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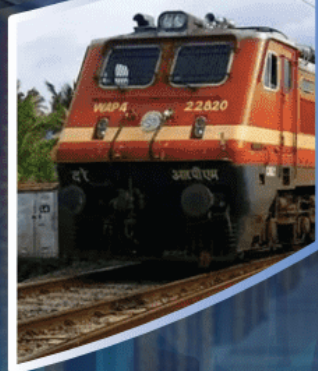
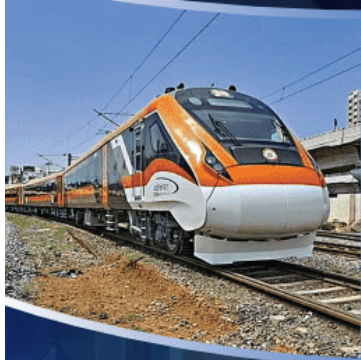


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EXCLUSIVE INTERVIEW



DELHI-MEERUT RRTS: ENHANCING CONNECTIVITY IN NCR THROUGH SUSTAINABLE PRACTICES

Metro Rail News conducted an exclusive interview with **Mr Shalabh Goel, Managing Director of NCRTC**. The interview explores critical aspects of the 82 km long Delhi-Meerut RRTS Corridor, including its current status and upcoming deadlines. Mr Goel highlights the advanced technologies incorporated into the project and NCRTC's key initiatives to make the Delhi-Meerut RRTS corridor financially and environmentally sustainable. The interview also covers Meerut Metro, which is uniquely integrated with the RRTS, sharing infrastructure between Meerut South and Modipuram. Here are the edited excerpts.



1. Mr Goel, can you shed light on the status of the Delhi – Ghaziabad – Meerut RRTS Corridor?

The Delhi-Ghaziabad-Meerut RRTS Corridor spans a total length of 82.15 km. Of this, a 42 km segment from Sahibabad to Meerut South is now open for public use, covering nine stations. Construction of the remaining sections of the corridor is on track to meet the 2025 deadline for full operation.

An additional 12 km section, extending from Sahibabad to New Ashok Nagar in Delhi, will open soon, bringing the operational length to 54 km. Trial runs are underway on this segment, which includes stations at Anand Vihar and New Ashok Nagar.

Viaduct construction in the Meerut section is now complete, with stations along the corridor taking shape. Tunnel construction at all three underground



stations in Meerut is already complete, with final finishing work being done.

2. What technological innovations are being incorporated into the RRTS project?

Digitalisation and technological advancements are key focus areas for NCRTC, enhancing both project execution and passenger facilitation.

Project Monitoring: Through in-house developed tools like SPEED, NCRTC ensures real-time monitoring of construction activities, facilitating timely and

efficient project delivery.

Advanced Signaling System: NCRTC has implemented European Train Control System (ETCS) Level 2 over the LTE backbone for the first time in the world, which includes Automatic Train Protection (ATP) and Automatic Train Supervision (ATS) sub-systems.

Passenger safety: Platform Screen Doors (PSDs) are integrated with the ETCS signalling system to prevent track access when trains are not fully stopped at platforms.

Track infrastructure: NCRTC has implemented durable, low-maintenance track slabs to support higher operational speeds and ensure long-term reliability.

Additionally, the high-speed, high-frequency Namco Bharat trains are engineered to operate at a design speed of 180 km/h. These trains aim to reduce travel times across the corridor.

3. How will the RRTS integrate with existing transportation systems such as metro and bus services to ensure seamless connectivity for commuters?

RRTS is a transformative mobility solution poised to address the myriad crises confronting our urban centres sustainably. However, without a seamless integration of transport and land-use planning, comprehensive solutions remain elusive. This underscores the pivotal role of Multi-Modal-Integration, facilitating seamless integration of the RRTS network with other public transit modes. In line with the PM National Gati Shakti Master Plan, RRTS stations are being strategically connected with Railway stations, Metro stations, and bus depots, wherever possible. By intertwining various mass transit systems, we aim to forge a vast network-of-networks, enhance ridership, and ensure the long-term sustainability of these capital-intensive projects.

