



Abu Dhabi is improving public transport. INIT system for highest requirements.

Innovative

- 2 > STOPnet — autonomous passen-
ger information displays.

International

- 3 > Fleet management and RTP1 for
Brisbane, Australia.
- 4/5 > Abu Dhabi relies on INIT.

Interesting

- 6/7 > initplan's user group meeting
a huge success.
- 8 > Integrated ITCS and ticketing
system for eastern German
region.
- 8 > Events

Imprint

2/2011

Index

In the attempt to make bus service in Abu Dhabi more attractive, accessible and reliable, Abu Dhabi's Department of Transportation (DOT) has started to implement an Automated Vehicle Management System (AVM). To find a technology partner fulfilling the high requirements, the Bus Office of DOT performed an international tendering.

The perfect partner was found in INIT, worldwide leading supplier of Intelligent Transportation Systems (ITS) and fare collection systems. Hence, Abu Dhabi is already the second Emirate of the U.A.E. that has decided for INIT's high performance technology.

Continued on page 4-5

Dear Transportation Professional,

According to UITP, the 59th UITP World Congress and Exhibition held in Dubai in April of this year has surpassed expectations and set new records. Having played an active part in this event, we had the opportunity to present the congress participants the ITS system we realised for RTA Dubai. This most modern system supports RTA providing world class public transport service. This successful work has now resulted in

our second project in the MENA region with the Department of Transportation Abu Dhabi (DOT).

Privileged with the new contract to provide the capital of the U.A.E. our ITCS system, we are very proud to contribute to the transformation process of Abu Dhabi from a car oriented city to a green, sustainable metropolitan city. Following the very ambitious Master Plan for the development of public transport in the emirate, the INIT system will increase the efficiency and quality of operations. It will also allow DOT to double their transport service by adding more routes and extending the bus fleet from 600 to 1,350 vehicles by 2013.

Please enjoy reading and have a pleasant summer time.



> **Dipl.-Ing. Eyad Tayeb**
Managing Director of INIT Innovation
in Traffic Systems FZE, Dubai

Eyad Tayeb

Editorial

Breaking New Grounds with Autonomous Passenger Information Displays.

Marketing of real-time passenger information improves service and revenue.



> **Power, Internet and a monitor:** nothing else is required for providing real-time passenger information.

Keeping an eye on the scheduled trip back home during shopping? Now that is easy with **STOPnet**. The web feed provides real-time passenger information to any stationary web-enabled terminal like an internet enabled monitor or a TV. **STOPnet** is the perfect addition to conventional stop displays offering clear passenger information even beyond the public transport zone. Wherever their location, passengers can get up-to-date information: in the department store, the foyer of a movie theater, the hotel, the pharmacy, etc.

Web-Feed Displays.

Companies participating in this modern solution stand out from the rest. Even more, they can gain financial benefit from e.g. impulse buys because now the passengers have time being sure that their train is not

yet due. Transport authorities can market this service to generate additional income. All that is needed at the point of installation is power supply, internet access and an appropriate monitor. The information is displayed via a standard internet browser. Therefore, it is not necessary to integrate **STOPnet** displays into the ITCS infrastructure, reducing the effort for connecting the terminals to the ITCS or passenger information system to a minimum.

All that needs to be done, is the initial configuration of a template for the display of the departures in the so-called prognosis-panel followed by the generation of a specific URL for all requested stop displays. Based on the URL the system recognises the stop code and generates automatically the location-specific display on the querying sign. As soon as the terminal

has internet access, the departures are updated regularly via a specific web server. **ONLINEinfo**, the web module of INIT's passenger information system provides this server constantly with reliable data.

Passengers and potential passengers are receiving in their daily life exactly the same information as the passengers waiting at the stops. Since the display layout can be configured freely, also data from several stops can be shown on one display or the layout can be integrated into existing web sites or infotainment systems. This allows for an easy combination with in-house advertising, third party advertising, weather, news, etc.

