

# Driverless Metro rails to run on E-W corridor

TIMES NEWS NETWORK

**Lucknow:** Taking the idea from Delhi Metro Rail Corporation, which operates driverless metro train services on two corridors in the national capital, the Uttar Pradesh Metro Rail Corporation (UPMRC) is set to introduce fully driverless trains on the upcoming East-West Corridor (EWC) of the Lucknow Metro.

UPMRC has floated tenders for the design and manufacturing of 15 advanced train sets along with signaling systems for Phase 1-B of the corridor.

The trains will operate in unattended train operation mode, enabling completely automated train movement without the need for a driver. The trains will use communication-based train control technology to automatically manage speed, braking and stopping functions. The system will always remain connected with the operations control centre to ensure monitoring and operational safety.

The automated system will maintain a safe distance between trains and can apply brakes automatically



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in case of any emergency or operational issue. The technology is expected to improve reliability, reduce human error and provide smoother and more punctual services for passengers.

The corridor will also feature AI-based predictive maintenance systems. The train control and management system will be integrated with a computerised maintenance management system for real-time monitoring of train performance. Data collected from trains will be analysed using AI tools to identify faults and maintenance requirements before breakdowns occur.

Officials said the integrated system will automatically generate maintenance

job cards after detecting faults, reducing reporting delays and improving operational efficiency at the OCC.

The upcoming trains will also have livestreaming-enabled infotainment screens installed inside metro coaches. These screens will be controlled from the OCC and can be used for passenger information and announcements.

To improve commuter comfort, sensor-based air-conditioning systems will also be introduced in trains. CO2 sensors inside coaches will monitor air quality and regulate cooling levels according to passenger load, ensuring comfort while reducing electricity consumption.

UPMRC managing director Sushil Kumar said Lucknow Metro currently records one of the lowest energy consumptions per km among metro systems operating in India and ranks among the most reliable networks in terms of train failures. The new trains planned for the corridor would maintain the same standards of reliability, safety and energy efficiency.