



Industry:

Rail Infrastructure

Solution:

**Public Address,
Voice Alarm**

Organization/End User:

Crossrail, TfL

Location/Country:

England, Europe

Year of Installation:

**Systems delivered 2016-2017,
in operation by 2022**

Number of Stations:

9

System Features:

**Powerful API integration,
remote control and
monitoring, exceptional audio
quality, EN 54 compliance,
VIPEDIA-12-NET, V2000**

Customer:

Siemens Mobility

Crossrail Elizabeth Line

Zenitel ensures the safety of millions of passengers with a state-of-the-art audio solution

ASL/Zenitel BU Transportation delivers 9 cutting-edge PAVA systems, based on AoIP technology, to provide clear communications along all 118km of the new Crossrail Elizabeth line.

The Customer/End User

Crossrail (CRL) have implemented a new railway which will run 118km from the suburbs of West London to the East, bringing an additional 1.5 million people within 60 minutes commuting distance of London's key business districts. The Elizabeth line consists of three sections - the newly built central section, and the east and west surface sections.

To ensure the safety and comfort of all these extra passengers, ASL/Zenitel worked closely with System Integrator, Siemens Mobility, to deliver 9 cutting edge, high quality, PAVA systems for all the central stations.

The Requirement

Siemens Mobility required prebuilt and tested rack-based PAVA systems from a trusted supplier who possessed the product range and services to deliver such a prestigious project.

The client needed PAVA systems capable of delivering high STI levels into extremely challenging and highly reverberant environments, without compromising full EN 54 compliancy, offering proven reliability and performance. This was complemented by a range of industry specific features and peripherals selected to overcome several operational complexities.

The project encompassed the construction of both traditional and Rail for London (RFL) stations, which serve as key interchange points between Crossrail and other rail services like

the London Underground and National Rail. These RFL stations facilitate seamless connections for passengers traveling across London, enabling them to switch between various modes of transportation with ease. To handle the intricacies of these sites and ensure a seamless passage, local control and monitoring systems were implemented, utilizing Telent's MICA and Siemens' Railcom Manager. Additionally, central monitoring was achieved through Siemens' Global Railcom Manager. The scope of the global manager also extends to monitoring the East and West stations.

The Solution

Zenitel provided Siemens with 9 separate prebuilt systems which each observed stringent FAT testing at our premises before being delivered to site. These systems were based

around ASL's IP enabled VIPEDIA-12-NET audio router and V2000 amplifier range, utilising various other peripherals to meet the requirements.

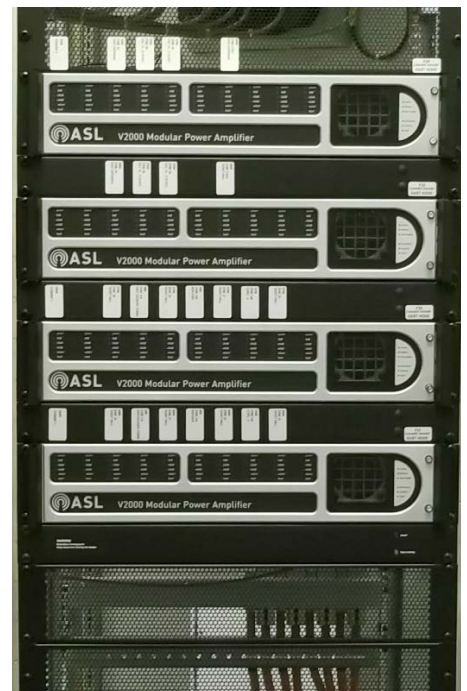
The advanced solution communicated seamlessly over IP with the two third party control systems using ASL's proven VIPA Audio Platform and powerful API, enabling secure access for both monitoring and non-emergency control.

This was made possible by ASL's VIPA software modules which provide multicast Voice over IP (VoIP) functionality, including the ability for audio broadcasts to be synchronised across multiple networks, and the use of low bandwidth codecs. The team managed complexities through detailed design, integration testing, all the way through to onsite commissioning support and optimisation.

The Result

Siemens Mobility with ASL/ Zenitel successfully delivered the contract, with a rail centric solution that successfully addressed all the challenges. The systems installed ensure that passengers and staff are informed effectively throughout their journey, which will result in safe, reliable travel, providing the best possible passenger experience for years to come.

Offering complimentary support services, Zenitel guaranteed expeditious technical support both onsite and remotely, offering the reassurance that only comes from a direct manufacturer package where the system is optimised following the handover and maintenance.



Why Zenitel?

Zenitel is well positioned to drive the future of intelligent critical-communication solutions. Through our portfolio of IP products & solutions, with built-in intelligence and a focus on cybersecurity, we provide organizations with superior, scalable security and flexibility. Zenitel is the proven, preferred choice for environments requiring crystal-clear audio to ensure the protection of human life, property, assets and the management of critical activities. With interoperability at all levels, we seamlessly integrate with access control, video management and security platforms.