On May 24, 2011, **STOPnet** was introduced for the first time in Bremerhaven, Germany in the course of the European research project EBSF (European Bus System of the Future). The EBSF project aims to develop an innovative and high quality bus system integrating planning, operational, and technical solutions into the ITCS framework.

For **STOPnet**, INIT offers turnkey solutions based on the established products **PIDvisio** and **PIDscreen** combining all functionality in one unit. Internet access via GPRS/UMTS can be accomplished as well using a simple integrated communications module. Where displays already exist, their usage can be extended to passenger information.

> Contact:

Klaus Janke
Tel. +49.721.6100.119
kjanke@init-ka.de

INIT Makes Further Headway into Australia.

State-of-the-art technology for down under: comprehensive ITS solution to be installed at Brisbane.

The Translink Transit Authority (Translink) in the state of Queensland has commissioned INIT to install an operations control and real-time passenger information system.

Translink's vision is making travel easy for customers by providing them with a seamless, quality journey from decision to destination. In this context, Translink launched the "Customer First Project" in 2010.

This project involves an Intermodal Transport Control System (ITCS) to determine departure times and to provide accurate real-time departure information to Translink's customers. Translink and INIT signed the contract for this part of "Customer First", at an official ceremony on June 6, 2011.

Due to their office based in Brisbane, INIT is able to offer local service to their new customer.

First Class Public Transport.

Initially, more than 130 vehicles will be equipped with the INIT on-board computer **COPILOTpc** and the **TOUCHit** driver interface and will be connected to the central system via GPRS data communication.

In the control centre, the dispatchers can take advantage of the sophisticated fleet monitoring functions and service restoration measures provided by **MOBILE-ITCS**.

By means of the central integrated module **MOBILE-STOPinfo**, Translink's customers will be reliably informed in real-time about next departures, either via stop displays or Translink's website. In the vehicles, the INIT TFT displays **PIDvisio** will keep travellers informed throughout their journey.

The statistical evaluation software **MOBILEstatistics** and the reports



> **Customer First Project:** Brisbane strives for reliable service and real-time passenger information.

management software **MOBILEreports** will enable Translink's decision makers to conduct long-term trend analysis and to assess daily operations regarding efficiency, quality of service, performance, and growth.

Future Expansions

In spring 2012, a one year pilot operation will be conducted. Following the successful completion of this pilot phase, the contract includes the option of equipping the vehicles of the entire network. The Translink network currently comprises 18 individual vehicle operators running more than 2,300 vehicles in the south-east of Queensland.

Thanks to the multi-client capability of the INIT solution, such an extension is already perfectly prepared. The service area stretches around Brisbane as a vibrant metropolis with a population in the millions.

About Translink

Established as recently as 2008, Translink is responsible for providing public transport services within South East Queensland. Stretching across 23 zones and covering more than 10,000 square kilometres this is one of the world's largest integrated public transport networks. Currently Translink coordinates around 181.8 million passenger trips provided by 18 different vehicle operators.

> Contact:

Bernd Gorenflo
Tel. +61.7.3310.8818
bgorenflo@init-ka.de

Enhanced Punctuality and Service Quality will Increase Ridership.

Abu Dhabi opts for Automated Vehicle Management System (AVM) from INIT.

Continued from page 1



► Support for Abu Dhabi's bus drivers with easy-to-read instructions and turn-by-turn navigation — thanks to innovative vehicle equipment from INIT.

The Automated Vehicle Management system (AVM), internationally known as Intermodal Transport Control System (ITCS), will allow dispatchers at the Operations Control Center (OCC) to monitor the buses in real-time as well as to proactively manage the fleet. INIT has been commissioned not only to deliver their leading-edge Intermodal Transport Control System **MOBILE-ITCS** but also to equip all DOT buses with state-of-the-art on-board computers and to set up the complete Control Centre including server infrastructure, workstations and a large video wall enabling the

dispatchers to keep track of the fleet situation in Abu Dhabi.

