Overview of the framework

Need for a framework

The highways sector in India is witnessing significant interest from both domestic as well as foreign investors following the policy initiatives taken by the Government of India to promote Public Private Partnership (PPP) on Design, Build, Finance, Operate and Transfer (DBFOT) basis. Several State Governments have also initiated similar policies for attracting private investment in State Highways. However, the actual inflow of investment will depend significantly on a comprehensive policy and regulatory framework necessary for addressing the complexities of PPP especially for balancing the interests of users and investors. Moreover, the transformation of rules must be accompanied by a change in the institutional mindset.

This volume responds to requests from several State Governments for assistance in evolving a Model Concession Agreement (MCA) that reflects best practices and can sustain investor interest in upgradation and maintenance of state highways on BOT basis. Besides the advantages associated with such a document, this would enhance the possibility of securing upto 20 per cent of the capital costs by way of viability gap grants from the Central Government coupled with long-term debt from the India Infrastructure Finance Company (IIFC) for funding up to 20 per cent of project costs.

A comprehensive framework is a pre-requisite for PPP

The MCA sets out a precise policy and regulatory framework that addresses the issues typically important for limited recourse financing of infrastructure projects, 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 also deals with other important concerns such as user protection; transparent and fair procedures; and financial support from the Government.

The MCA also provides the framework for commercialising highways in a planned and phased manner through optimal utilisation of resources on the one hand and adoption of international best practices on the other hand. The objective is to secure value for public money and provide efficient and cost-effective services to the users.

Rationale for phased development

The four critical elements that determine the financial viability of a highway project are the traffic volumes, user fee, concession period and capital costs. As the existing state highways have dedicated traffic and the State Governments have prescribed the user fee for uniform application across the respective States, revenue streams for a Project Highway can be assessed with a fair degree of accuracy. The concession period, on the other hand, can be extended only marginally for improving project viability as the growth of traffic would not permit very long concession periods. In any case, the present value of projected revenues after say, 15 years, is comparatively low from the Concessionaire's perspective.

As three of the four above-stated parameters are predetermined, capital cost is the variable that will determine the financial viability of a project. Bidders would, therefore, seek an appropriate capital grant/subsidy from the State Government in order to reduce the capital cost for arriving at an acceptable rate of return.

In the given scenario, higher the capital cost, greater would be the compulsion of project sponsors to seek larger grants from the Government. This, in turn, would restrict the ability of the Government to leverage a larger pool of extra-budgetary resources, including private investment, and would hence result in a limited programme of highway development.

In view of the foregoing, it is important to rely on cost-effective designs and to combine them with a phased investment programme to enable a more efficient and sustainable programme of highway development.

Phased development will be affordable and cost-effective

As a general principle, capacity augmentation of highways should be based on the standards adopted by the Indian Roads Congress for different bands of traffic volume. The emphasis should be on phased development rather than on providing high cost roads for catering to the projected growth in the long term.

Where traffic intensity is comparatively low, limited widening of highways should be undertaken with further widening planned after 7-12 years depending on projected traffic growth. Upgradation of designs and standards, construction of bypasses in urban and semi-urban areas and other improvements may also be planned in phases depending on traffic intensity. As an alternative, comparatively shorter concession periods may be stipulated so that the Government can augment the capacity when it is due. These issues should be subjected to in-depth examination and reflected in a Manual of Specifications and Standards that would form part of the standard documents associated with the MCA.

Technical parameters

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

Unlike the normal practice of focussing on construction 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 and processes 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 greater opportunity to innovate and optimise designs and processes in a way normally denied to it under conventional input-based procurement specifications.

Concession period

The guiding principle for determining project-specific concession period is the carrying capacity of the respective highway at the end of the proposed concession period. As such, the concession period is proposed to be determined on a project-specific basis depending on the volume of present and projected traffic. Toll paying users should not be subjected to congested highways and the Concession should, therefore, cease when full capacity of the road is reached, unless further augmentation is built into the MCA.

Concession period will be linked to projected traffic

The time required for construction (twelve to eighteen months) has been included in the concession period so as to incentivise early completion, implying greater toll revenues.

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 grant sought by them. The bidder who seeks the lowest grant should win the contract. In exceptional cases, instead of seeking a grant, a bidder may offer to share the project revenues with the Government.

