



Project Property

London Bus Services Limited (LBSL) Turnkey ITCS solution for London Bus Services Limited

“The major iBus project by LBSL entails data and voice connections for the world’s largest ITCS solution. Implementation of the project would not have been possible without the know-how, support and commitment of our main partner Trapeze ITS.”

Paul Fitzpatrick, Technical Services Group, Transport for London

London Bus Services Limited operates the world’s largest public ITCS system. This intermodal transport control system shows the dispatcher at a glance exactly what’s happening on the entire network encompassing more than 770 routes. The current locations of all buses can be stipulated at any time using various parameters. This permits efficient dispatch of the vehicles and brings more than six million passengers quickly to their destination every day. The iBus project with its data and voice connections makes bus operations more reliable and provides precise information at the bus stops. The new ITCS system has enhanced the efficiency of operations and brought about additional savings.

The functionalities

- _ Intermodal transport control system type VICOS-LIO
- _ Analogue radio system
- _ Latest generation of on-board computers GHP
- _ GPS positioning
- _ „Enhanced Navigation“ GPS location function with additional sensors for greater accuracy (gyro, odometer, map matching)
- _ Data supply VICOS-LIO-Data
- _ Software up- and downloading to and from the vehicles
- _ Data coupling DIVA – VICOS-LIO-Data
- _ Recording of all trips and events for corresponding billing with the individual bus licences
- _ Extended reporting system with several 100 reports
- _ 10-year maintenance agreement (24/7 service)

The system at a glance

Control centre

- _ Operating control centre for emergencies and escalation, 89 control centres for bus operators, 1 main control centre with 23 workstations for emergencies/police, 220 dispatcher workstations

Radio system

- _ Analogue radio system with 80 channels

Vehicles

- _ More than 8,500 busses

Dynamic passenger information

- _ Self-learning prognosis system for announcing bus arrival times at the bus stops

Depots

- _ Altogether 89 depots

Third-party components

- _ Siemens traffic light preemption system, TAIT radio system

Software interfaces

- _ Real-time interface to a display management system with 4,000 displays

London Bus Services Limited (LBSL)

Transport for London (TfL) does not run its own bus operations but places orders with transport service providers (currently 15 companies). LBSL is responsible for the entire ITCS system and its operation and monitors compliance with stipulated key performance indicators with regard to overall operation of the bus system.