State-of-the-Art Technology on the Buses.

INIT will equip more than 500 DOT buses with the next generation of on-board IT. Also planned is the equipping of another 860 buses which DOT intends to purchase with INIT devices. The on-board computer **COPILOTpc** will form the vehicle's IT-platform controlling all ITCS functions such as vehicle position calculation or schedule adherence. It will also efficiently manage all peripheral devices in the vehicle and act as their central communication gateway facilitated by the comprehensive **WLANrouter**. Moreover, **COPILOTpc** will control voice and data radio communication via UMTS mobile radio supported by INIT's **UMTSvoice** communication module. The use of mobile radio networks will allow for an expedited implementation of the system within the next two years.

Drivers will be able to operate all functions comfortably using the large 8.4" mobile data terminal **TOUCHmon** which provides clearly presented

and easy-to-understand instructions supported by touch-screen technology. The drivers will even receive navigational support along their routes even in the event of deviations through their terminals in form of turn-by-turn instructions. For the first time the drivers will log-on by identifying themselves with their fingerprints using the **TOUCHmon's** fingerprint sensor.

Leading-Edge Fleet Management system.

INIT's Intermodal Transport Control System **MOBILE-ITCS** is the heart of operations and enables dispatchers at the DOT Operations Control Centre (OCC) to maintain an overview of the fleet status and take action in the event of any incident. Clear and concise displays deliver all necessary information at a glance, enabling the dispatchers to recognise disruptions as they happen. Comprehensive dispatching measures will provide the tools to immediately restore services. Moreover, the ITCS features the automatically restoring of the buses' timetable adherence, thus enhancing service quality remarkably.



► DOT is already INIT's second customer in the United Arab Emirates.

A further feature that will contribute to smoother rides and satisfied customers is “connection protection” which will make taker-buses waiting for delayed feeder-buses within a defined threshold. So, passengers no longer have to watch a connecting bus depart without them. Thanks to the foreseen intermodal interfaces, “connection protection” will also work for connections with trams or the metro in the future. This will meet DOT’s strategy for an intermodal system minimising waiting times for passengers.

The system will provide the latest functionality available in the industry including a 3-D map display providing the dispatcher with a more realistic picture of the location, as well as an ad hoc detour feature which won INIT an innovations award. The feature allows for a straight-forward approach to re-routing buses in case of a disruption. Even more important, the INIT solution is capable of transmitting all information about the service changes instantly and automatically to drivers and passengers. Thus, the drivers will receive routing information and navigation advice about their new ad hoc route, while passengers will be informed about actual departures at their stop as well as about the next stops of their bus.

INIT will also deliver a traffic light bus priority system giving the buses right of way at numerous key intersections. This will facilitate Abu Dhabi’s goal of making the bus service more punctual, more reliable and more attractive for the passengers.

Integrated Solution to Improve Public Transportation.

This contract is part of the Intelligent Transportation Systems strategy which Abu Dhabi’s Department of Transportation has developed since high-performance technology has been identified as key for improving



> Abu Dhabi counts on public transport and on high-end technology from INIT.

public transport services. Thus, the AVM system is set to interface with future ITS systems. One of the next steps will be the implementation of a real-time passenger information system which will include wayside signs at many bus stops as well as a journey planner providing Internet users with personalised trip information, including real-time departures. This will improve the accessibility of DOT services dramatically and contribute to the overall objective to increase the market share of public transportation in Abu Dhabi.

Since Abu Dhabi is a pioneer in environmental consciousness, not only in the U.A.E., it is no surprise that strengthening public transport is one of the main goals of the Surface Transport Master Plan (STMP). Abu Dhabi developed this Master Plan to create an effective intermodal transportation system contributing to the economic growth, quality of life and environmental sustainability in the emirate of Abu Dhabi over the next decades.

