URBAN RAIL IN INDIA 2019

Market Analysis, New Technologies and Systems, Upcoming Projects and Opportunities

- Report (PDF)
- Data-set (Excel)

India Infrastructure Research
Emerging Trends

- India has emerged as a fast growing market for urban rail systems.
- The urban rail network has increased significantly in the last decade; up from 81 km in 2006 to about 657 km operational currently.
- The network has expanded from two cities in 2006 to about 13 cities as of March 2019.
- The segment had been for long reeling under issues related to the absence of a well defined policy framework. In August 2017, the government approved the Metro Rail Policy, 2017. This policy aims to facilitate innovative financing, revive private investment by making public-private partnerships (PPPs) mandatory, promote transit-oriented development and provision of last-mile connectivity, and improve project appraisal procedures.
- The most crucial aspects of the new policy is the creation of an Unified Metropolitan Transport Authority (UMTA). Kochi and Chennai are a few cities attempting the creation of such an authority.
- In another major initiative, in April 2017, the government introduced the norms to procure at least 75% of rail cars and 25% of critical equipment locally under the Make in India initiative. The government has also standardised norms for rolling stock and signalling equipment applicable to over 90% of the present imports. The move is expected to enable technology transfer, reduce costs, de-risk the industry from exchange rate fluctuations, drive the establishment of ancillary units along with manufacturing hubs, etc.

Opportunities Galore

- The current level of activity in the urban rail sector spells significant opportunity for consultants, developers, contractors, operators, rolling stock manufacturers, signalling and telecom technology providers, fare system providers, equipment manufacturers, construction material suppliers, software solution providers, etc.
- According to India Infrastructure Research, based on the project pipeline in the urban rail space, there is an investment requirement of over Rs 6 trillion till 2026. This includes metro rail, RRTS, light rail and monorail projects.
- Of this, maximum opportunity of over Rs 4 trillion exists in projects which have either been approved or are on the drawing board. The remaining investment will be mobilised under the projects which are either under construction/awarded or have been recently put on the block.
- Emerging segments such as station branding, commercial development, real estate development (office complexes/banquets/convention centres, etc.) will also provide significant opportunity in the years to come.

Bright Outlook

- With the new Metro Rail Policy 2017 in place, several cities are ready to rollout work under their respective urban transit systems. While metro will continue to be the dominant mode, new modes such as trams, rapid rail, light rail are also gaining traction.
- The most crucial aspects of the new policy is the creation of an Unified Metropolitan Transport Authority (UMTA). Kochi and Chennai are a few cities attempting the creation of such an authority.
- In another major initiative, in April 2017, the government introduced the norms to procure at least 75% of rail cars and 25% of critical equipment locally under the Make in India initiative. The government has also standardised norms for rolling stock and signalling equipment applicable to over 90% of the present imports. The move is expected to enable technology transfer, reduce costs, de-risk the industry from exchange rate fluctuations, drive the establishment of ancillary units along with manufacturing hubs, etc.
- It is high time the city-level governments come to terms with the fact that metro rail projects need to be driven at the city-level for faster execution.
India has emerged as a fast growing market for urban rail systems. Currently, 10 cities have an operational urban rail network spanning 536 km. The network has grown significantly over the past 12-13 years, up from about 90 km in 2006. Meanwhile, with the Metro Rail Policy 2017 in place, several cities are ready to rollout work under their respective urban transit systems. In the last five years, 13 new metro projects with a total length of about 248 km have been approved for implementation. About 750 km of metro rail systems and 373 km of rapid rail transit systems are on the drawing board in various cities. While metro will continue to be the dominant mode, new modes such as trams, rapid rail, light rail are also gaining traction. State-of-the-art rolling stock, and advanced signalling and telecommunication technologies are expected to be deployed as part of these projects. Innovations and developments in the fare payments industry are resulting in the adoption and use of a variety of payment methods, especially interoperable electronic payment methods such as smartcards, bank cards, mobile wallets and near-field communication (NFC)-enabled devices. The current level of activity in the urban rail sector spells significant opportunity for consultants, developers, contractors, operators, rolling stock manufacturers, signalling and communications technology providers, fare system providers, equipment manufacturers, construction material suppliers, software solution providers, etc.

