



How to cope with the masses. Munich and the World Cup.

During Football World Cup the Münchner Verkehrsgesellschaft (MVG), transport authority of Munich, Germany, was in exceptional circumstances: about 1.7 million enthusiastic football fans took the subway to the stadium and to the fan party at Olympiapark. Afterwards many of these fans took to the streets to celebrate the World Cup victories, then headed home by subway, bus, and tram operated

by MVG. The passenger numbers exceeded the predictions of the organisers by far and caused a run on the subway. Although the public transport system reached more than once its limit, MVG mastered all challenges thanks to meticulous planning and the staff's commitment.

Continued on page 4.

Innovative

2/3 > Multimedia display PIDvisio

Informative

4 > Munich, Germany:
Rush for Football World Cup successfully mastered.

International

5 > An integrated ITS system for the region of Waterloo, Canada.

6 > Salt Lake City, USA:
Automatic Passenger Counting System continues to capture the US market.

Interesting

7 > North American User Group Meeting was a huge success.

8 > Wallpass with Leicester City Council.

8 > Events

Imprint

Winter 2006

Index

Dear transportation professionals,

It seems that Football will not leave us for a while.... Looking back on an exciting World Championship we are not only comfortable with the great time we all had, but also proud of the fantastic job our customers did. Due to their excellent staff and by using state-of-the-art ITS Technology the transport authorities have been able to deal with the masses visiting the matches and enabled their passengers to have a truly moving experience. And if somebody still needs to be convinced of our relation to football — just read about the football experience we shared in September with our customer from Leicester, UK.

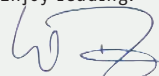


> Dipl.-Ing. Wolfgang Degen,
Chief Operating Officer, Mobile Telematic and Fare Collection Systems

Talking about international meetings, I would like to mention the User Group Meeting which took place in Toronto, Canada in September. Designated as a North American meeting, it was also well attended by participants from Europe. A lot of workshops, provided in addition to the conference, made it a real international training camp and enabled the transport professionals to learn how to use proven and new INIT products more effectively.

You can be certain INIT will keep the ball rolling when it comes to innovative developments for public transport. Read here, e.g., about PIDvisio, the multimedia display that upgrades passenger information onboard. Not only does it allow to display easy-to-read passenger information, but also the set up of a location-based infotainment system. PIDvisio is successfully in use in more than 120 buses in Oslo and is in a good position to enter more buses all over Europe.

Enjoy reading!


Wolfgang Degen

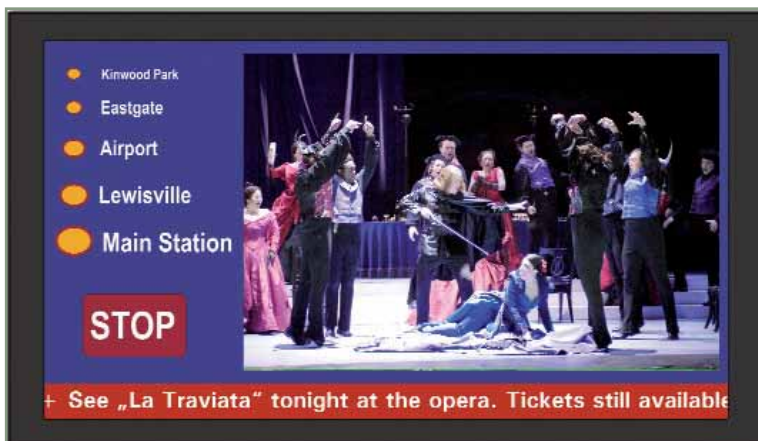
Multimedia display offers maximum flexibility. PIDvisio provides optimum passenger information aboard buses and trains.



> **PIDvisio:** There is no way to keep passengers informed in a more suitable manner.

The history of information displays aboard buses and trains goes way back. Early on, upcoming stops were displayed using simple static signs. However, mechanical systems like rollerblinds have also long been replaced. Too much time and effort had to be invested to reflect network modifications and extensions since each display in each vehicle had to be changed manually. LED matrix displays like INIT's very successful **PIDmobil** solved this problem. This system is cost-efficient and robust; however, space and design possibilities are limited.

PIDvisio is INIT's latest development in the area of passenger information displays. The colour TFT display does not only show all the information regarding the route, upcoming stops, and transfer possibilities, but also allows for the installation of a location-based infotainment system due to its multimedia display. This is why the purchase price does not only pay off in a very short time, but also opens new income possibilities for the transport company through the sale of commercials.



> **PIDvisio:** It is a win-win situation, also for city marketing.

Excellent presentation – information received.

