THE ECONOMIC TIMES

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Private sector involvement will lead to operational efficiencies of Namo Bharat: NCRTC head

Vinay Kumar Singh, managing director, National Capital Region Transport Corporation iamge credit: Special Arrangement

Synopsis

RRTS, the semi-high-speed rail corridor, is touted as the next big thing in urban transportation. But how viable are such capital-intensive projects? And is India ready for such fast trains running at an average speed of 100km per hour? Vinay Kumar Singh, managing director, National Capital Region Transport Corporation, clears all the doubts in an exclusive interview with ET Prime.

National Capital Region Transport Corporation (NCRTC), a joint venture between the central government and the state governments of Delhi, Haryana, Uttar Pradesh and Rajasthan, has the mandate for implementing the country's first Regional Rapid Transit System (**RRTS**), also known as Namo Bharat.

Last month, Prime Minister Narendra Modi inaugurated the first leg of the 82km-long Delhi-Meerut RRTS corridor. The full stretch is likely to be operational by mid-2025. Two more such semi-high-speed rail corridors are planned under phase I of the project – Delhi-Gurugram-Alwar and Delhi-Panipat. Running at an average speed of 100km per hour, these rapid transit systems are expected to cut down commute time and improve connectivity within the National Capital Region.

While the economic benefits of such rapid transportation projects are well established, there have always been questions around their financial viability and sustainability given their capital-intensive nature. In an interaction with ET Prime, Vinay Kumar Singh, managing director, NCRTC, allays concerns around the project's viability, and how the agency plans to improve sustainability of such projects. Edited excerpts:

This project has been under the spotlight for a long time now – a possible template for other fast-spreading urban clusters. So, what has been the thought process in terms of financing such a capital-intensive project, and also making it viable?

There are two parts to your question. First is financing. The other one is how to make it viable. The financing model is similar to any other Metro projects in the country. There are some Metro projects that are managed by state governments, and few by private entities. Most such projects have a joint-venture model with the central government in the ratio of 50-50.

The RRTS project is also being done under the Metro Railway (Operations and Maintenance) Act, 2002. Hence, the administrative control falls under the Ministry of Housing and Urban affairs. So fundamentally, we are aligned to a similar kind of model.

In the Metro Rail Policy, 2017 various models of financing have been given. We have taken this up under the predominant model. So, if the total project cost is, say, INR100. Then, INR20 is given by the central government, INR20 by the state government, and INR60 comes from multilateral funding agencies.

In this case, the estimated cost of the project was INR30,000 crore approximately. Only thing is that government land is not part of the project cost. The land in this case is given to us by the state governments.

Currently, three multilateral banks are financing the corridor. The Asian Development Bank is giving us about USD1billion. The Asian Infrastructure Investment Bank and the New Development Bank are giving about USD500 million each.

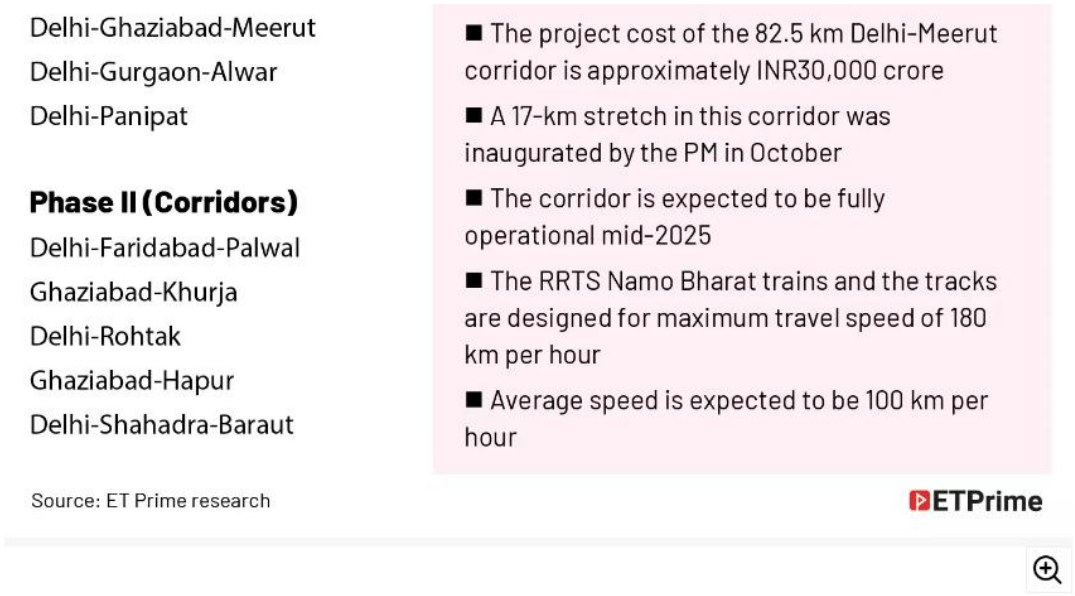
As regards viability, as an organisation we are striving to take all measures towards long-term financial sustainability of the organisation. During the construction stage we look at measures to optimise capital costs through value engineering. We will tap various sources of affiliate revenues such as property development, rentals, consultancy and many such initiatives.

RRTS: A template for speedy commute within urban clusters

Devised as a plan to nudge commuters toward using mass rapid rail-based multi-model public transportation - and reduce the traffic load on roads and highways - the National Capital Region Planning Board has recommended setting up of eight RRTS corridors to connect towns within the National Capital Region.