SECTION I: MARKET ANALYSIS, KEY TRENDS AND RECENT DEVELOPMENTS

Executive Summary

1. Sector Overview
   - Network Size and Growth
   - Key Sector Trends
   - Role of ‘Make in India’ and Focus on Indigenisation
   - Growth in Budgetary Outlays
   - Recent Developments
     - Key Government Initiatives
     - Project Completions
     - Recent Contract Awards
     - Projects Approved
     - New Concepts and Technologies
   - Investment Requirements
   - Issues and Challenges
   - Future Outlook

2. Metro Rail Policy, 2017 - Impact and Challenges
   - Salient Features
   - Potential Benefits
   - Impact on PPPs
   - Scope for Private Participation in O&M
   - Potential for the Creation of Unified Metropolitan Transport Authority
   - Industry Feedback
   - Recommended Amendments

3. Analysis of Operational Projects
   - Current Network
   - Growth in Operational Network
   - Trends in Ridership
   - Analysis by:
     - Mode of Implementation
     - Type of System
     - Alignment
   - Analysis by Segment:
     - Stations
     - Rolling Stock
     - Fare Collection Systems
     - Signalling and Telecommunication
     - Systems
     - Traction and E&M

4. Analysis of Upcoming Projects
   - By Status
     - Ongoing
     - Awarded
     - Under Bidding
     - Approved
     - Announced/Planned
   - By Mode of Implementation
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     - PPP
   - By Type of System
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     - Monorail
     - Light Rail
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   - By Alignment
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     - By 2020
     - Beyond 2020
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   - Investment Projections
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   - Market Opportunities: By Stakeholder
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     - Consultants
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     - Others
   - Future Outlook

6. Emerging Areas of Growth
   - Transit-oriented Development
   - Real Estate/Commercial Development
   - Technology Innovations (MaaS, IoT, Big Data, etc.)
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   - Project Portfolio
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   - Financial Performance and Future Plans

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   - Business Models (Fully Government-funded, VGF-based PPPs, Hybrid PPPs, Fully Privatised)
   - Financing Trends
   - Value Capture Financing Framework
   - Key Sources of Revenue
   - New Revenue Streams (Advertising Revenue, License Fee, Real Estate Development Rights, Additional Stamp Duty, etc.)
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   - Historical and Expected Rates of Returns
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- Recent Contracts
- Upcoming Bids and Tenders
- Recent Developments
- Outlook and Projections

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- Jaipur Metro Rail Project Phase I
- Kochi Metro Rail Project Phase I
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- Nagpur Metro Rail Project Phase I
- Navi Mumbai Metro Rail Project Phase I
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- Pune Metro Rail Project

17. Upcoming Projects (Announced, Approved and Under Bidding Projects)
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- Chennai Metro Rail Project Phase II
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- Dehradun-Haridwar-Rishikesh Light Rail Project
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- Greater Noida - J ewar Metro Rail Project
- Gurgaon-Manesar Metro Rail Project
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- Guwahati Metro Rail Project Phase I
- Hyderabad Metro Rail Project Phase II
- Indore Metro Rail Project Phase I
- Jaisalmer Metro Rail Project Phase II
- Jammu Metro Rail Project
- Kanpur Metro Rail Project Phase I
- Kochi Metro Rail Project Phase II and III
- Meerut Metro Rail Project Phase I
- Mumbai Metro Rail Project (Lines 5, 8, 9, 10, 11 and 12)
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- Pune Light Rail Project
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- Vijayawada Light Rail Project
- Chennai Monorail Project (First Corridor)
- Warangal Monorail Project (First Corridor)
- Delhi-Meerut Regional Rapid Transit System

[Each profile covers the project background and scope (network length, number of stations, rolling stock, fare system, signalling and telecommunication, traction, etc.), the implementing agency, project cost, time and cost overruns, key consultants, key contractors, key milestones, sources of fund, recent contracts, upcoming tenders, current status, etc.]
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