### Overview of the framework

#### Need for a framework

Accelerated economic growth, aided by expansion of air services in a competitive environment, has manifested itself in a rapid increase in air traffic. For providing connectivity to regions hitherto not served by commercial flights, it is necessary to expand the network of air services by setting up new airports. Some of the State Governments have already taken steps for setting up greenfield airports. Examples in the past include Cochin, Hyderabad and Bangalore where greenfield airports have been commissioned with the active support and participation of the respective State Governments. The policy relating to setting up of greenfield airports has since been liberalised by the Central Government and several new projects are being planned in different states.

Expansion of the airport network is necessary

Investment requirements for building airport infrastructure will continue to grow, hence private participation would be necessary to supplement public investment. Moreover, private sector efficiencies would help in cutting costs and improving service quality. In particular, private sector participation will help increase non-aeronautical revenues through commercial exploitation of airports. Such revenues will help in cross-subsidising passenger charges that will promote low-cost air travel. Public Private Partnerships (PPP) in airports would, therefore, ensure lower passenger charges and high quality service.

PPP to ensure lower tariffs and higher quality

The airport sector has been witnessing significant interest from both domestic as well as foreign investors following the policy initiatives taken by the Central Government to promote PPP on Design, Build, Finance, Operate and Transfer (DBFOT) basis. However, the actual inflow of investment has been less than expected, and future prospects will depend significantly on adoption of a comprehensive policy and regulatory framework necessary for addressing the complexities of PPP, especially for balancing the interests of users and investors. In particular, transformation of rules will have to be accompanied by a change in the institutional mindset.

A comprehensive framework is a prerequisite for PPP

For building and operating a greenfield airport on DBFOT 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 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 addresses other important concerns such as user protection, independent monitoring, dispute resolution, transparent and fair procedures; and financial support from the Government.

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

#### **Structure of the Concession**

The framework contained in this MCA provides for: (a) construction and operation of the airport including the commercial exploitation of specified areas, and (b) city side development in the form of hotels, convention centres and airport related businesses on the land identified for city side development. The proposed structure seeks to ensure that the airport is maintained and operated to world-class standards while its commercial potential is maximised.

World-class standards to be ensured

The master plan of the airport is to be included as part of the concession agreement and should specify the land use and other restrictions on development of the airport. It must also earmark the vacant lands for future expansion of the airport by the Concessionaire, which is being stipulated as an obligation of the Concessionaire for catering to increased traffic volumes over the concession period.

The Concessionaire is expected to finance the expenditure on construction and operation of the airport from the revenues that it would receive from User Fees, commercial activities and city side development. This would provide a mechanism for optimising on the overall operations of the airport while reducing the costs to the public exchequer and the user.

Airport revenues to meet costs of construction and operation

# Elements of financial viability

The four critical elements that determine the financial viability of an airport are the concession period; traffic volumes; User Fees and other revenues; and capital costs. The concession period for such capital-intensive projects is normally in the range of 50 to 60 years. Such a timeframe should enable a robust project structure and any further extension in the concession period would improve financial viability only marginally as the present value of projected revenues after 50 years would be very low from the Concessionaire's perspective.

Financial viability is critical

For a greenfield airport, the traffic projections are likely to be conservative as it would take time for traffic to build up. As a result, User Fees alone may not provide financial viability, especially since they would have to be kept at affordable levels. Additional revenues can, however, be generated from non-aeronautical sources and city side development to enable some cross-subsidisation of User Fees.

Three of the four parameters stated above could be virtually taken as given, and as a result capital cost is the variable that will determine the financial viability of an airport project. If the potential for non-aeronautical and city side revenues is inadequate, bidders may seek an appropriate capital grant/subsidy from the Government in order to reduce their capital investment for arriving at an acceptable rate of return. As such, reduction in capital costs and phasing out some capital expenditure can help improve project viability significantly. Though PPPs undertaken so far in the sector have been financially viable and self-sustaining, the government's initiative to build greenfield airports in remote areas may require cost-efficient designs as well as some capital subsidy.

### **Technical parameters**

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 airport are to be specified and enough room would be left for the Concessionaire to innovate and add value.

