# Overview of the framework

## Need for a framework

The highways sector in India has witnessed significant public investment in recent years following the policy initiatives taken by the Government of India to reverse the neglect of highways that prevailed earlier. The National Highways Authority of India (the "Authority") has completed the construction of over 6,000 km of four-lane highways and work is underway on a further 5,000 km. Several State Governments have also made substantial public investments in upgrading their highways. All the four-laned national highways and several of the augmented state highways are to be tolled as per current policy. They would also need to be maintained at higher levels than hitherto, both on account of improved standards and also because there are greater expectations from a public service which is paid for.

For incentivising better recovery of tolls along with a higher quality of service, it would be useful to attract private participation through Public Private Partnership (PPP) in highway operation and maintenance. However, the prospects of private participation will depend on a comprehensive policy and regulatory framework necessary for addressing the complexities of PPP, and for balancing the interests of users and investors. Moreover, the transformation of rules must be accompanied by a change in the institutional mindset.

For sustaining the interest of private entities in operation and maintenance of highways on Operation, Maintenance and Transfer (OMT) basis, a precise policy and regulatory framework is being spelt out in this Model Concession Agreement (MCA). This framework addresses the issues which are typically important for PPP, such as mitigation and unbundling of risks; allocation of risks and rewards; symmetry of obligations between the principal parties; precision and predictability of costs and obligations; reduction of transaction costs; force majeure; and termination. It

A comprehensive framework is a prerequisite for PPP

also addresses other important concerns such as user protection, independent monitoring and dispute resolution. The objective is to provide efficient and cost-effective services to the users.

# Elements of financial viability

The three critical elements that determine the financial viability of OMT concessions are traffic volumes, user fee and capital costs. As the existing highways have dedicated traffic and the user fee is pre-determined, revenue streams for a Project Highway can be assessed with a fair degree of accuracy. The capital cost of OMT projects would normally be limited and predictable. The project structure would not, therefore, suffer from volatility or unmanageable commercial risks from the perspective of bidders. The main risk that they would be required to take is the rate of growth of traffic, which would determine their profitability.

# **Technical parameters**

Unlike the normal practice of focussing on input specifications, the technical parameters proposed in the MCA are based mainly on output specifications, as these have a direct bearing on the level of service for users. Only the core requirements of design, construction, operation and maintenance of the Project Highway are to be specified, and enough room would be left for the Concessionaire to innovate and add value.

In sum, the framework focuses on the 'what' rather than the 'how' in relation to the delivery of services by the Concessionaire. This would provide the requisite flexibility to the Concessionaire in evolving and adopting cost-effective designs without compromising on the quality of service for users. Cost efficiencies would occur because the shift to output-based specifications would provide the private sector with a greater opportunity to innovate and optimise designs in a way normally denied to it under conventional input-based procurement specifications.

Technical parameters will focus on the level of service for the users

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# **Concession period**

The guiding principle for determining a project-specific concession period should be the periodic maintenance cycle of the Project Highway based on the current practice of undertaking major maintenance works once in five years. As such, the concession period is proposed to be determined on a projectspecific basis depending on the balance period remaining before the forthcoming maintenance cycle. The concession period should terminate at a point where the life of previous maintenance works has expired so that fresh investments are left to the next concessionaire who would have a greater incentive in ensuring the quality and longevity of its maintenance works. It seems appropriate to consider a maximum concession period of about ten years so that the Project Highway is available thereafter for augmentation of capacity as necessary. Moreover, a period longer than ten years may not be optimal because there may be little advantage in allocating the traffic risk to the Concessionaire for a longer period.

Concession period will be linked to maintenance cycle

## **Selection of Concessionaire**

Selection of the Concessionaire will be based on open competitive bidding. All project parameters such as the concession period, toll rates, price indexation and technical parameters are to be clearly stated upfront, and short-listed bidders will be required to specify only the amount of annual concession fee offered by them. The bidder who offers the highest concession fee should win the contract. In exceptional cases, instead of offering a concession fee, a bidder may seek O&M support from the Authority/ Government if its operational expenditure exceeds the toll revenues.

Competitive bidding on single parameter will be the norm

## **Concession Fee**

Concession fee, the share of toll revenues payable to the Authority/ Government, will be determined by competitive bidding. The concession fee offered for the first year could be

increased for each subsequent year by five per cent thereof to capture the increase in traffic volumes. Predictability of payment obligations is expected to incentivise the Concessionaire to improve toll recovery and undertake cost-effective maintenance. This would be reflected in higher revenues for the Authority/ Government.

## Risk allocation

Risk allocation and mitigation is critical to private investment As an underlying principle, risks have been allocated to the parties that are best suited to manage them. Project risks have, therefore, been assigned to the private sector to the extent it is capable of managing them. The transfer of such risks and responsibilities to the private sector would increase the scope for innovation leading to efficiencies in costs and services.

