



DB Regio Bus Bavaria

# Germany's largest fleet management system



*Covering all key public transportation processes for the major part of Bavaria in one single system? Too difficult? Not with an integrated multi-client ITS system from INIT. It comprises functions for fleet management, passenger information, ticketing, staff roster planning and on-demand services as well as all on-board equipment. And the benefit? It makes public transport more efficient for the operators and more attractive for the passengers.*

**Four bus companies of DB Regio Bus Bavaria**

DB Frankenbus,  
DB Ostbayernbus,  
DB Oberbayernbus,  
Regionalverkehr Allgäu GmbH

500 subcontractors

3,300 vehicles

# The project at a glance

## DB REGIO BUS BAVARIA

4 bus companies as original clients

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500 subcontractors

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5 clients meanwhile incorporated

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1 IT-center for the multi-client system

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80 remote ITCS-workstations

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3,300 vehicles

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25,000 stops

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## REQUEST

- Set up of an integrated ITCS and ticketing system in Bavaria. Including cross-company fleet management and passenger information, intermodal connection protection, on-demand-service scheduling and management as well as standardized ticketing.

## SOLUTION

- A fully multi-client ITS system that provides an overall solution for all operational processes.

## BENEFITS

- Synergy effects due to multi-client structure
- Efficient control of operations
- Excellent driver support e.g. through turn-by-turn navigation
- Improved service quality by:
  - Dove-tailed service
  - Real-time passenger information
  - Cross-company connection protection
  - Standardized ticketing
  - On-demand offers
  - Increased punctuality

# The future of public transport has already begun.

## The challenge

DB Frankenbus, DB Ostbayernbus, DB Oberbayernbus and Regionalverkehr Allgäu. These Bavarian companies of DB Regio Bus with the help of 500 subcontractors, provide bus services for 60 rural districts and 23 towns and cities throughout almost all of Bavaria – including routes that cross into Austria and the Czech Republic. To realize their goals of offering excellent service to passengers and streamlining operations across all participating companies, a partner was required who had the skills and resources to create an integrated telematics system.

## The solution

Based on the integrated overall solution MOBILE, INIT created Germany's largest telematics system to date. This multi-client system now manages more than 3,300 busses, and passenger information for more than 25,000 stops in real time. Moreover, ticketing is now standardized and managed centrally.

### **MOBILE-ITCS: exceptional flexibility**

The Intermodal Transport Control System MOBILE-ITCS offers rich functionality for the effective management of operations. It enables dispatchers to respond flexibly to unexpected events by means of dispatching measures – for example, with ad-hoc diversions that can be defined directly in the ITCS. This results in increased service quality as does the dedicated function for guaranteeing the availability of onward connections. These connections are monitored

automatically, but drivers can also request transfers on demand. This means passengers alighting from trains can be sure that their bus will be waiting for them.

The central ITCS solution is operated at a data center in Nuremberg. The dispatchers are able to access the ITCS through more than 80 remote workstations located throughout Bavaria. A sophisticated user management ensures secrecy of sensitive internal data and the intelligent design of the system allows the quick and simple integration of further clients.



We simply found the best partner for our project. And the feedback is positive – without exception.



Dieter Behrendt  
Head of Information Technology,  
DB Frankenbus

### **Driver roster planning – with MOBILE-PERDIS®**

Bidirectional data exchange between the ITCS and MOBILE-PERDIS guarantees exceptional efficiency. MOBILE-PERDIS, the module for staff roster planning, transmits driver rosters to the ITCS every morning. Data is subsequently updated and synchronized. This allows dispatchers to monitor driver changeovers via the ITCS, and take them into account when executing dispatching measures. It is also possible to capture times spent at the wheel by means of driver log-on and log-out via the on-board computer.

### **MOBILE-STOPinfo: real-time passenger information**

MOBILE-STOPinfo leverages precise bus location data to accurately forecast arrival and departure times. This dynamic passenger information system also takes into account the timetable and dispatching measures – which is vital to the accurate calculation of journey and arrival times. The real-time data is distributed via VDV interfaces to a variety of passenger information systems, and made available over the Internet and at displays at popular stops. At less busy stops, mobile tagging allows the provision of up-to-the-minute information at acceptable cost. Passengers can scan a QR code printed on the bus timetable, and departure information is then sent to their smartphones. This results in greater customer satisfaction.

# 3,300

Busses equipped for ITCS and Ticketing

### **MOBILEcall: on-demand busses improve service**

One of the DB bus companies' key goals is to improve the quality of service in rural areas, and a pivotal role is played by on-demand busses. Operators need technologies that enable them to best reconcile standardized bus services and routes with the diverse personal travel imperatives of passengers. The MOBILEcall module allows the effective scheduling and management of flexible routes, including on-demand route-based service and corridor route service. Integration with the ITCS means maximum support for dispatchers and drivers, who – in the simplest case – only need an Android smartphone.