Phase I (Corridors)

Delhi-Meerut RRTS Corridor: A showcase of shape of things to come



Given the capital-intensive nature of the project, how do you plan to service the debt? What is the tenure of these loans?
If you see the repayment matrix, the first charge is on NCRTC. We are responsible for repaying the loan. And if we fail, then it is the state government's concern.

The tenure of the loan is 25 years. We have an eight-year moratorium. The interest rates charged by multilateral banks are a little different in each case.

Given the high-interest rate scenario, how viable is the project?
There are two aspects to this.

These are public-transport projects. Such rail-based projects are quite capital-intensive and have a long gestation period. They are intended to encourage the public to shift to public transport.

After 2017 there has been a change in the process of sanctioning Metro projects. Now, the projects are being sanctioned based on ERR (economic rate of return).

It has been understood that the kind of benefit that these projects bring to the society and to the economy cannot be evaluated in terms of financial rate of return.

The reason is very simple. If you want to recover the cost of the capital investment or operational expenses, then nobody will ride these services.

We try to make the project financially viable through methods like, land monetisation, or property development, or advertisement. These are some small ways of improving the sustainability of these projects.

Could you share some of the steps being taken to ensure financial sustainability of the project?

NCRTC has been working on project sustainability from day one. It has taken several value-engineering initiatives to control expenditures with the purpose of increasing revenue of the system.

We adopted a strategy focusing on three fundamental elements, namely, CapEx reduction, OpEx reduction and enhancing revenue.

CapEx reduction involves the plans and revisions adopted in the pre-construction stage, which is meant to reduce the engineering processes involved, while making no compromise on the safety of the infrastructure. Integrating all three prioritised RRTS corridors at Sarai Kale Khan, integrating Meerut Metro with RRTS, converting stations and sections from underground to elevated, reducing train coaches to nine from the initially proposed twelve, are a few examples to name.

OpEx reduction deals with decreasing operational costs and expenses, such as maintenance, manpower and energy requirements by optimisation and modification. Reduction in energy cost by using solar power, and use of energy-efficient technologies, equipment and design choices come under reducing operational expenditure.

A big step in this direction was appointing a private operator for operations and maintenance which not only brings private sector efficiencies but also brings down the costs of operations.

Reduction in energy cost by using solar power, and use of energy-efficient technologies, equipment and design choices come under reducing operational expenditure

Revenue generation is the most important aspect of any transportation project. Revenue in this system is collected through farebox and non-farebox methods. NCRTC is exploring various non-fare box revenue options to increase the revenue, along with fare box revenue.

How do you plan to go about this?
Increasing ridership by connecting densely populated city centres, efficient and seamless multi-model integration with other public-transit modes, like Metro, inter-city bus service, intra-city bus services, airport, railway stations, etc. will increase farebox revenue.

How do you plan to go about this?
Increasing ridership by connecting densely populated city centres, efficient and seamless multi-model integration with other public-transit modes, like Metro, inter-city bus service, intra-city bus services, airport, railway stations, etc. will increase farebox revenue.

Measures like property development, exploiting the commercial potential of RRTS stations, like advertising, station naming rights, commercial space selling within the station, and supporting other projects by sharing expertise, come under non-farebox revenue.

Also, the focus has been on corridor-level enhancement rather than individual property value maximisation. The diversified set of properties is planned to cater to a larger group of RRTS passengers. Focus will be on multifunctional complexes which can address various traveller needs, including food and beverages, banking, healthcare, shopping etc.

The Namo Bharat train sets are designed to travel at a maximum speed of 180 km per hour and are being used in the country for the first time. How do you plan to tackle the operational and maintenance challenges?

The train sets are being manufactured in India at an Alstom factory located in Savli, Gujarat under the Make in India guidelines. We have adopted the first-of-its-kind model for integrated procurement-cum-long-term (15 years) comprehensive maintenance of rolling stock to capture lifecycle costing. Hence, the rolling stock will be maintained by the manufacturer and the costs have already been optimised through the long term contract.

Also, for operations and maintenance, NCRTC has entered into a first-of-its-kind agreement with the Indian subsidiary of Deutsche Bahn for the comprehensive operation and maintenance of the 82km-long Delhi-Ghaziabad-Meerut RRTS corridor for a period of 12 years.

Through this model it is expected that apart from the efficient delivery of services, the private-sector involvement will lead to operational efficiencies and optimum utilisation of assets and resources.

This will help bring predictability of long-term costs, managerial efficiency, and the entrepreneurial spirit of the private sector in providing quality services to the commuters.

How well placed are you to make the operations 'Green'?
These are electric-run trains, and we are trying to increase the share of renewable energy as much as possible. We use two kinds of energy. One is what we call auxiliary power – it is used for maintaining stations. We will run our trains from renewable sources.

We have already established a 600 kilowatt solar plant at our depot. All stations will have solar power plants on the roof. It's a similar model which is followed by the Indian Railways.

We are going for renewable traction power. We will start with almost like 60%-70% of renewal power from day one. And we will further increase it to 90% plus within a short period.

Besides, we are using trains which have 30% regenerative power. Every time the train brakes, it gives back 30% of the power itself.

(*Graphics by Sadhana Saxena*)
(Originally published on Nov 28, 2023, 04:30 AM IST)