The commercial and technical risks relating to operation and maintenance are being allocated to the Concessionaire, as it is best suited to manage them. Other commercial risks, such as the rate of growth of traffic, are also being allocated to the Concessionaire. The traffic risk, however, is significantly mitigated as the Project Highway is a natural monopoly where existing traffic volumes can be measured with reasonable accuracy. On the other hand, all direct and indirect political risks are being assigned to the Authority/ Government.

# **Commercial operations**

Commercial operation should begin forthwith

The primary purpose of the concession is to provide for PPP in operations and maintenance. This presupposes that construction works have been completed by the Authority/Government and the highway is amenable to tolling. As such, tolling should commence as soon as the Project Highway is handed over to the Concessionaire. Construction of project facilities or selected maintenance works need not hold up tolling to the detriment of the Concessionaire and the Authority/Government.

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## User fee

A balanced and precise mechanism for determination of user fee has been specified for the entire concession period since this would be of fundamental importance in estimating the revenue streams of the Concessionaire and, therefore, its viability. The user fee shall be based on the rates to be predetermined and notified by the Government.

The MCA provides for indexation of the user fee to the extent of 40 per cent thereof linked to WPI. This is in line with the policy for levy of user fee on all national highways, and is considered adequate to neutralise the impact of inflation on the Concessionaire's operating costs. A higher level of indexation is not favoured, as that would require the users to pay more for a declining (more congested) level of service when they should be receiving the benefit of a depreciated fee. A higher indexation would also add to uncertainties in the financial projections of the project.

## Local traffic

Owing to the absence of an alternative road, highways should be open to use by local residents without any payment of tolls until free service lanes are provided. This would ensure local support for the project and avoid legal challenges or local opposition arising out of easement rights.

Frequent users should be entitled to discounted rates, in accordance with the extant tolling policy.

#### Construction

The Project Highway may require construction of facilities such as toll plaza, truck laybyes, bus shelters, etc. Some additions and alterations may also be necessary for improving the safety and quality of service. Major maintenance works on the Project Highway may also be necessary in some cases. The MCA provides for construction of such works but without affecting the commercial operations of the Project Highway.

Safety and quality of service must be ensured

The Concessionaire would be entitled to commence tolling soon after the concession agreement comes into effect and construction of works would follow with the obligation to complete them within a time frame justified by good industry practice, to be determined by the Independent Engineer.

# **Operation and maintenance**

Maintenance standards will be enforced strictly

Operation and maintenance of the Project Highway is proposed to be governed by strict standards with a view to ensuring a high level of service for the users, and any violations thereof would attract stiff penalties. In sum, operational performance would be the most important test of service delivery.

The MCA provides for an elaborate and dynamic mechanism to evaluate and upgrade safety requirements on a continuing basis. The MCA also provides for traffic regulation, police assistance, emergency medical services and rescue operations.

# Force majeure

Concessionaire will be protected against political actions

The MCA contains the requisite provisions for dealing with force majeure events. In particular, it affords protection to the Concessionaire against political actions that may have a material adverse effect on the project.

## **Termination**

Pre-determined termination payment should provide predictability In the event of termination, the MCA provides for a compulsory buy-out by the Authority/ Government, as the Concessionaire cannot use the highway in any other manner for recovering its investments. Termination payments have been quantified precisely as compared to the complex formulations in most agreements relating to private infrastructure projects. Political force majeure and defaults by the Authority/Government are proposed to qualify for adequate compensatory payments to the Concessionaire and thus guard against any discriminatory or arbitrary action by the Government or the Authority.

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# Monitoring and supervision

Day-to-day interaction between the Authority/ Government and the Concessionaire has been kept to the bare minimum by following a 'hands-off' approach, and the Authority/Government shall be entitled to intervene only in the event of a material default. Checks and balances have, however, been provided for ensuring full accountability of the Concessionaire.

Monitoring and supervision of construction, operation and maintenance is proposed to be undertaken through an Independent Engineer (a qualified firm) that will be selected by the Authority/ Government through a transparent process. Its independence would provide added comfort to all stakeholders, besides improving the efficiency of project operations. If required, a public sector consulting firm may discharge the functions of the Independent Engineer.

To provide enhanced security to the lenders and greater stability to the project operations, all financial inflows and outflows of the project are proposed to be routed through an escrow account.

#### Miscellaneous

A regular traffic census and annual survey has been stipulated for keeping track of traffic growth. Sample checks have also been provided for. The MCA also addresses issues relating to dispute resolution, suspension of rights, change in law, insurance, defects liability, indemnity, redressal of public grievances and disclosure of project documents.

## Conclusion

Together with the Schedules, the proposed contractual framework addresses the issues that are likely to arise in the operation of highway projects on OMT basis. The proposed regulatory and policy framework contained in the MCA is a prerequisite for attracting private entities that would operate highways with improved efficiencies and reduced costs, necessary for accelerating growth and welfare.

Independent supervision is essential

An effective dispute resolution mechanism is critical

Private participation should improve efficiencies and reduce costs