

Dublin Bus

Ireland

Case Study



THE CUSTOMER

Dublin Bus provides bus services throughout Dublin City and County Dublin (570 miles) with some services extending into the neighbouring counties of Meath, Kildare and Wicklow. The vehicles provide services for the wider population of 1.5 million people, operating 1,100 vehicles on 220 mostly radial routes into the city. Dublin Bus operates a predominantly double-decker fleet to carry its 150 million passengers each year.

SITUATION

Dublin Bus has many services that begin, end or go through the city, so dealing with traffic congestion is a major issue. The organisation required a communications solution that would help ensure that their buses were on schedule or as close to schedule as possible. A primary goal of the project was to implement a real-time display and control system that would allow inspectors to improve the quality of service.

Historically, Dublin Bus had placed importance on ensuring vehicles begin and complete routes on schedule, but had not always been able to track the success of the intermediary stages of a journey. They needed to be able to capture data to ensure their vehicles were consistently arriving on-time at all stops on a route.

Similarly, bus passengers had to plan their journeys with timetables that offered only static information. Dublin Bus wanted to offer patrons up-to-date, real time scheduling before they even left home, as well as at bus stops and on-board buses.

“The decision to implement an AVL system that used Tait TNDS to carry the real time data was based on the practicality and cost effectiveness of this solution”

Brendan Flynn,
Technology Development Manager -
Dublin Bus

RESPONSE

Dublin Bus improved their communications between despatch staff and drivers when they installed a six-site TaitNet MPT1327 trunked radio system mostly for voice calls. Tait Communications mobile radios were also installed in buses and control centres, and 100 Tait Communications portable radios were issued to supervisors and maintenance staff.

Dublin Bus has deployed Automatic Vehicle Location (AVL) throughout their fleet. They were able to implement the AVL system using their existing MPT infrastructure with the TaitNet Data System (TNDS) by adding five extra TDMA channels to carry position polling data.

The sites have been designed to accommodate 30-second polling frequency automatic location updates which occur seamlessly via the same radio used for voice communications. The highly efficient switching of the Tait Communications radio allows this to occur at a speed barely noticeable to the drivers. In addition, the infrastructure has the facility for dynamic frame linked extension, which ensures that larger-than-expected radio traffic volumes can be accommodated without interrupting the data flow.

The Tait Communications TM8235 mobile radio has replaced their T2030 mobiles because of its data capabilities and ability to communicate over MAP27 with the INIT on-board COPILOT. During the staged roll-out of the TM8235, bus drivers were still able to utilise the T2030 radio to maintain voice contact with their supervisors and controllers.

With the TM8235, Tait Communications also introduced rear port programming, which enables the on-board computer to accommodate software updates sent via wireless LAN. Previously, to update any software in bus applications, such as radios, Dublin Bus had to go through the expensive and timely method of bringing an entire fleet into the workshop to carry out manual updates.

OUTCOME

Dublin Bus piloted the AVL system on one of its routes before a wider city rollout. Data obtained from the AVL will be used to allow the company to plan route structures, amend services when needed and to pass on real time information to passengers.

MORE INFORMATION

For news, product specifications, comprehensive technical information and contact details of your nearest Tait service facility, please visit www.taitradio.com

CUSTOMER PROFILE

Dublin Bus is metropolitan bus company operating with 1,100 vehicles on 220 routes.

APPLICATIONS

- ▶ MPT1327 trunked radio network with six sites

BUSINESS BENEFITS

- ▶ Ability to integrate speech and data into one control room
- ▶ Passengers have certainty about when the next bus is coming with real time information
- ▶ Rear port programming feature keeps buses out of the workshop and on the roads
- ▶ MPT system will keep the radio network running even if the AVL system goes down
- ▶ Fleet identity features enable voice calls to be dialled using a 5-digit bus number

PRODUCTS USED

- ▶ Tait TM8200 mobile radios
- ▶ TaitNet Data System (TNDS)



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