INIT uses the same colour TFT displays that are installed in LCD TV sets. Thus it is possible to display the next stop as well as the route. Background graphics, layout, icons, font style and size – they can all be set as required.

While LED matrix displays often have only 8 pixel rows in height and approx. 140 pixels in width, **PIDvisio** features 1280 x 768 pixels. Each of these pixels can assume one of more than 260.000 different colours. Thus even Arab or Chinese fonts and high-resolution pictures can be displayed without any difficulty.

The 16:9 widescreen format is an important competitive advantage, because it offers a bigger screen at the same height, which is often a critical parameter with the installation in vehicles. In addition, the movie format display is better suited for long stop names in large fonts.

Excellent legibility – in any situation.

Due to an integrated sensor, the brightness automatically adapts to the surrounding light. With 400 candela, a contrast of 450:1, and a tamper-proof, anti-glare coated screen the display remains legible even in bright sunshine.

Excellent timing – right time, right place.

PIDvisio shows its strength even better if you are going for more. The high-performance embedded processor displays animations and videos in superb quality. Updated information, diversion notices, transfer information, or even commercials – any number of applica-

tions are possible. As **PIDvisio** always knows the exact vehicle location through the on-board computer, it is even possible to show location-related commercials between the stop information. Thus, the supermarket's special offers or the hairdresser's opening hours, that are located close to the next stop, can be displayed during the ride.

Excellent data provision – always up-to-date.

The multimedia display comes with a slot for compact flash cards with a storage capacity of up to 8 GB which is sufficient for several hours of repeat-free videos in TV quality. An optional connection for hard disks designed for automotive environment is available with up to 40 GB. The unit is connected to the vehicle electronics with an IBIS data bus interface. **PIDvisio** is linked with the on-board computer via Ethernet for graphics and video updates, made possible with an integrated 10/100 MBit Ethernet switch. A hub is not necessary; the displays can simply be connected one after the other. Weighing 8 kg and fixed on a

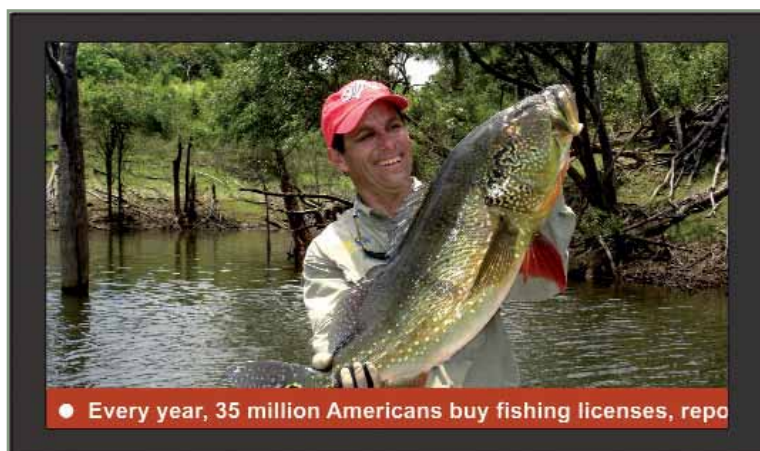


> **Passenger information or commercials** can be displayed using various media, e.g. video, animations, or photographs.

mounting plate, the unit is equipped with an anti-theft lock. For servicing needs, there are concealed plugs on one side to connect keyboard, mouse, external monitor, network, and USB stick. However, if used in an INIT system these interfaces are no more necessary. In this case, the data and software updates are centrally controlled via WLAN.

> **Contact:**
 Thomas Sent
 Tel. +49.721.6100.180
 tsent@init-ka.de

Author: Norman Theis



> **Full-screen video:** it's like watching TV at home with **PIDvisio**.

Home Match for the Münchner Verkehrsgesellschaft. The Football World Cup rush successfully mastered thanks to motivated staff and an efficient ITCS system.

Continued from page 1



> Transporting more than a regular day's number of passengers within a very short period of time — that was the challenge.

On peak days up to 770 drivers and 160 service and security workers were mobilised at the same time. In addition, workers from a security firm were hired. On July 4th, the day of the semi-final, 30 volunteers of the municipal traffic control service provided additional support. Furthermore, up to 24 employees of the MVG headquarters controlled and supervised all trains, trams, buses, and personnel. Numerous technicians and helpers were busy in the background.

MVG had renewed their fleet management system just in time for the World Cup to coordinate the visitor crowd even better. INIT's Intermodal Transport Control System **MOBILE-ITCS** was the key to success. Due to its user-friendly information displays and user interface, it is easier for the staff to coordinate and control operations — not only during the World Cup. Sophisticated dispatching measures help them to promptly eliminate disturbances and capacity overloads.