Sarai Kale Khan: This RRTS station is going to become a major hub designed for smooth integration with adjacent transport facilities. This station will be integrated with the

Veer Haqiqat Rai ISBT (Interstate Bus Terminal),

Delhi Metro Pink Line,

Hazrat Nizamuddin Railway Station,

Additionally, a 300-meter **Foot Over Bridge (FOB)** with six travelators is being constructed to connect the RRTS station directly to the railway station and metro station, ensuring smooth passenger movement.

Anand Vihar: Anand Vihar is also one of the most critical points in the RRTS network for multi-modal integration, as it connects with six different public transport modes. These include:

- ◆ **The Swami Vivekananda (Anand Vihar)**
- ◆ **Interstate Bus Terminal,**
- ◆ **City Bus Stand,**
- ◆ **Uttar Pradesh State Road Transport Corporation (UPSRTC) bus stand (Kaushambi),**
- ◆ **Delhi Metro's Pink and Blue Line,**
- ◆ **Anand Vihar Railway Station.**

I am happy to share that for efficient digital integration of ticketing systems, NCRTC recently signed a **Memorandum of Understanding (MOU)** with **IRCTC** and **DMRC**. This collaboration supports the **'One India - One Ticket'** initiative, enabling seamless ticketing for Namo Bharat trains on the Delhi-Ghaziabad-Meerut RRTS Corridor through the IRCTC platform and Indian Railway's ticket on RRTS Connect App.

Similarly, customers who book a Namo Bharat train ticket through the RRTS Connect App can simultaneously purchase a Delhi Metro ticket. Similarly,

passengers using the DMRC Mobile App to book a metro ticket can also add a Namo Bharat train ticket. All these initiatives will ensure seamless connectivity for commuters.



4. Can you share some of the commuter-centric features of the Meerut Metro trainsets?

In a first-of-its-kind initiative, the Meerut Metro system is uniquely integrated with the RRTS, sharing infrastructure between Meerut South and Modipuram, providing a seamless transit experience for commuters. The 23-km Meerut Metro corridor will feature 13 stations, covering the distance in 30 minutes.

Key Features of Meerut Metro Trainsets:

Modern and Comfortable Design: The coaches are air-conditioned and equipped with ergonomic seating in a 2x2 configuration and offer both transverse and longitudinal options with cushioned seats for a comfortable journey.

Passenger Facilities: The trains include amenities such as luggage racks, grab handles, USB mobile charging ports, dynamic route maps, and CCTV cameras, ensuring convenience and safety for commuters.

Capacity and Speed: Each three-car trainset accommodates over 700 passengers, with seating for 173. The Meerut Metro train will have a design speed of 135 kmph and a maximum operational speed of 120 kmph.

Energy Efficiency: The lightweight stainless steel trainsets are engineered for energy efficiency and feature a regenerative braking system that reduces power consumption.

5. How is NCRTC balancing growth with sustainability in terms of reducing the environmental footprint of the trains and the overall project?

For the first RRTS corridor, NCRTC has incorporated several eco-friendly technologies and green initiatives, in line with our commitment to environmental conservation.



Key Sustainability Measures:

Solar Power Generation: NCRTC aspires to cover 70% of the total energy requirement of the Delhi-Ghaziabad-Meerut RRTS corridor through the generation of **11 MWp** of solar power. Solar power panels are being installed on the rooftops of all the stations, depots and other auxiliary buildings across the corridor. These installations have transformed depots, key stations, and substations into clean energy hubs, currently generating **4 MWp** of solar power.

Green Building Certification: NCRTC is actively pursuing the highest rating of (Indian Green Building Council) IGBC certification for all RRTS stations, depots, and buildings.



Electric Traction and Regenerative Braking: The RRTS trains operate on electric traction, significantly reducing fossil fuel consumption compared to road vehicles. This Made-in-India rolling stock is equipped with regenerative braking systems which convert 30% kinetic energy into electrical energy.

6. Apart from ticketing, how are you planning to earn revenue from other modes?

To ensure the long-term financial sustainability of this capital-intensive project, NCRTC has been exploring avenues for increasing non-fare box revenue, both from conventional and innovative methods, by benchmarking domestic and international best practices. These initiatives include implementation of **Transit Oriented Development (TOD)**, **Land Value Capture (LVC)** and **Value Capture Financing (VCF)**. We have also made significant progress in bringing together all the stakeholders and aligning them with this larger objective.