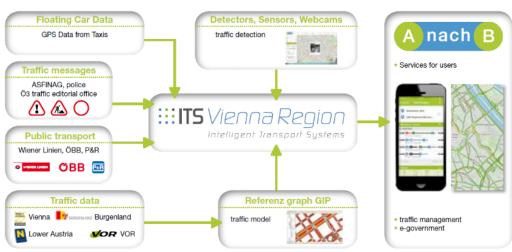
To guarantee highest quality and reliability of its services ITS Vienna Region follows a single source solution by PTV. PTV products are covering the long-term data storage (PTV Optima module Traffic Data Warehouse), the offline model (PTV Visum), the data fusion and forecast engine (PTV Optima).

With PTV Optima forecast, ITS Vienna Region also feeds the national route planner (see www.anachb.at) based on PTV HyperPath, in order to take into account future queues and congestions the drivers may meet.

#### **FUTURE PROOF**

To benefit to the maximum from the PTV

Optima functionalities an extension of the application is possible. Using PTV Optima's scenario comparison capabilities traffic operators can improve their decision making even further.



Schematic data flows, contributors and further usage of the information

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