



## Public Private Partnership: Delhi- Gurgaon Expressway, India

### Background

Under the Ministry of Road Transport & Highways (MoRT&H), the National Highways Authority of India (NHAI), was assigned the responsibility for implementation of the Golden Quadrilateral project connecting the four metro cities- New Delhi, Mumbai, Chennai and Kolkata.

Because of the growing vehicular density between Delhi and Gurgaon, non-segregation of traffic leading to increased number of accidents and congestion, upgradation of NH-8 connecting Delhi to Gurgaon was prioritised under the Golden Quadrilateral Project. Consequently, NHAI was given the responsibility to convert a 27.7 KM stretch, connecting Delhi with Gurgaon, from existing four lane into a 8 lane access controlled expressway.

### PPP Structure of the Project

In 2001, MoRTH invited pre-qualification bids and in April 2002, the project was awarded to the consortium of Jaiprakash Industries Limited and DS Construction Limited to design, built, operate and maintain the highway in accordance with the specifications as approved by NHAI for a concession period of 20 years. The Concession Period included the construction period to encourage the concessionaire to complete the construction early.

In May 2003, the selected bidders, created a Special Purpose Vehicle (SPV) Jaypee-DSC Ventures Limited, with 51 percent stake held by Jaiprakash Industries Limited and 49 percent by DS Construction Limited. Over time, the former transferred much of its stake to the latter, reducing it to just 1.2 percent. Consequently, DS construction Limited acquired 98.8 percent stake in the project and renamed the venture as Delhi Gurgaon Super Connectivity Limited (DGSC). As per concession contract, the concessionaire was allowed to collect toll from the users to recover investments and has to transfer back the ownership of the expressway to the Government at end of the concession period. In addition to this, the project was first Build Operate Transfer (BOT) project in India to be

awarded on negative grant basis<sup>1</sup>, amounting to Rs. 61 crore.

Out of total capital of Rs. 547.5 crore, debt amounted to Rs.383.3 crore and equity to Rs. 164.2 crore (inclusive of negative grant of Rs. 61 crore to the NHAI). Out of which, Rs. 200 crore of debt was funded by the Housing and Urban Development Corporation Limited (HUDCO) and other lenders to the project included consortium of Infrastructure Development Finance Company (IDFC) Limited, Punjab National Bank, Bank of India and Others. The overall cost of the project was Rs. 1,175 crore, the overrun cost of the project was funded by the promoters, by withholding payments to DSC Limited and amount of Rs 155.25 crore received from NHAI on account of change in scope.

### Implementation of the Project

The Delhi Gurgaon Expressway is one of the largest BOT road project on the national highway of India, executed on PPP framework. The implementation of an 8-lane Access controlled highway was undertaken in three phases:

- **First Phase** was designed as a VIP route. It starts from Rao Tula Ram marg with an elevated structure; it was expected to bring high traffic volume to NH-8.
- **Second Phase** was designed as a daily commuter's traffic zone catering to both local and urban traffic. Long elevated flyovers were built to provide high speed link to the daily commuters to Gurgaon.
- **Third Phase** was designed as a tourist paradise that cuts through the industrial zone of Haryana to other states carrying a mix of local and commercial vehicles and features a 20 lanes toll plaza at 42 Km.

The Project was completed and the concessionaire commenced the commercial operations of the Project, on 25th January 2008. The Expressway has 11 flyovers and overpasses. This expressway is the busiest inter-

<sup>1</sup> Negative grant is a situation where in the concessionaire pays an upfront fee to the authority (here NHAI) in return of the concession as against a capital grant from the government.

city route in India and handles more than 180,000 Passenger Car Units (PCUs) daily, starting at Dhaulakuan in Delhi and terminates on the outskirts of Gurgaon (Manesar). Till, February 2014 vehicle users have to pay a toll collected at three points, near the Indira Gandhi International Airport, the Delhi-Gurgaon Border and the 42nd Milestone.

### Transfer of Equity Stake in DGSCCL to IDFC

NHAI had issued a preliminary termination notice to the concessionaire on 7th December 2011, and subsequently issued a final termination notice on 18th February 2012 for following three reasons:

- Failure to decongest the expressway;
- Failure to finalise the operation and maintenance plan;
- Refinancing the project without getting NHAI's approval.

The lenders of the project had requested NHAI through a letter to withdraw the termination notice issued to DGSCCL and resisted that NHAI had not informed the lenders about the said termination notice and said that in case of termination of DGSCCL, they (lenders) would lose huge amount of money they have lend to DGSCCL. On receiving the termination notice, DGSCCL approached High Court of Delhi, which stayed the execution of the said termination notice and advised the parties to settle the matter through conciliation, as termination would cause huge loss to lenders of the project. Abiding with court orders, NHAI withdrew termination notices pursuant to MoU signed between NHAI, DGSCCL and IDFC to settle the dispute.

