



Docklands Light Railway 3-Car Capacity Enhancement



Docklands Light Railway

First opened in 1987, the Docklands Light Railway (DLR) has been central to the regeneration of London's East End. Since its inception, when PEL Services Limited designed, supplied and installed all the public address and passenger announcement systems, the network has been extended to serve the business and financial district centred on Canary Wharf, tunnelled into the City to connect with Bank Station and extended to the south to connect with Lewisham. The more recent extension to serve the London City Airport is currently being extended further to connect with Woolwich Arsenal, where PEL has recently supplied a new Bosch public address and voice alarm system and a further extension is planned to provide an alternative route from Canning Town to Stratford.

Passenger use has grown massively and the network carries over 60 million passengers each year and this is expected to rise to 80 million by 2009. Furthermore the DLR is expected to provide an efficient key transport link to the 2012 Olympic Games.

To meet these demands, the network infrastructure is being modified to enable the use of 3-Car trains, greatly enhancing the passenger capacity of the railway. This project is currently ongoing and is expected to be finished in 2010.

Specialist Contractor

Having been a specialist contractor for DLR since its inception, PEL is responsible for the Sound Communications Network that announces passenger information at all of the stations on the railway.

Using Ditra infrastructure, announcements are stored and retrieved automatically from a central control then transmitted to the relevant station to be decoded and broadcast over the local loudspeaker system.

The whole of the railway's infrastructure is being extended and PEL is currently tasked with upgrading the Sound Communications Network.

This involves the installation and commissioning of loudspeaker arrays to provide sound coverage on platforms once they have been extended to accept 3-Car trains as well as the installation and commissioning of new sound equipment outstations, amplification and loudspeaker arrays in new and refurbished stations

A project of this nature requires close support and cooperation with many interested parties. Working as a team, this includes:

- Closely liaising with the principle contractor and electrical sub-contractor to ensure the project progresses smoothly and is delivered on time
- Providing detailed drawings, technical specifications and methodology
- Conducting environmental tests to ensure broadcast sound is not a nuisance to local residents and falls within the remit of each station's planning application.
- Providing client familiarisation and training to DLR's maintenance teams

In order for the Sound Communication System to be effective, it has been designed in such a way that station announcements can be clearly heard on the platforms yet mitigating the nuisance effect of 'overspill' to local residents.

This time critical project demands a level of experience and dedicated resource that few organisations can truly offer. Over 30 years of supplying such systems to railway networks throughout the UK and Eire makes PEL Services Limited an ideal choice to support a project of this nature.