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

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 a greater opportunity to innovate and optimise on designs and processes in a way normally denied to it under conventional input-based procurement specifications.

### **Performance standards**

For an airport project, the Concessionaire would not only procure the civil works and equipment, it would also provide various passenger and cargo related services. The efficiency of its operations would normally be reflected

Performance standards to be enforced in the quality of service provided to the users. The MCA, therefore, identifies the key performance indicators relating to operation of the aeronautical assets, terminal building, cargo terminal etc., and specifies penalties for failure to achieve the requisite levels of performance, especially in relation to user services.

The MCA includes a Passenger Charter that the Concessionaire should publish and implement for the benefit of users of the airport. This will add to the accountability of the Concessionaire to the users.

# **Concession period**

The concession period should normally be long enough to enable the Concessionaire to recover its investment with a reasonable rate of return. In the case of a greenfield airport, the traffic build-up may be gradual and the investments in airport infrastructure as well as city side may take long to recover. As such, a total concession period of 50 to 60 years has been provided. This would enable the Concessionaire to realise the full potential of the project and thus offer a competitive bid. A shorter concession period would lead to a lower revenue share or require a greater capital grant and/ or higher user charges.

Concession period to be sixty years

The time required for construction of the airport (about two to three years) has been included in the concession period so as to incentivise early completion that would maximise the revenues of the Concessionaire.

### **Selection of Concessionaire**

Selection of the Concessionaire will be based on open competitive bidding. All Project parameters such as the concession period, User Fees, price indexation, city side development and technical parameters are to be clearly stated upfront, and short-listed bidders will be required to specify the revenue share that they are willing to offer in the form of a Premium. The bidder who offers the highest Premium should win the contract. In exceptional cases where instead of offering a Premium, the bidders seek a capital grant from the Government, the bidder who seeks the lowest grant would win the concession.

Competitive bidding on single parameter will be the norm

#### **Concession fee**

Concession fee will be a fixed sum of Re. 1 per annum for the concession period. The Concessionaire shall, commencing from the 15<sup>th</sup> year of the concession period, pay a Premium equal to 1 per cent of the total realisable fee which shall be increased every year by an additional 1 per cent of the

Concession fee should be levied when revenue streams can sustain it total realisable fee. Where bidders do not seek any grant and are willing to offer a higher Premium to the Government and/or an earlier commencement of its payment, they will be free to do so, subject to a ceiling of 30 per cent of the total realisable fee. In case of an exceptionally viable Project, the bidders would be free to offer an annual payment in the form of city side premium which shall be in addition to the 30 per cent revenue share mentioned above.

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 on account of the declining debt service on the one hand and rising revenues on the other. Recognising this cash flow pattern, the concession fee to be paid by the Concessionaire will be based on an ascending revenue-share.

The revenue share will be computed as a percentage of the regulated fee only. Unregulated revenues will not be reckoned while computing the revenue share, though the bidders are expected to factor the same while making their respective offers.

### Grant

Based on competitive bidding, the Authority may provide a capital grant of up to 30 per cent of the project cost. This would help in bridging the viability gap of the Project. Where even such assistance is inadequate for making the Project financially viable, an additional grant not exceeding 10 per cent of the project costs may be provided as O&M support during the initial years following the commissioning of the airport.

### **Risk allocation**

As an underlying principle, risks have been allocated to the parties that are best able 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.

Risk allocation and mitigation are critical to private investment

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 have also been allocated to the Concessionaire. On the other hand, all direct and indirect political risks are being assigned to the Government.

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 influence the rate of economic growth. 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 20 per cent in the concession period if the growth in traffic is less than projected. For example, a shortfall of 8 per cent in the target traffic will lead to extension of the concession period by 12 per cent. On the other hand, a reduction of up to 10 per cent of the concession period is stipulated in the event of a higher than expected growth. For example, an increase of 8 per cent in the target traffic will reduce the concession period by 8 per cent.

### Financial close

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 for achieving financial close (extendable for another 120 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.

Project implementation must commence as per agreed timeframe

The MCA represents a 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 ensuring timely provision of the much-needed infrastructure. This approach would also address the typical problem of infrastructure projects not achieving financial close for long periods.

