

INDEPENDENT MOBILITY INNOVATIVE DATA TRANSMISSION EVEN ON THE BUS

Unfortunately, traffic jams, rush-hour or accidents cannot be avoided. In these situations, it is important to respond quickly and reliably so that passengers can be informed about deviations in the schedule and, if necessary, can be redirected to substitute lines. With the computer-aided operation control system, the passenger information is taken to a new level, and connection security is significantly improved. In addition to the optimized operational work processes, the service quality is also increased, which ultimately is because the operations can be more transparent and irregularities can be detected more quickly due to the computer-aided operation control system.

The buses transmit their position to the UFHO-RBL server, which allows the exact position of the vehicles to be visualized on a map. The bus receives data about the bus station routes display, which gives information about the route, arrival times or delays. The more buses and trains are connected to combined data hubs, the greater the quality of the regional public transport system will be, since the information network of each vehicle increases and passengers benefit. Thanks to the innovative IBIS Bluetooth adapter, all devices in the bus, such as validators or the exterior and interior displays, can be controlled with a tablet. If delays occur, anticipatory measures can be implemented based on the transmitted GPS data in the VDV standard and communicated directly to the passengers via apps, loudspeaker announcements or displays.

UNHINDERED TRAVEL BY TRAFFIC LIGHT CONTROL

To speed up the movement of the buses through traffic, the UFHO system in vehicles can be used to influence both local analog and digital radio as well as mobile radio-based traffic light signal systems. The pre-, main- and de-registrations will take place by sending data telegrams to light signal system points.

CORRESPONDENCE WITH THE DRIVER THROUGH UFHO MESSAGE FUNCTION

The message function in the UFHO system allows the control center and drivers to communicate with each other. This enables the driver to send standard texts generated in the background system, so that no text input is required. The control center has a free-text function. If, for example, the route is blocked, the driver can be sent a pdf file with a detour route.

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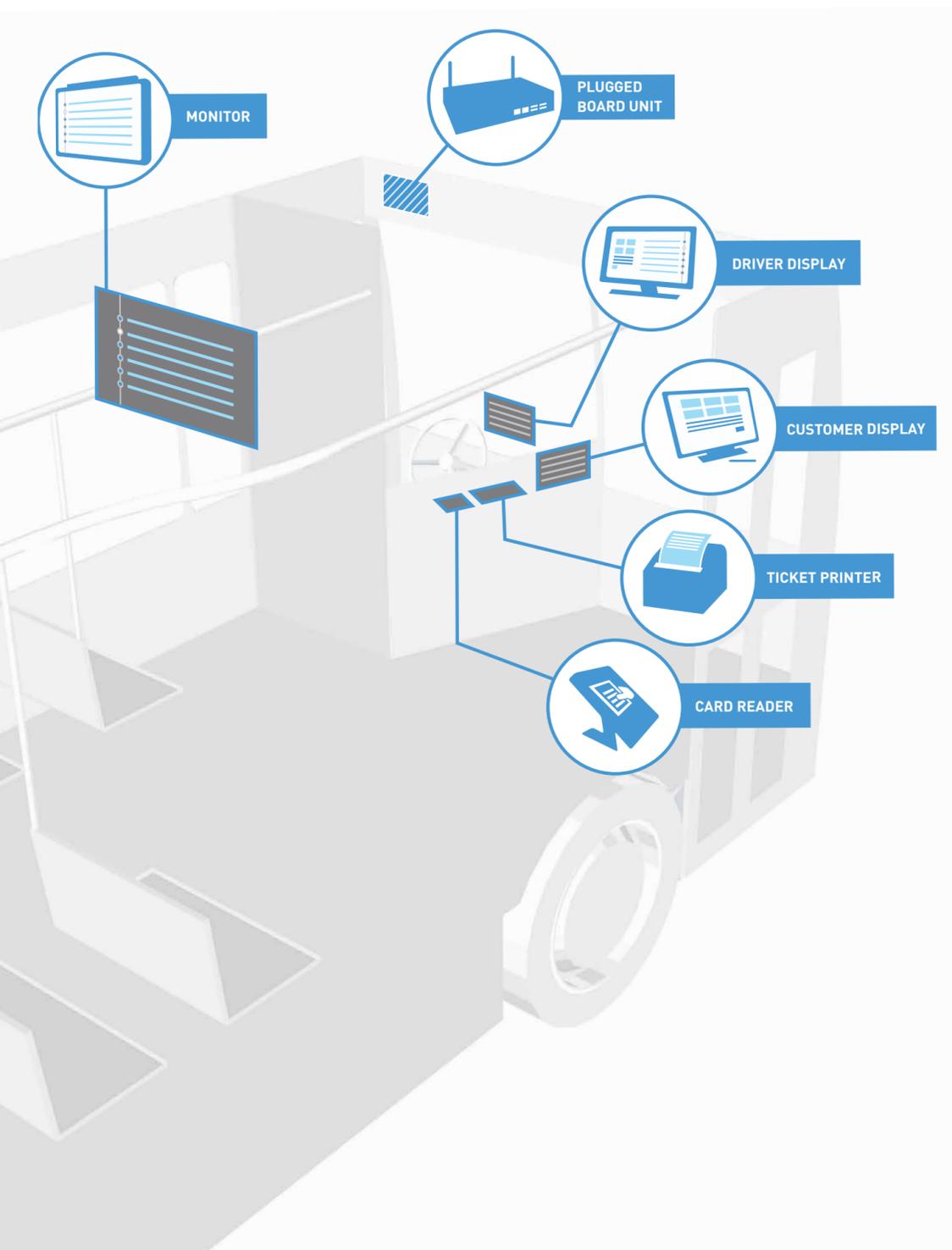
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OUR PILOT PROJECT: COST-SAVING ITCS APP FOR ON-DEMAND TRAFFIC

