

HIGHWAY TO PROSPERITY

Mukund G Sapre, executive director, IL&FS Transportation Networks Ltd (ITNL) on how he has made a success of 'risky' projects

Winding hill terrain on Jharkhand state road.

Considering that you work with BOT projects, what are some of the factors that insulate you from risk?

Mukund G Sapre: In the recent past, the current Public Private Partnership (PPP) model has been widely debated, even though PPPs have significantly reduced the demand supply gap in providing essential infrastructure services and transferred risk to the private sector. Since ITNL is one of the oldest PPP players in the infrastructure space, we have closely learnt and contributed extensively to the PPP policy framework and its evolution over a period of time, particularly in the Indian context. Our experience and parentage enable us to overcome associated risks.

Due to the large number of projects we have implemented over the years, we have managed to establish a market reputation. Along with our track record, infrastructure lenders have repeatedly reposed faith in our ability and continually backed us. Our robust financial models help us understand the implications of any changes in the BOT model and anticipate risk.

We have also managed to create a bond of trust with our contractors, who have become aware of ITNL's expectations and execute work in an environment with minimum disruptions. Moreover, the contractual structures ensure that risk and rewards are shared with contractors and vendors.

We have an in-house design team that helps us conceptualise and design innovative and cost effective works in our projects while meeting standards and specifications and thus benefit from value engineering. Our in-house tolling systems team also develops tolling software to integrate the collection system deployed at our projects. We also have an established risk management process that identifies and alerts the management of project risks before they occur.

Some time ago, you had announced plans to foray into new sectors. How has that shaped up?

In 2009, we entered the city bus transportation segment by acquiring stake in a company that was responsible for running



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the Nagpur City Bus services, a project awarded by the Nagpur Municipal Corporation (NMC) on BOO basis. The work involves planning, procuring, financing, operating and maintaining city bus fleet up to 470 and retains the fare revenue for the period of the concession – which is 10 years. Currently work on one bus depot is in progress. The work will be scheduled to commence later this year.

We are developing the metro link from Delhi Metro Sikan-derpur station to Sector 56 in Gurgaon (Phase II of the project) awarded by Haryana Urban Development Authority (HUDA) in 2013. We have completed the development of metro link from Delhi Metro Sikanderpur station to NH-8 in Gurgaon (Phase I) which is in its operation & maintenance stage with a total length of 5.1km.

In Madhya Pradesh we are involved in the construction, upgradation, modernisation, development, operation & maintenance of 24 Border Checkposts and two central control facilities in Madhya Pradesh on BOT basis awarded by Madhya Pradesh Road Development Corporation Limited (MPRDCL) in 2010. Out of these 24 checkposts, 14 checkposts and both the control facilities are operational.

We are seeking car-parking projects and closing in on commencement of one such project in the UAE.

Could you tell us about some of your projects that will be commissioned in the next year or so?

The Jorabat-Shillong project will be soon commissioned. It has been awarded by NHAI for 20 years on design build finance operate & transfer (annuity) basis. The work involves four-laning of (Barapani) section of NH-40 in Assam and Meghalaya under the SARDP-NE. The project is the entrance gateway to the seven sister states, thus connecting the erstwhile neglected region of north east to the rest of the country.

The Baleshwar-Kharagpur project will achieve provisional completion in June. It has been awarded by NHAI on DBFOT (toll) basis for 24 years. The scope of work involves construction of new bridges/structures, repair of existing four lane highway from Baleshwar to Kharagpur section of NH-60 in Orissa and West Bengal. The project will also help in reducing to a large extent the damage caused by floods in the region.

Also in line is Sikar-Bikaner project expected to be commissioned soon. It is a toll project awarded by PWD NH division of MORT&H (Ministry of Road Transport & Highway) for a concession period of 25 years. The scope of work involves two-laning with paved shoulders of Sikar-Bikaner section on NH-11 and NH-89 in Rajasthan along with four-laning in selected stretches. The project cuts through some of the hot-test parts of Rajasthan.

The Chenani-Nashri project is scheduled for commissioning in mid-2016. It was awarded by NHAI on DBFOT (annuity) for a concession period of 20 years. The work involves four-laning of Chenani to Nashri section of NH-1A including 9km long tunnel (two-lane) with parallel escape tunnel in Jammu & Kashmir. This will be the largest road tunnel in India and will ensure permanent road access to the northern parts of J&K which are prone to landslide and damages during rains.

You are executing the metro project for Gurgaon. Could you tell us of your role in this project?

The Rapid Metro project in Gurgaon is our first venture into metro rail. It was awarded by HUDA for a concession period of 99 years. Rapid Metro, NCR's first privately owned and operated metro system connects NH-8 to Delhi Metro via Cyber City, Gurgaon. It is the first-of-its-kind project on PPP model. ITNL has been involved in financing, design, construction, procurement, installation, commissioning, operation and maintenance of all systems. We have also been awarded the Rapid Metrorail Gurgaon South Limited (RMGSL) – the South extension – by HUDA for a concession period of 98 years. This 2nd phase will link Sikanderpur metro station on the Delhi Metro line with Sector 56 in the south-east of Gurgaon. Length of the corridor is approximately 7km. It is scheduled to be completed in January 2016 and the concession ends in July 2111. Currently this project is in construction stage and our functional role involves overall responsibility for civil works.

ITNL has a 35% stake in both the projects and remaining

65% stake is owned by IRL (IL&FS Rail Limited) where again, ITNL holds 78.56% stake.

The NHAI is bidding out road projects on a hybrid model. Do you think it would change things for road contractors?

