



Market segment:
Road Tunnels

Country of installation:
New Delhi, India

Year of Installation:
2022

End Customer:
Pragati Maidan

System Integrator:
L&T Constructions

Solution:
**Emergency communication
Public address and Voice Alarm**

Key Products:
**Tunnel-500 long horn speaker
ICX-500
TCIS-3/6**

Key Technology:
**OPC Integration
Unified communication
HD Voice and Low
Reverberation time**

Zenitel solution installed across Pragati Maidan Tunnel

The Zenitel SOS and PA system provides clear communication for state-of-the-art tunnel project.

The End Customer

Pragati Maidan tunnel will be a unique stretch and it is an engineering marvel. The 1.6-km long tunnel will be a six-lane, three-lane carriageway on both sides and it will connect, ease traffic and provide signal-free travel, the tunnel will also provide direct connectivity to Pragati Maidan parking.” They will help reduce snarls for over 90,000 commuters using the IOT Intersection every day .

The Requirement

Pragati Maidan tunnel will be a unique tunnel and engineering marvel. The 1.6-km long tunnel will be a six-lane, three-lane carriageway on both sides providing connections between cities, traffic easing and signal-free travel.

The tunnel will also facilitate direct connectivity to Pragati Maidan parking. The tunnel will help reduce congestion for the over 90,000 commuters that use the IOT Intersection daily.

The Challenges

The biggest challenge was to have a common platform for PA+SOS as the customer was not willing to use 2 different calling stations. Furthermore, both the PA + SOS systems needed to communicate with the central SCADA System. Zenitel Systems had an exact

solution to solve these challenges by providing a common platform for PA+SOS and OPC Integration with Central SCADA System.

A further challenge was providing acceptable audio clarity of more than 0.4 STI in a highly reverberant surrounding environment. The speaker placement and the type of speaker selected solved this challenge. The ambient noise levels

vary throughout the day depending on traffic volume and the AVC needed to be configured accordingly.

The Result

Zenitel provided a SOS+PA system for this project, managed by ICX-500 and Exigo with IP Amplifiers on a common platform. Each system has a

common calling station for better cost of ownership and to reduce manpower requirements. Both the systems have been integrated with the Central SCADA system for better control.

Our Tunnel-500 speakers help in achieving the desired STI with an RT value of more than 4 seconds, whilst the AVC function helps tackle the varied noise levels throughout the day.



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.