Intermodal passenger information and connection protection.

One of the most convincing arguments for the system renewal was the interoperability of the INIT system. So far, there had been no interface between the subway control system, MVG's own control system for buses and trams, and Munich's commuter trains. Now INIT closed the gap with IMS, the intermodal information system. This ensures that passengers arriving on a feeder bus can obtain all connection information from the passenger information display at the stop. On their way back the connection protection feature makes sure that taker buses and trams wait for subway and commuter train passengers.



> Tested to the limit: **MOBILE-ITCS** proved its dependability during the World Cup.

> Contact:

Albrecht Simons
Tel. +49.721.6100.112
asimons@init-ka.de

INIT provides an integrated ITS system for the region of Waterloo.

Waterloo's passengers are given a new direction.

INIT is to provide the region of Waterloo, Canada, with an integrated ITS system. Along with the fleet management system **MOBILE-ITCS** the contract for the Waterloo region's public transport system (Grand River Transit (GRT)) includes GPRS-based communication technology, vehicle tracking via GPS, a wayside passenger information system providing passengers with real-time information on bus arrival times, an automatic passenger counting system, as well as evaluation and planning software.

In addition, the vehicles operated by GRT will be equipped with the on-board IT platform **COPILOTpc** and the mobile data terminal **TOUCHit**, which enables each driver to send and receive text messages from the control centre.



> Passengers of the Waterloo region will soon be able to see real-time passenger information at the stops.



> The Urban Transport Showcase Program relies on INIT's ITS solution.

The Urban Transport Showcase Program.

The Waterloo region, which comprises the municipalities Waterloo, Kitchener and Cambridge in South-West Ontario, has a population of around 500,000. The iXpress bus service provided by GRT, which will benefit from the INIT technology in the first instance, is one of the showcase projects (UTSP, Urban Transport Showcase Program) of the Canadian government in its efforts to develop the local public transportation system as part of a national programme to reduce greenhouse gas emission levels.

The Waterloo project is currently on time and within budget. Project Manager Mel Johns has reported wonderful reactions from GRT who are looking forward to the completion of the system. Their Board is excited to see the official opening of

the new system, as this system will allow passengers, both new and existing, the opportunity to use the transport system to its fullest.

With the addition of GRT, INIT now provides services to four of the leading transportation authorities in Canada. INIT's excellent track record of providing innovative and reliable systems for its customers, is the reason why GRT chose INIT.

> Contact:

Norbert Trembacz
Tel. +49.721.6100.114
ntrembacz@init-ka.de

Automatic Passenger Counting System (MOBILE-APC) continues to capture the US market.

Light rail vehicles in Utah's capital to be equipped with APC hardware and software.



> **Exact counting and the automated processing** of recorded data make MOBILE-APC the most reliable APC-system in the industry.

INIT was awarded an automated passenger counting (APC) contract by the Utah Transit Authority (UTA), the local public transportation company operating in Salt Lake City. The light rail vehicles of Utah's capital will soon be counting all boarding and alighting passengers in a fully automated process.

Passenger counting is a major point of contention in the US, because public funds for local public transportation companies are allocated based on passenger numbers. The current, often manual recording system is rather time-consuming and costly. Accurate counting is the backbone of any system to ensure proper scheduling. In comparison to competing products, the passenger counting and data transmission process can be fully automated with **MOBILE-APC**, and therefore INIT's technology will support UTA's efforts and at the same time create new sources of income.

INIT's competitive edge.

INIT has been contracted to equip 41 vehicles with an option of an additional 28 of UTA's light rail vehicles with the entire APC system. Dr. Gottfried Greschner, CEO of INIT

said: *"Because of our technology, which gives us a clear edge over our competitors, we are the market leaders in the light rail field in North America."*

Precise information improves efficiency.

The infrared-based counting technology automatically records passengers as they get on and off. This

data is transmitted via wireless LAN directly to the control centre and can then be used to plan future transportation services. This highly precise count and processed information is the most reliable in the industry, making the system extremely cost-effective. The daily collection of data will give the company an overview of the number of passengers boarding and alighting at each stop, the number of passengers on a route, and the use at certain times. Based on this, vehicles can be dispatched more efficiently. Routes that require more vehicles due to heavy demand can be properly supported. Due to correct data transport companies now have the ability to schedule routes efficiently and will be able to ensure that they have the necessary vehicle coverage. In the end, this all means increased profits and better spending practices for transportation companies.

> **Contact:**

Norbert Trembacz
Tel. +49.721.6100.114
ntrembacz@init-ka.de



> **Accurate passenger counting** is the basis for efficient scheduling and optimised resource allocation.