On 18th December 2012, a MoU was signed between DGSCCL and IDFC, according to which IDFC will hold 74 per cent stake in the project, DS constructions and Jaiprakash Industries Limited will retain 24.8 per cent and 1.2 per cent respectively. Additionally, as per terms of the MoU, all the liabilities including debt (Rs. 1600 crore), investment relating the road, and rights to collect tolls until 2023 will be passed on to IDFC.

### Key Learnings and Observations

Delhi-Gurgaon Expressway project built under PPP model, offers insights into following important lessons, which should be kept in mind for effective and efficient implementation of other PPP agreements.

- **Lengthy construction period:** The Delhi – Gurgaon Expressway is the 'fully access controlled' highway project and caters to both local and urban traffic, in addition the Domestic and International airports are located on its corridor. There were more than 15

government agencies such as Delhi Development Authority (DDA), Haryana Urban Development Authority (HUDA) and many others that were affected by the development of expressway and thus various approvals were needed from them, because of which construction phase of the project became complex and time consuming. All this led to delays in development of the expressway, thus there needs to speed up the process of getting approvals from various authorities to deliver the project on time to realise its complete benefits.

- **Problems in land acquisition:** Acquisition of land for development of these kinds of projects in thickly populated environment always impact timely delivery of the projects. Although, NHAI and other agencies involved with this project put great efforts to accelerate the process, but due to difficulties in acquiring certain areas of lands contributed to the delays.
- **Changes in scope of the project:** Another major reason for delay in completion of project was change in the scope of the project. Keeping in mind the future requirements and convenience of commuter's substantial changes were made in the original design that were finalised by NHAI and government. In addition to this, demands of bodies such as HUDA and DDA regarding the connected projects also played an important role in the delays in completion of the project. Thus, there adhering to future needs, a robust structure of the project has to be designed in order to avoid future delays.
- **Poor Traffic forecast:** NHAI relied on the traffic study conducted in 1998 at the time of the project procurement. Thus, the actual traffic volume grossly exceeded the projections from the very beginning of commercial operations. In fact as soon as the expressway was opened to traffic, the unexpected high number of vehicles led to heavy queuing at the toll booths and delays in crossing the stretch. This appeared to have defeated the very purpose of the expressway to reduce travel time, fuel cost and congestion making the project socially unviable. However, conditions improved due to timely action and necessary measures by authorities and the Concessionaire.
- **Lower traffic risk:** Traffic risk is the biggest risk to the success of a typical toll road project. However the risk is substantially lower in this project as it involved improvement and tolling of an existing highway, where traffic flow is more or less established. The Delhi Gurgaon section of NH-8 has been one of the busiest sections in the country and to that extent had the

advantage of enormous traffic and therefore high revenues. Between 2008 and 2013, the concessionaire collected approximately Rs. 900 crore annually from toll.<sup>2</sup>

### Conclusions

The sustained economic growth in India in recent years has brought opportunities and challenges to the planning and management of the Indian transportation system. Like in other developing countries, the transportation system in India is characterised by limited roadway infrastructure and the lack of operation and management experience.

Delhi Gurgaon Expressway is the most exciting development in transport history of India and it has provided help to businesses by providing a comparatively free-flowing alternative to the congested NH-8. This facility could be benchmarked with best expressways in the world as best of the design and engineering technologies has been incorporated in this project to bring in the class of best expressways worldwide. But despite of this, the expressway has faced concerns in managing and decongesting the traffic density.

### Delhi Gurgaon Expressway-Today

Recently, the Sirhaul toll plaza at 24 km landmarks has been dismantled and from now there will be only one operational toll plaza on the 27.7 Km stretch starting from Subroto Park in Delhi and ending at Kherki Dhula in Gurgaon, which will be managed by IDFC after the exit of DGSCL. Additionally, toll rates at the operational toll plazas will be revised upwards by up to 80 per cent in coming future to partially cover the loss incurred due to shut down of toll plaza at 24 km landmark.

### Further Readings:

- Delhi Gurgaon Super Connectivity Limited website: <http://www.dgexpressway.com/about.htm>- last accessed on 06.03.2014
- Balachandran, M, "Delhi HC approves IDFC takeover Of Delhi Gurgaon Expressway", Business standard, 16 February 2014. Last accessed on: 06th March 2014.

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<sup>2</sup> Dash, Dilip Kumar, "Developers earn Rs893cr toll on Gurgaon expressway", Times of India, 10 September 2013. Last accessed 13th March 2014.