

For immediate release

## **New approaches to operations control in Karlsruhe**

### **INIT on-board computer also in use in the new railroad ITCS**

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**A groundbreaking partnership in the digitalization of operations control was recently established in Karlsruhe: The existing [MOBILE-ITCS](#) solution from INIT, which the two public transport companies "Verkehrsbetriebe Karlsruhe GmbH" (VBK) and "Albtal-Verkehrsgesellschaft mbH" (AVG) have relied upon for many years, will in future be supplemented by the DatNet operations control system from ETC Solutions GmbH for AVG light rail vehicles that also operate both as trams and trains on regional railroad lines. The latest generation of INIT's proven on-board computer [COPILOTpc](#) will control communication on all light rail vehicles. The required interface between the two operations control systems is also being developed by INIT, with commissioning planned for 2025.**

In the Karlsruhe region, so-called tram-trains run far into the surrounding areas and also use railroad lines. This world-renowned Karlsruhe model enables direct connections from surrounding areas to the city center on inner-city tram and regional railroad lines.

#### **INIT's high-performance on-board computer for the bus and rail sector**

The latest generation of INIT's on-board computer COPILOTpc will be used in AVG's tram-trains: This includes not only existing vehicles, but also the 148 new tram-trains that AVG and VBK will receive as part of a joint order with four other transport companies from 2025. Thanks to its high performance, the COPILOTpc is ideally suited to support both operations control systems - including the DatNet from ETC Solutions GmbH. With this order, INIT is demonstrating its expertise in equipping existing and newly procured vehicles, proving once again that their on-board computers can also be the first choice for rail transport companies.

### **New features for drivers and control center staff**

The INIT on-board computers will also support drivers with various displays of the vehicle status and passenger information – just one of the improvements they can look forward to. However, the change between the two systems will hardly be noticeable to drivers: they simply log on with their train number on lines that also use railroad lines. On all urban lines, they will log on using their block number. Things look different in the operations control center: The AVG operations control center team will work in the new railroad ITCS and will receive numerous railroad-specific functions with DatNet. However, the close connection between the two systems will also enable VBK dispatchers to monitor the timetable and position of AVG trains in their ITCS and to communicate with them by radio – not least because they are responsible for the inner-city tram network and also operate the accident reporting center for it.

### **Improvements to passenger information**

Some enhancements will also be made to the passenger information system, which will help improve service quality: In future, all transfer options, including to third-party transport companies, will be announced over loudspeakers and shown on passenger information displays. Separate destinations of individual vehicles in the train set will be taken into account in the passenger information channels. Numerous new text modules in the ITCS will also make it easier for passengers to understand why there has been a disruption or a delay.

### **INIT develops the interface between both systems**

As a first step, INIT is developing a special interface to ensure a smooth data exchange between the two systems. INIT will base this on existing standards such as VDV 453 and VDV 454 (standards developed by the German Public Transport Association). The interface will be developed in conjunction with other projects that INIT is currently implementing for VBK and AVG, such as the on-board computer application COPILOTapp for railroad replacement services and the introduction of a system for occupancy rate forecasts in passenger information.

### **Simplified exchange of information between rail infrastructure companies**

The networking of the systems provided by INIT and ETC Solutions will result in a digitalization boost for AVG, which will primarily be reflected in a simplified and accelerated exchange of information with rail infrastructure companies, in particular of course with DB InfraGo, Deutsche Bahn's network operator. This includes Passenger Train Composition messages, Cause of Delay messages, and Path Section Notifications for (partial) cancellations. With this project, AVG will also implement the EU TAP TSI directive, which defines a standardized data exchange format for path requests, timetables and operations, and will ensure interoperability between different infrastructure operators – including for cross-border rail traffic.

Once the project has been implemented, Karlsruhe's transport companies will be able to rely on a state-of-the-art system to transport their passengers more reliably from Karlsruhe's city center to the region's vineyards and to the Black Forest and at the same time ensure they are well-informed.

Image 1: In addition to INIT's tried-and-tested MOBILE-ITCS, the AVG tram-trains that also operate on railroad lines will be equipped with DatNet's control system from ETC Solutions GmbH. The interface is being developed by INIT. © AVG

Image 2: The powerful COPILOTpc on-board computer and the TOUCHit driver control unit are used in both operations control systems. © AVG

## **About INIT**

As a worldwide leading supplier of integrated planning, dispatching, telematics and ticketing systems for buses and trains, INIT has been assisting transport companies in making public transport more attractive, reliable and more efficient for more than 40 years. Today, more than 1,100 transport providers rely on INIT's innovative hard- and software solutions.

The unique selling proposition of INIT's integrated telematics system MOBILE is that it comprises all of the daily tasks of public transport providers:

- Planning & Dispatching
- Ticketing & Fare Management
- Operations Control & Real-Time Passenger Information
- Analysing & Optimising

With INIT's integrated solutions, transport companies can master all requirements of electromobility and strengthen their role as mobility broker of their region by establishing a mobility platform. An excellent package of operational services completes the INIT offering.

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*We look forward to the publication of this release and request a sample copy.*