### **User Fee**

A 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 notified by the Government prior to bidding for the concession. User Fees should be determined with care and precision

The MCA provides for a reduction in the User Fee by about 2 per cent every year to account for the depreciated assets and increased efficiency. The MCA also provides for indexation of the User Fee linked to the Price Index. In respect of non-aeronautical services, however, the Concessionaire shall be free to determine the charges thereof.

### Construction

Handing over possession of at least 90 percent of the required land as well as procuring the environmental clearances are proposed as conditions precedent to be satisfied by the Government before financial close.

The MCA defines the scope of the Project with precision in order to enable the Concessionaire to determine its costs and obligations. Additional works not included in the scope of the concession may be undertaken, but only if the entire cost thereof is borne by the Government.

Service quality and safety must be ensured

Before commencing the collection of fees, the Concessionaire will be required to subject the airport to specified tests for ensuring compliance with the specifications and standards relating to safety and quality of service for the users.

The Schedules would include the master plan of the airport. The Master Plan should specify the land use and other restrictions on development of the airport and should also earmark vacant land for future expansion of the airport.

# **Operation and maintenance**

Operation and maintenance of the airport 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, security and rescue operations.

#### **Reserved Services**

Certain services at the airport are to be provided by the designated government agencies. The MCA specifies the obligations of the Concessionaire in respect of the reserved services with a view to ensuring that the respective agencies are enabled to provide such services without any hindrance or lack of support from the Concessionaire.

### **Right of substitution**

The project assets may not constitute adequate security for lenders. It is the project revenue streams that constitute the mainstay of their security. Lenders would, therefore, require assignment and substitution rights so that the

Lenders will have the right of substitution

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.

## 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 airport 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 infrastructure projects. Political force majeure and defaults by the Government are proposed to qualify for adequate compensatory payments to the Concessionaire and will 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, 90 per cent of the debt will be protected, (b) in the event of non-political force majeure such as Act of God (normally covered by insurance), 90 per cent of the debt not covered by insurance cover will be protected and (c) when termination occurs on account of Concessionaire Default during Construction Period, the initial expenditure equal to 40 per cent of the Total Project Cost will be set apart, and for the expenditure in excess of such 40 per cent, an amount equal to 90 per cent of the debt expended will be protected.

Pre-determined termination payments should provide predictability

A different method of valuation has been adopted for city side development which will enable a more transparent and predictable valuation of assets in the event of termination.

### Monitoring and supervision

Day-to-day interaction between the Government and the Concessionaire has

A credible and fair arrangement for supervision is essential

been kept to the bare minimum by 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 implementation. If required, a public sector consulting firm may discharge the functions of the Independent Engineer.

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. Guarantees and/ or compensation have also been provided to protect the Concessionaire, though for a limited period, from construction of competing airport which can upset the revenue streams of the Project.

Support and guarantees by the Government are essential

# City side development

Capital subsidies alone may not suffice in ensuring the financial viability of the Project. It may, therefore, be necessary to provide development rights over real estate for generating additional revenue streams with a view to making the Project self-sustaining. It is expected that revenues from city side development will also cross-subsidise the Project operations and help reduce the burden on the users as well as the exchequer. This would also help in an integrated development of the Project as well as the neighbourhood areas. While allowing sufficient flexibility to the Concessionaire for exploitation of the earmarked land and spaces, the MCA stipulates some limits and restrictions to prevent excessive commercialisation of the real estate. The

MCA also enables the Concessionaire to grant licences to third parties for the

City side development can cross-subsidise user fees use of the real estate which would have to revert to the Government at the end of the 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.

### **Miscellaneous**

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

An effective dispute resolution mechanism is critical

# **Application to brownfield projects**

The framework contained in the MCA is applicable for development of greenfield airports through PPPs. With some modifications, it can also be applied to brownfield projects involving upgradation and development of existing airports through PPPs.

### **Conclusion**

Together with the Schedules, the proposed framework addresses the issues that are likely to arise in financing of greenfield airport projects on DBFOT basis. The proposed regulatory and policy framework contained in the MCA is critical for attracting private participation with improved efficiencies and reduced costs, necessary for accelerating growth.

Private participation should improve efficiencies and reduce costs