For countless reasons, fleets sometimes require short-term replacements of vehicles. If vehicles cannot be used to perform their service, for example, because of a defect or accident, an equivalent replacement vehicle will be needed quickly. However, providing and purchasing reserve vehicles is very expensive, so that many transport companies have cut them back to a minimum. In addition, there are the costs for the ITCS components and their installation. Compounding the problem, if the vehicles have individual hardware configurations tailored to one line only, their possible uses are further limited. To map the route, make loudspeaker announcements or change the destination signage on the bus quickly and easily, AMCON has developed the ITCS Quick & Easy App, which communicates with the ÖPNV Service GmbH Bluetooth box. The individual control of the vehicle components is thus no longer a problem. The purchase of the Bluetooth box and a tablet or smartphone is not a major cost factor in equipping the vehicles for on-demand or replacement rail traffic. Another advantage of the Android app is that the data is read via a streamlined web-based background system as a simple Excel export, which makes the function easy for anyone to understand. This avoids having to purchase additional hardware or software.

SIMPLE APPLICATION FOR CONTROLLING THE VEHICLE COMPONENTS

With the AMCON ITCS App, the bus driver can choose between predefined routes when additional buses are integrated. In addition, the interior and external destination signage can be accessed with the app. The driver has the option to select from the predefined destinations with a few clicks.

The Bluetooth box contains an electronic loudspeaker system which can be controlled and through which the internal and external announcements can also be controlled via the ITCS app. Furthermore, the driver has a telephone list available in which important numbers can be entered centrally. The navigation of the app is connected to Google Maps and can display the routes to the driver on request. The ITCS app also includes an integration feature for additional external apps. For example, you can install additional timetable apps that could be useful to the driver or that provide him/her with other important documents. If necessary, the app can be installed in kiosk mode, so that the focus is on the relevant content.



SMART ON THE ROAD IN SATERLAND: CONTROL OF INDOOR AND OUTDOOR DISPLAYS DUE TO INNOVATIVE IBIS BLUETOOTH ADAPTER

Space-saving, easy to install and use: Wilhelm Janssen Omnibusbetrieb relies on our innovative UFHO software solution for ticket sales in the VGC fare zone. Samsung Active Tab tablets serve as a reliable user interface and as an on-board computer for the UFHO system, which displays ticket sale processes, routes, and timetables. Interior and external displays are controlled with innovative ÖPNV-Service Bluetooth adapters. The sales data are transmitted via WLAN or mobile radio to the associated UFHO background system in the AMCON cloud. The timetable data in the VDV452 standard are also processed by the tablet and displayed to the driver. The Bluetooth/IBIS adapter especially developed by ÖPNV-Service to control the vehicle components, and which is unique on the market, operates the standardized interface to the vehicle systems.