With INIT, Abu Dhabi opted for a highly professional partner with more than 25 years of experience in the

transport industry. With its unique expertise and understanding of public transport, INIT is able to support public transportation providers around the world in making public transport more attractive and efficient. INIT systems are successfully in use worldwide including Dubai, New York, Oslo, Stockholm and Munich. Soon the benefits of INIT’s high-end technology will also be seen in Abu Dhabi and contribute to the success of the Surface Transport Master Plan.

> Contact:

Eyad Tayeb
Tel. +971.4.70.17.286
etayeb@initag.com

initplan User Group Meeting a Big Success. Group of participants reflects international success of MOBILE-PLAN.



> 68 Experts from 36 transport providers met in Mühlhausen/Germany.

The Planning Systems User Group Meeting was held in the Thuringian city of Mühlhausen from May 10 through May 11, 2011. This year's user group meeting was all about the 30th anniversary of the planning systems MFS, MFS90, INTERPLAN, and **MOBILE-PLAN**. The systems originate from developments made by Krupp Essen, PTV Karlsruhe and INIT GmbH. Since 2008, initplan GmbH has been in charge of this line of business. 68 customers from 36 transport authorities were eager to learn everything about the latest

developments in their planning system **MOBILE-PLAN** and to talk shop with fellow attendees of other transport authorities. For the first time, the meeting was interpreted simultaneously in order to accommodate the many participants from all over Europe. Achim Becker, COO of init AG, opened the event followed by Gerd Haßkerl, CEO of the regional bus association Unstrut-Hainich and Kyffhauserkreis mbH, based in Mühlhausen, who was also the co-host of the event. Gerd Haßkerl was pleased to have so many

attendees from all over Germany and various European countries. He referenced the fact that Mühlhausen, being the "geographical centre of Germany" was a possible reason for the high attendance. Further in his speech he introduced the Regionalbus GmbH and announced that "Molly" and "Polly" the two road trains of Regionalbus GmbH would drive them later in the evening through the beautiful countryside of Thuringia.

Exchange of Experience Allows for More Efficient Work.

The extended international meeting platform received very positive feedback from the attendees with hopes that at the next meeting the North American customers of initplan will also share their experiences. The attendees put special emphasis on how such meetings benefit their daily routine. The exchange with the initplan professionals and with other users of the planning system provided the participating transport authorities with useful



> Hands-on-Sessions provided training for direct use in practise.

information for their in-house process optimisation. In addition to the lectures, e.g. about new features in the planning system, the graphical schedule, or the new GIS, this year's hands-on sessions were once again a favourite. The initplan team provided help and advice at various workstations where they demonstrated how to use existing functions more efficiently. At the same time, the developers learned where the users are having difficulties and how they can ensure that further developments of **MOBILE-PLAN** are practical and process-driven.

Convenient Planning with a few Mouse Clicks.

The new developments of the planning system presented in Mühlhausen also reflect the feedback received during former meetings. Customers were especially thrilled by the possibility to transfer planning variants easily into the current schedule. Thus **MOBILE-PLAN** allows a user-friendly way to copy lines across versions into the effective version of the timetable. All agreed that this is far more convenient and improves work speed. The new function "route planning via GIS" (map display), was also introduced with which route patterns can be defined with just a few mouse clicks.

Much acclaimed was the newly developed graphical user interface with which it is now possible to use **MOBILE-PLAN** via Internet browser. This is really helpful because now data can be imported and exported anytime and anywhere using any internet-enabled terminal. Moreover, the progress can be monitored.