Competitive bidding on single parameter will be the norm

Grant

It is proposed that based on competitive bidding, the Government should provide a capital grant of up to a maximum of 30 per cent of the project cost in case the Project Highway is not financially viable. This would help in bridging the viability gap of the project. Where even such assistance is inadequate for making a project financially viable, an additional grant not exceeding 10 per cent of the project cost may be provided by the State Government for O&M support during the period following the commissioning of the Project Highway.

Concession fee

Concession fee will be a fixed sum of Re. 1 per annum for the concession period. Where bidders do not seek any grant and are instead willing to make a financial offer to the Government, they will be free to quote a higher concession fee in the form of a share in revenues from user fee which shall not exceed 50 per cent of such revenues. In case the bidder is willing to offer a revenue share of more than 50 per cent, it shall offer that in the form of an upfront premium which will be payable

Concession fee should be levied when revenue streams can sustain it

in 12 equal monthly instalments. In addition, the revenue share quoted for the initial year could be increased for each subsequent year by an additional 1 per cent. The rationale for the above fee structure is that in the initial years, debt service obligations would entail substantial outflows. Over the years, however, the Concessionaire will have an increasing surplus in its hands owing to the declining debt service and rising revenues. Recognising this cash flow pattern, the concession fee to be offered by the Concessionaire will be on an ascending revenue-share.

Risk allocation

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 of innovation leading to efficiencies in costs and services.

The commercial and technical risks relating to construction, 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 Government.

Risk alleviation and mitigation is critical to private investment

It is generally recognised that economic growth will have a direct influence on the growth of traffic and that the Concessionaire cannot in any manner manage or control this growth rate. By way of risk mitigation, the MCA provides for extension of the concession period in the event of a lower than expected growth in traffic. Conversely, the concession period is proposed to be reduced if the traffic growth exceeds the expected level.

The MCA provides for a target traffic growth and stipulates an increase of upto 25 per cent in the concession period if the growth rate is lower than projected. For example, a shortfall of 10 per cent in the target traffic after 10 years would lead to extension of the concession period by 15 per cent thereof. On the other hand, an increase of 8 per cent in the target traffic would reduce the concession period by 6 per cent thereof.

Financial close

Project implementation must commence as per agreed timeframe

Unlike other agreements for infrastructure projects which neither define a time-frame for achieving financial close, nor specify the penal consequences for failure to do so, the MCA stipulates a time limit of 180 days (extendable up to another 185 days on payment of a penalty), failing which the bid security shall be forfeited. By prevalent standards, this is a tight schedule, which is achievable only if all the parameters are well defined and the requisite preparatory work has been undertaken.

The MCA represents comprehensive framework which is necessary for enabling financial close within the stipulated period. Adherence to such time schedules will usher in a significant reduction in costs besides timely provision of the much needed infrastructure. This approach would also address the issue of infrastructure projects not achieving financial close for long periods.

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 project and, therefore, its viability. The user fee shall be based on the rates to be notified by the Government.

User fee should be determined with great care and precision

The MCA provides for indexation of the user fee to the extent of 40 per cent thereof linked to the Price Index. Since repayment of debt would be virtually neutral to inflation, the said indexation of 40 per cent is considered adequate. 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.

Captive local residents must be exempt from user charges

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

Construction

Handing over possession of at least 85 per cent of the required land and obtaining of environmental clearances are being proposed as conditions precedent to be satisfied by the Government before financial close.

The MCA defines the scope of the project with precision and predictability in order to enable the Concessionaire to determine his costs and obligations. Additional works may be undertaken within a specified limit, only if the entire cost thereof is borne by the Government.

Before commencing the collection of user fee, the Concessionaire will be required to subject the Project Highway to specified tests for ensuring compliance with the specifications relating to safety and quality of service for the users.

Safety and quality of service must be ensured

Wayside Amenities

The MCA provides that the Authority may earmark additional land for Wayside Amenities. The Concessionaire shall utilise the earmarked land for provision of Wayside Amenities which may include public toilets, rest areas, cafeteria, hotels and other amenities or facilities for Users of the Project Highway and the local population. The land and assets comprising the Wayside Amenities shall revert to the Authority upon expiry of the Concession Period. Further, the Concessionaire may procure additional land, at its own cost and expense, for provision of additional facilities. Such additional land and facilities shall be retained by the Concessionaire after the transfer date and the Authority shall not have any right or lien on such land at any time during or after the Concession Period.

