

## Press Release

### PTV shows latest product highlights at Innotrans in Berlin

#### PTV's transportation experts present intelligent solutions for public transport

Karlsruhe, Germany, September 1, 2010. InnoTrans, which will take place in Berlin from September 21 - 24, 2010, is the leading international trade fair for transport technology. With its focus on rail transport technology it has become the international business platform for the world of passenger and freight transport. PTV AG will be presenting its product highlights in hall 4.1, stand no. 126.

Whether road, rail or public transport – intelligent consulting and planning designed to optimise and use traffic and transportation systems worldwide is the key focus of activities of PTV's transportation experts. Within this field, PTV works primarily with local authorities, private and public operating companies, public transport companies and transport associations as well as with engineering offices and industry.

PTV Vision Public Transport with its software packages PTV VISUM for macroscopic transportation planning and VISSIM for microscopic traffic simulation is the World's only software suite that fully integrates the intermodal aspects of travel demand, transportation planning and operations analysis.

#### **Demand-responsive public transport planning: the offensive PuT strategy in VISUM**

The new VISUM 11.5.version provides public transport operators with precise information on travel demand for individual public transport lines. Moreover, it calculates vehicle utilisation and assigns vehicle types flexibly by also considering passenger volumes in order to ensure optimum and cost-efficient use of the entire fleet.

#### **Scenario management**

The VISUM scenario manager makes transportation planning significantly easier. Different planning scenarios can now be easily and precisely compared with each other. First, a base scenario is created. Variants of this base version are stored in the form of difference files which can be loaded on top of the base scenario, if required. This means that the differences between the various

planning scenarios can be precisely visualised and concisely organised in a non-redundant format.

### **The new fare model**

Some metropolitan areas are served by several public transport operators which apply different fares. To model these complex fare systems, the concept of a fare system has been considerably extended in VISUM 11.5. A VISUM public transport model can include one or several fare systems side by side. Each fare system applies to a set of lines and those sets may overlap. Fare systems have a rank and if more than one fare system defines a fare for a given path, the highest-ranking fare system "wins".

If the ranks are equal, the cheapest fare takes priority. Ticket types can be distance-based, zone-based, matrix-based (from/to-zone) or apply to short trips only.

### **Line blocking including inter-route vehicle transfers**

Line blocking (vehicle diagramming) was completely revised in VISUM 11. VISUM 11.5 again extends this new functionality in two directions. Firstly, VISUM now provides a line block viewer that graphically visualises the result of the calculation in a graphical form (Gantt charts) that can even be edited on the screen. Secondly, the basic line blocking optimiser is complemented by an extended optimiser which takes more constraints and objectives into account. The user specifies whether one vehicle type can substitute for another, and for each service trip VISUM will pick the vehicle type that will result in the most cost-efficient fleet utilisation. VISUM can also automatically match the assigned vehicle type to the forecast number of passengers per run.

### **Matrix estimation**

TFlowFuzzy is a module for updating PuT and PrT travel demand matrices based on current count data. It can match any combination of the following count and survey data: number of passengers boarding and alighting at stops (optionally including transfers), volumes on links, unlinked passenger trips by public transport line, flows across screenlines. In addition, TFlowFuzzy optionally matches a given trip length distribution. The calculations will lead to an updated demand matrix.

### **Multimodal simulation for PuT with VISSIM**

VISSIM is a microscopic simulation model and a component of the PTV Vision suite. It allows users to efficiently visualise and analyse traffic flows, including cars, trucks, buses, heavy rail, trams, LRT, cyclists and pedestrians.

Modelling the interaction between vehicles and pedestrians is another true innovation since it allows users to simulate and interactively optimise multimodal and intermodal traffic systems. This option is particularly attractive for facilities with high volumes of pedestrian traffic such as airport terminals or bus and underground stations. Users can analyse both pedestrian flows and transfers.

### Experts on site

PTV's transportation experts will be glad to answer all questions in detail during the trade show in Berlin. They will also give presentations on the following topics:

- ▷ Jürgen Kaiser: Measuring the quality of transport operations, Tuesday, September 21, 2.00 pm (in German only)
- ▷ Michael Bundschuh: Vehicle scheduling with VISUM, Wednesday, September 22, 10.30 am
- ▷ Tobias Kretz: Pedestrian Modelling at railway stations, Thursday, September 23, 10.30 am

Attendees who would like to arrange an appointment with one of PTV'S transportation experts can send their request by e-mail to [ptvvision@ptv.de](mailto:ptvvision@ptv.de). Another highlight at Innotrans: the happy hour event at PTV's stand on Tuesday, September 21, at 5.30 pm.

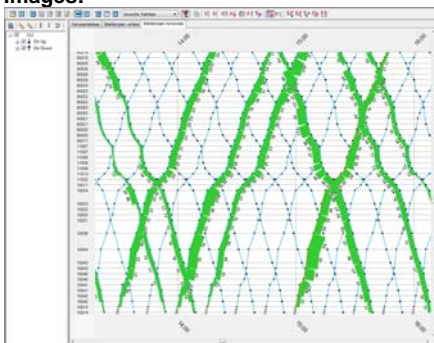
812 words. For immediate publication. Author's copy kindly requested.

### Background information about the products:

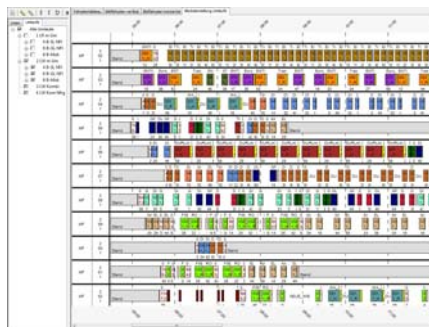
For more information about VISUM 11.5 visit <http://www.ptvag.com/software/transportation-planning-traffic-engineering/software-system-solutions/visum/>.

For more information about VISSIM visit <http://www.ptvag.com/software/transportation-planning-traffic-engineering/software-system-solutions/vissim/>.

### Images:



(Graf\_FPI Aufkomm\_112.jpeg ) Time-path diagram of a timetable with passenger volume per trip



(Uml\_Gesch\_ohne Kopf.jpeg) Block diagram of line blocking optimisation including interactive editing



(Ped\_Underground03-116\_combined\_sharp.tif) Pedestrian simulation including interaction between vehicles and passengers

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**PTV Planung Transport Verkehr AG**

The PTV Group provides cutting-edge software technology and consulting to enable customers to meet their mobility needs. It helps people plan and manage traffic and transportation, provides them with the latest traffic reports and assists them in optimising their long-term resource allocation. Since 1979, the independent corporate group has been a leading provider of products and solutions for travel, traffic and transportation planning.

Strong international demand has fuelled dynamic growth: We currently have over 700 employees worldwide crafting innovative solutions for our customers in the public and private sectors. Our Karlsruhe headquarters acts as a development and innovation centre with tight links to research and educational institutions. We additionally maintain shareholdings and subsidiaries in Germany, Europe and every continent in the world.

In the Traffic Software, Transport Consulting and Logistics business fields, PTV technology forms the foundation of a host of brand-name products and our own leading map&guide and PTV Vision product lines.

PTV. The transportation experts.