A lot has also been done with regard to a more efficient use of resources and improved reliability of planning results. The attendees were impressed by the demonstration of **MOBILEloop**. This new feature



> The road train took the participants out into the beautiful countryside of Thuringia.

controls the automated feedback of operating data from the operational statistics (e.g. INIT's **MOBILE-statistics**) to the planning system **MOBILE-PLAN**. With this solution INIT closes the loop of planning, operation, analysis, and optimisation. The schedulers see now at a glance on the graphical timetable how the actual driving time deviates from the schedule. Thus transport authorities can find out immediately where there is a need for action. More robust schedules can be designed and delays carried over so subsequent trips can be avoided. Thus **MOBILEloop** offers a one-of-a-kind knowledge base for the transport authorities to provide a more punctual and thus more attractive service for the passengers.

Ulrich Schmidt, CEO of initplan GmbH was thrilled about the attendees' positive responses: *"The enthusiastic reception of our new features and the very positive feedback from our customers to our user group meeting corroborate the efforts which we are investing in our developments and services. This motivates us at the same time to continue to work on the highest level possible."*

> **Contact:**
 Harald Hellwig
 Tel. +49.721.6100.187
hhellwig@initag.com

An Integrated ITCS and Ticketing System for South Thuringia.

INIT equips regional buses with new ticket printers with integrated on-board computers.

The three transport authorities PNG Bad Salzungen, MBB Meininger Busbetriebe, and KVG Eisenach have decided to modernise their existing CAD/AVL systems. They opted for an integrated fleet management, passenger information, and ticketing system from INIT with which soon all of the approximately 350 buses of the three participating companies and their subcontractors will be dispatched. Thanks to its multi-client capability the integrated ITS system can be extended easily. Thus, other regional transport providers in Thuringia can be integrated into the communication and control system very easily.

Multi-Company Solution.

The data centre for all companies will be located in Bad Salzungen. However, with each having their own remote workplaces, the different transport authorities can dispatch their own buses without dependency on the others. The unique user management makes sure that all the sensitive data of the participating authorities are protected. It is defined which company can see and change which data and who is allowed to carry out which functions. It is also ensured that cross functions like connection



> The transport authorities of Meiningen, Bad Salzungen and Eisenach share the benefits of a multi-client ITCS and Ticketing System.

protection can access the data of all companies. This results as well in region-wide real-time passenger information that will be displayed on the existing passenger information displays.

The **EVENDpc**, which is a combination ticket printer and on-board computer, is used as the IT platform in the vehicles. Deploying this efficient multi-functional unit, the three transport authorities not only reduce their investment costs, but also enable the implementation of new functions like the protection of on-board passenger requested transfers.

Ticketing System.

The South Thuringian transport authorities rely on a multi-client solution for their electronic fare management as well. This will keep their administrative work down and will help to implement cross solutions much easier. In addition to the **EVENDpc** they will use the sophisticated background system **MOBILEvario**.

> Contact:

Jens Reinwald
Tel. +49.721.6100.239
jreinwald@init-ka.de

1 – 2 September 2011	“VÖV Generalversammlung” in Aarau/Baden, Switzerland
7 – 9 September 2011	“InformNorden” in Malmö, Sweden
22 – 23 September 2011	“Paikallisliikennpäivät” in Helsinki, Finland
5 – 6 October 2011	“Coach & Bus Live 2011” in Birmingham, UK
5 – 6 October 2011	“International User Group Meeting” in New Orleans, LA, USA
12 – 14 October 2011	“Rencontres Nationales du Transport Public” in Strasbourg, France

Published by:
init innovation in traffic systems AG

Editors:
Andrea Mohr-Braun (Editor-in-chief),
Alexander Baudendistel, Jürgen
Glöggl, Gisela Krieger, Ann Derby,
Anke Ost

Design:
Ücker & Partner Werbeagentur GmbH

Print layout:
Alexander Baudendistel

Print:
E&B engelhardt und bauer
Druck und Verlag GmbH

Editorial Office:
init AG, Kaeppelstrasse 4-6
76131 Karlsruhe - Germany
Tel. +49.721.6100.113
Fax +49.721.6100.399
www.init-ka.de / www.initag.de
redaktion@initag.de