### **State-of-the-art on-board equipment with EVENDpc**

Peace of mind for the driver: the combined on-board computer / ticket printer EVENDpc is an end-to-end solution for all ticketing and ITCS needs. It can be used to print tickets or to read smart cards and multifunctional tourist passes. For DB Regio Bus Bavaria, additional card readers were installed to incorporate further regional ticketing schemes.

The driver can perform all ITCS tasks with speed and simplicity via a generously sized touch screen. The navigation function is particularly useful, making it easier for drivers to deal with diversions and on-demand routes. The multifunctional EVENDpc unit also supports passenger announcements, and features modules for voice and data transmission via GSM, GPRS/UMTS, as well as for data transfer via WLAN.



*MOBILE-ITCS: Busses almost all over Bavaria are tracked.*



*EVENDpc supports all kinds of Ticketing, including 2-D Barcode tickets on paper or mobile phone.*

# 80

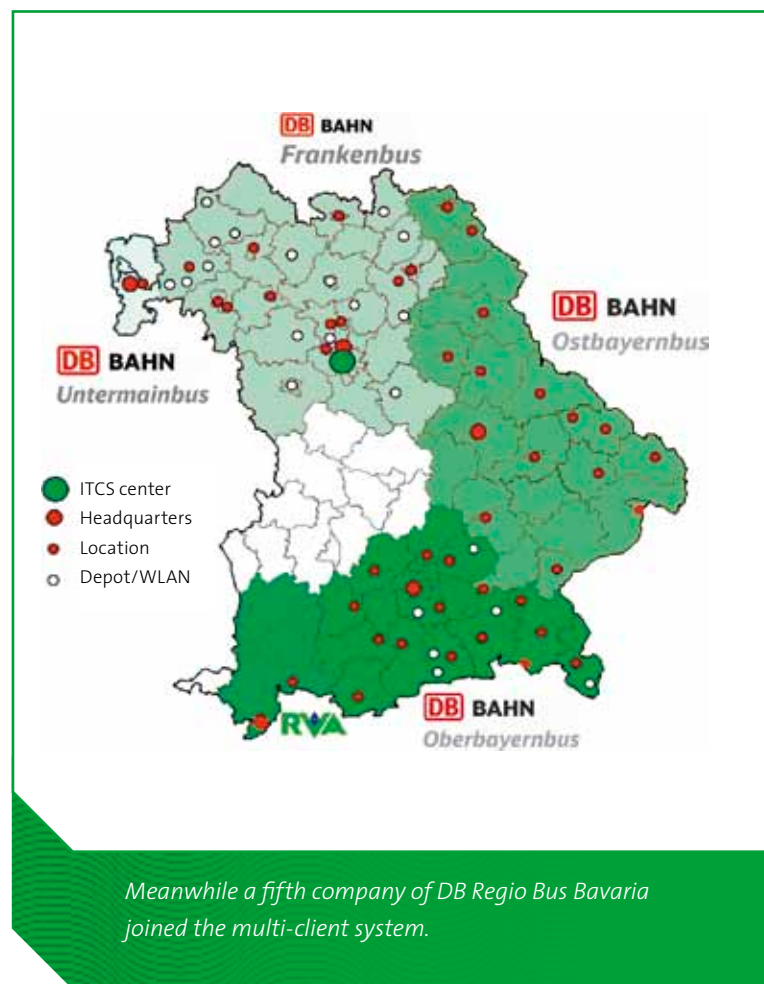
remote workstations for dispatchers

## MOBILEvario: Standardized ticketing processes

The MOBILEvario module enables the effective and standardized management of fares, including clearing. The multi-client design means that participating companies can perform all tasks independently, while benefiting from the efficiency of a centrally operated system. From settlement of driver and device accounts, to reporting and the distribution of revenues – robust data secrecy is guaranteed, with user organizations only having access to their own data. And the passengers benefit, too. They are able to buy standardized tickets – for travel throughout all regions served.

## The conclusion

The integrated multi-client solution for ticketing, ITCS and passenger information helps the five Bavarian bus companies of DB Regio Bus to better manage the challenges of their business. All key tasks are covered by the comprehensive MOBILE product range. This results in a complete solution which offers maximum integration for a more efficient handling of operational processes. The multi-client design further contributes to enhanced efficiency without jeopardizing the economic independence of individual companies. But the greatest benefits are for passengers – in the shape of on-time busses, guaranteed connections and real-time information, even in rural areas.



*If you would like to know more about this project and featured INIT products, please contact us at [sales@initse.com](mailto:sales@initse.com). We look forward to hearing from you.*

*More than 400 customers worldwide rely on our integrated solutions to support them with their daily tasks*

- ◆ *Planning & Dispatching*
- ◆ *Operations Control & Real-Time Passenger Information*
- ◆ *Ticketing & Fare Management*
- ◆ *Analyzing & Optimizing*

*and they also benefit from our proven Service & Maintenance support.*

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INIT is the worldwide leading supplier of integrated ITS and Ticketing systems for busses and trains. For more than 30 years, we have been assisting transportation companies in making public transport more attractive, faster and more efficient.

**INIT**

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