Provision for wayside amenities for users and local population

Operation and maintenance

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.

Maintenance standards will be enforced strictly

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.

Right of substitution

In the highways sector, project assets do not constitute adequate security for lenders. It is project revenue streams that constitute the mainstay of their security. Lenders would, therefore, require assignment and substitution rights so that the concession can be transferred to another company in the event of failure of the Concessionaire to operate the project successfully. The MCA accordingly provides for such substitution rights.

Lenders will have the right of substitution

Force majeure

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. The MCA also provides for relief to the Concessionaire upon occurrence of an unforeseen event.

Concessionaire will be protected against political actions

Termination

In the event of termination, the MCA provides for a compulsory buy-out by the Government, as neither the Concessionaire nor the lenders can use the highway in any other manner for recovering their 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 Government are proposed to qualify for adequate compensatory payments to the Concessionaire and thus guard against any discriminatory or arbitrary action by the Government. Such termination payment shall not be less than the product of twenty four and the Realisable Fee due and payable for and in respect of the last month of the Concession Period. Further, the project debt would be fully protected by the Government in the event of termination, except for three situations, namely, (a) when termination occurs as a result of default by the Concessionaire, only 90 per cent of the debt will be protected, and (b) in the event of non-political force majeure such as Act of God (normally covered by insurance), only 90 per cent of the debt beyond the insurance cover will be protected and (c) when termination occurs on account of Concessionaire Default during Construction Period, the Concessionaire shall bear the initial expenditure equal to 40 per cent of the Total Project Cost, and for the expenditure in excess of such 40 per cent, an amount equal to 90 per cent of the debt attributable to such excess expenditure will be protected.

Pre-determined termination payments should provide predictability

Monitoring and supervision

Day-to-day interaction between the Government and the Concessionaire has been kept to the bare minimum following a 'hands-off' approach, and the Government shall be entitled to intervene only in the event of 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 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 not owned or controlled by the Authority may discharge the functions of the Independent Engineer.

A credible and fair arrangement for supervision is essential

The MCA provides for a transparent procedure to ensure selection of well-reputed statutory auditors, as they would play a critical role in ensuring financial discipline. As a safeguard, the MCA also provides for appointment of additional or concurrent auditors.

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.

Support and guarantees by the Government

By way of comfort to the lenders, loan assistance from the Government has been stipulated for supporting debt service obligations in the event of a revenue shortfall resulting from political force majeure or default by the Government.

Support and guarantees by the Government are essential

Guarantees have also been provided to protect the Concessionaire from construction of competing roads, which can upset the revenue streams of the project. Additional tollways would be allowed, but only after a specified period and upon compensation to the Concessionaire by way of an extended concession period.

Funded Works

The MCA provides an option that enables the Authority to finance selected works, thus relieving the Concessionaire from the obligation to raise the requisite financial resources for such works. This provision can be used for capital-intensive works which cannot be sustained by user fee. This arrangement can also be adopted for other project-specific reasons.

Certain works may be financed by the Authority

The MCA provides for fixing a lump sum amount for construction of Funded Works, which would be paid to the Concessionaire in four equal instalments. The MCA also provides for a mobilisation advance of upto 20 per cent of the aforesaid lump sum amount in order to facilitate the Concessionaire in meeting the construction costs of Funded Works.

Deemed Shadow Fee

The MCA also provides an option to the Authority to compensate the Concessionaire for loss of fee revenues from vehicles that are exempt from payment of fee under the Fee Rules. The Authority may specify an estimated number of PCUs, not exceeding 30 per cent of the total projected PCUs as on COD, which shall be increased by 5 per cent every year, and stipulate payment of a deemed shadow fee by the Authority to the Concessionaire in respect of such fee-exempt vehicles. Such an arrangement would help improve the viability of the project and also reduce the capital grant payable by the Authority during the construction period.

Deemed shadow fee for improving viability

Miscellaneous

A regular traffic census and annual survey has been stipulated for keeping track of traffic growth. Sample checks by the Government have also been provided for. As a safeguard against siphoning of revenue share by the Concessionaire, a floor level of present and projected traffic has also been stipulated.

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 framework addresses the issues that are likely to arise in financing of highway projects on DBFOT basis. The proposed regulatory and policy framework contained in the MCA is a pre-requisite for attracting private participation with improved efficiencies and reduced costs, necessary for accelerating growth.