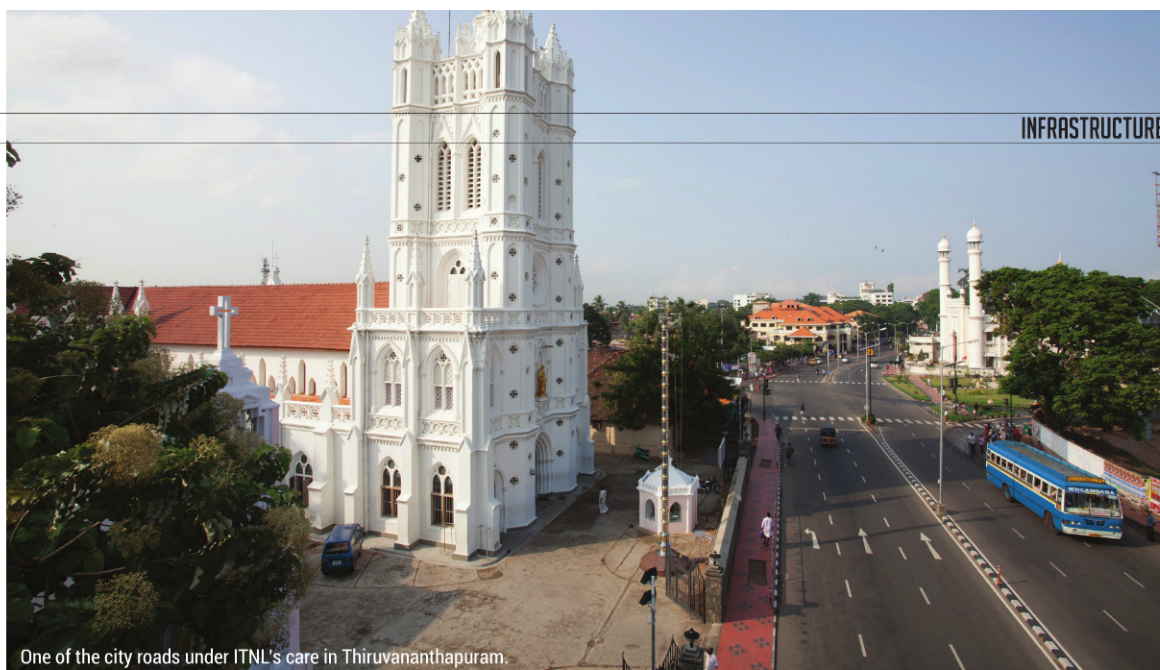
With government funding up to 40% of the project cost during the construction period itself, and the private player the remaining 60%, the hybrid model will reduce financing risk for large projects for which financiers may not have the capacity to fund. Here, the revenue risk due to traffic variation will be covered as the annuity mode is opted for. This model will cushion developers from the risk of revenue uncertainty arising from inaccurate traffic projections and share the financial



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Work in progress inside the longest road tunnel in India at Chenani Nashri tunnel project.





One of the city roads under ITNL's care in Thiruvananthapuram.

burden between the developer and the government. Additionally, it will also account for inflation and interest rate fluctuation which will be a huge sigh of relief for the contractors, who for the past 2-3 years were reeling under spiralling material prices, throwing them off their projections and affecting project viability. This model will ensure better risk sharing in comparison to the earlier model and for the contractors it will help in reducing the stress on cash-flow, interest costs can also be reduced if managed well which will in turn lead to faster completion of projects and improve productivity. Their returns will commensurate with increased construction completion efficiency and reduced maintenance cost. Hence, this model will attract developers who are able to bring in the above-mentioned efficiencies.

Any new technologies your company has introduced in road building in the country? If yes, Please expound.

We constantly seek technology in our operations. We have used micro-surfacing in many of our project stretches which helps in preservation of pavement strength and extending life of pavement and can be used both for preventive and periodic renewal treatment. It is an environment-friendly cold mix application treatment applied over an existing pavement surface which is structurally sound, but surface shows signs of premature ageing, aggregate loss, cracking, high degree of polishing, etc. Moreover it has a quick turnaround time and is cheaper than conventional bitumen mixes.

In addition to this, we have started cold recycling of pavements. Recycled cold mix is an asphalt concrete mix, processed in a central plant or in-situ which consists of sized salvaged asphalt material, some type of stabilising agent and new aggregates. This material meets specifications of an as-

phalt aggregate base and generally requires that an asphalt surface course or surface seal be used. A significant benefit of cold recycling is that the milled material can usually be recycled and used on other projects as compactable base or recycled asphalt pavement. Approximately 20-30% savings in cost compared to regular bitumen.

We have used innovative slope stabilising methods such as Geo-mats, tech-mats, reinforced slopes, embankment slopes at various projects. In addition to road building, we focus on reducing road accidents on our operational project roads. We are experimenting with innovative measures (sign-boards, road markings) which have led to reduction in accidents and elimination of black spots on roads. Besides, we are in the process of developing a mobile application for recording and reporting accidents which will help the road user to get in touch with our rescue team through their mobile, in case of emergencies.

ITNL has 35% stake in both the Rapid Metro projects in Gurgaon.

How will the hybrid annuity model help contractors heave a sigh of relief?

The hybrid model will be a win-win for developers as well as the government. The major advantages from this framework are the reduced initial capital outflow for the authority, which will allow them to govern a larger portfolio of road projects. In the current situation where developers lack capital, a move to lower the upfront costs is significant. Given the certainty of cash flows in the annuity model – the government will be in charge of toll collection – developers can obtain leverage from banks, thus reducing their equity requirements. Annuities will also protect the developer from risks such as sudden withdrawal of collection rights by authorities as seen in Maharashtra. Thus, the model has the potential of reviving the road sector as the risk element of pricing based on traffic movement on the roads will be taken over by the government. **cw**