Transport professionals from all over the world came together in Toronto, Canada.

The North American User Group Meeting was a huge success.

This year's North American User Group Meeting was held September 13 - 15 in Toronto, Canada. There were over 58 attendees from 5 different countries, again indicating INIT's international popularity and the use of its technology around the world. The meeting provided transport companies, vendors, INIT staff and the presidents of both APTA and CUTA with an opportunity for information exchange and advanced training.

INIT regards their customers as the World Series Champions of the transportation industry, which is why this year's meeting had a baseball theme that was carried out throughout the entire conference. The conference started with Spring Training and ended in the ninth inning with a Toronto Blue Jays game.

What are the advantages of an intensive dialogue?

The decision to establish international workshops for various subjects was a major result of the meeting. This will allow the specialists of the transport authorities to share their experience more effectively with the INIT specialists and each other. The goal is to increase the transport authorities' productivity using INIT products more efficiently.



> Following the baseball theme of the meeting the participants attended a match of the Toronto Blue Jays.

Spring Training is the best way to prepare for the season.

In response to the feedback of this year's international User Group Meeting in Karlsruhe there was a hands-on training room equipped with all of INIT's products and experts to assist with additional training and answer questions. The training room was filled with customers wanting to learn about new and existing products. Some of the training sessions covered **MOBILE-ITCS** (fleet management) for new and power users, **MOBILE-PLAN** (planning, scheduling and data management), **MOBILEstatistics** (data evaluation and analysis), **MOBILEsurvey**

(geographical network data collection), **MOBILE-PARANet** (on demand scheduling and management), and **MOBILE-APC** (automatic passenger counting).

Tour of the York Region Transit Agency.

The tour was truly an intermodal transportation experience. The York Region Transit Agency (YRT) did a great job hosting the event. The tour began with a train ride to a VIVA bus designated specifically for the User Group Meeting. Customers got a chance to see the YRT dispatch and garages, and learn more about what makes the YRT system one of the most advanced in North America. This is why YRT was awarded the Innovation Award at this year's APTA annual meeting in San José, California. YRT was also kind enough to demonstrate how supervisors stay in the game, with their remote and mobile offices.

For further information about the User Group Meeting and international workshops please contact:



> The training room provided opportunity for everyone to receive advice on INIT products.

> Contact:

Andrea Mohr-Braun
Tel. +49.721.6100.113
amohr-braun@init-ka.de

Wallpass with Leicester City Council. This was the second game for the “Fat Cat Cup”.



> The teams of Transport systems of Leicester City Council and INIT met on a pleasant September afternoon to compete for the Cup.

What started as a one-off match between two recreational football teams last year is turning into an annual test of strength. On September 23, 2006, the team of Leicester City Council (Midlands/UK) played INIT for the second time for the “Fat Cat Cup”. Unexpected summerlike temperatures in Karlsruhe posed a challenge for the players’ physical condition.

After approx. 15 minutes of pleasing but eventless play, the first three goals were scored within minutes. Jürgen Gizzi scored all three goals for INIT. This flawless hat trick and the overall very determinedly performing INIT team, who piled on the pressure, meant the guests were not in a position to straighten out their

playing. As a result, INIT scored three more goals just before the half-time break. The LCC team returned in an altered formation after the break. This change had a very positive effect on the game of the English team and as a result, they were able to score two goals. The INIT team, however, was quick to counter and found the mesh yet twice again ending the match with a final score of 8:2.

Thus, the “Fat Cat Cup” went to Karlsruhe for one year. The INIT team is intent on defending the cup again next year, although another company team already expressed interest to enter the “Fat Cat Cup”.



> For one year, the “Fat Cat Cup” will stay in Karlsruhe.

> **Contact:**

Thomas Münzner
Tel. +49.721.6100.207
tmuenzner@init-ka.de

March 13 - 14, 2007

“3. ÖPNV Innovationskongress” in Freiburg, Germany

May 20 - 24, 2007

“57th UITP World Congress and Exhibition” in Helsinki, Finland

Published by:

init innovation in traffic systems AG

Editors:

Andrea Mohr-Braun (Editor-in-chief),
Anke Baldauf, Alexander Baudendistel,
Gisela Krieger, Jenille Logan,
Claudia Roland

Design:

Ücker & Partner Werbeagentur GmbH

Print layout:

Alexander Baudendistel

Print:

Engelhardt und Bauer, Druck und
Verlagsgesellschaft mbH

Editorial Office:

init AG, Kaeppelstrasse 6
76131 Karlsruhe - Germany
Tel. +49.721.6100.113
Fax +49.721.6100.399
www.init-ka.de / www.initag.de
redaktion@initag.de