Overview of the framework

Private investment to play a key role

To meet the infrastructure deficit, the Twelfth Five Year Plan envisages a renewed thrust on investment in infrastructure, particularly in the power sector. The additional thermal power capacity proposed to be created during the Twelfth Plan is estimated at 72,340 MW. As a result, the total demand for coal is expected to rise significantly and the gap between demand and domestic supply by the end of the 12th Plan is estimated at 150 million tonnes. Considering the high price of imported coal, it is necessary to invite private participation in mining of domestic coal for bridging this large gap in supply.

A comprehensive framework is a pre-requisite for PPP in coal mining

Consequent to the policy initiatives taken by the Government of India in the last decade, infrastructure projects across sectors have attracted significant interest from both domestic as well as foreign investors. However, adoption of a comprehensive policy and regulatory framework for addressing the complexities of Public Private Partnerships (PPP) is a pre-requisite for attracting private capital. To this end, a precise policy and regulatory framework is being spelt out in this Model Concession Agreement (MCA) for PPP in coal mining.

The framework contained in the MCA addresses the issues which are important for investors as well as for the public sector owners of coal mines. These issues include 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 customer protection, independent monitoring and dispute resolution.

The MCA provides the framework for 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 while providing reliable and cost-effective supply of coal to the consumers, especially power producers.

Elements of financial viability

Need to reduce capital costs

The three critical elements that determine the financial viability of coal mining projects are the concession period, capital costs and mining charge. The concession period for a coal mining project should be fixed keeping in view the expected life of the mines. It could be fixed for a period of about 25 years, including the construction period, with a provision for extension of 5 years at the option of either the Concessionaire or the project authority (the "**Authority**"). Yet another extension of upto 10 years can be undertaken if both the parties so agree. This timeframe should enable a robust project structure. So far as the capital cost is concerned, adoption of cost-effective specifications should be relied upon for reducing the capital costs. Thus, the financial viability of a mine would largely be determined by the Mining Charge, which would be determined through a competitive bidding process.

Mining Charge

Mining Charge to be determined through competitive bidding

The Concessionaire shall be paid a Mining Charge for availability of the mines and for excavation and delivery of coal equivalent to the specified annual production programme and would be determined through competitive bidding. The Mining Charge actually payable to the Concessionaire would be reduced proportionate to any reduction in the availability of the mines for excavation and delivery of coal, thus ensuring that the Authority does not have to pay if the Concessionaire is unable to deliver coal due to its own failure. An annual increase between 2 and 4 per cent in Mining Charge has been stipulated to account for the increase in mining cost as the excavation goes deeper. The Mining Charge so determined shall be revised on quarterly basis to reflect the variation in Price Index.

Mobilisation Advance

Mobilisation advance to the Concessionaire

The Authority shall provide to the Concessionaire, a pre-determined amount of mobilisation advance ranging between 10 and 20 per cent of the total project cost, to be specified by the Authority prior to invitation of bids. The mobilisation advance shall be payable in two instalments against provision of a bank guarantee and shall carry interest equal to the Bank Rate, as modified by the Reserve Bank of India from time to time.

Availability of Mines

Mining Charge to be paid for Availability of mines

The Concessionaire shall operate the mines such that they are available for excavation and delivery of coal to the extent of Normative Availability for each accounting year. Any shortfall in Availability below 80 per cent will attract penalties and improvement over Normative Availability shall qualify for incentives. Payment of Mining Charge shall always be computed on the basis of availability of the mines.

Penalties for Mis-declaration

Unless otherwise notified by the Concessionaire, the declared availability shall be deemed to be 100 per cent of the Contracted Capacity. The MCA stipulate stiff penalties in case of mis-declaration by the Concessionaire.

Gross Calorific Value (GCV)

For monitoring the GCV content of coal, the Concessionaire and the Independent Engineer shall test the coal for determining its GCV at the coal seams. In case the GCV of coal delivered to buyers falls short of the GCV determined at the coal seams, the Authority shall recover damages from the Concessionaire.

Removal of Overburden

Damages for failure to remove Overburden

The Concessionaire shall be responsible for the excavation, removal and depositing of Overburden so as to maintain the geometry of the mines in conformity with the provisions of the Agreement and Good Industry Practice. The removal of Overburden prior to commercial operation shall be measured in two stages and the cost thereof shall be borne by the Concessionaire as part of its initial capital investment. The cost of removal of Overburden after COD would be recovered from the Mining Charge payable to the Concessionaire.

The Independent Engineer shall inspect the mines every quarter to ensure compliance in respect of removal of Overburden and in case of any breach of its obligation by the Concessionaire, a part of the payments due to the Concessionaire shall be withheld.

Production Programme

Production Programme

The Concessionaire shall excavate and deliver coal to the Authority in accordance with the Production Programme contained in the Agreement, which shall commence from COD and shall end on expiry of the concession period. The Authority may vary the Production Programme only within the specified band and in case of reduction beyond such band, the Authority shall pay Mining Charge for the quantity of coal reduced by the Authority below the specified band. The band within which the Concessionaire may vary the monthly Production Programme has also been specified in order to maintain stability in the supply of coal.

Damages for failure to achieve Production Programme

In case the Concessionaire fails to deliver coal in accordance with the Production Programme, the Authority shall recover the specified Damages from the Performance Security, subject to a monthly cap of 20 per cent of the Performance Security. Such Damages shall be in addition to the reduction in Mining Charge arising out of a lower volume of production.

Storage of coal

Coal Depot for storage of coal

The Concessionaire shall build and operate a Coal Depot for storage of coal with a capacity between 25 and 40 per cent of the Monthly Capacity. The Coal Depot shall include the spaces required for storage of coal, its processing, loading and dispatch in accordance with the provisions of the Agreement. Unless otherwise authorised by the Authority, all coal excavated by the Concessionaire shall be delivered at the Coal Depot. The Authority and the Concessionaire may, however, mutually identify an additional coal depot to store coal when storage capacity of the Coal Depot has been fully utilised. The Authority shall make a pre-estimated payment to the Concessionaire in consideration of the additional cost imposed on account of such handling.

Dispatch and sale to Buyers

The Concessionaire shall dispatch coal in accordance with the instructions given by the Authority. Unless mutually agreed by the parties, the Authority shall not issue dispatch instructions in excess of the Production Programme. If the Mining Charge remains unpaid for a period of 2 months from the due date, the Concessionaire shall be entitled to sell 50 per cent of its accumulated stock, acting as an agent of the Authority, to any subsidiary of CIL or a buyer with whom the Authority has a subsisting Agreement for supply of Coal. In case no such subsidiary or buyer is willing to purchase the coal, the Concessionaire may sell the coal to any other buyer, but only for recovery of its Mining Charge. All receipts on account of such sales shall be booked to the account of the Authority and the Concessionaire may retain only the amounts equal to the dues payable to it by the Authority.

Sale to Buyers by the Concessionaire

Contracted Capacity

The Concessionaire shall design, finance, develop and operate the mines and equipment to excavate and deliver a pre-specified quantity of coal per annum which shall be deemed to be the Contracted Capacity of the mine. Further, one-twelfth of the Contracted Capacity shall be deemed to be the Monthly Capacity.

Contracted Capacity of the mine

Additional Capacity

The Concessionaire may, with prior consent of the Authority and in accordance with applicable laws, create additional capacity in accordance with the provisions of the Agreement. Ninety per cent of the Mining Charge payable for the Contracted Capacity shall be the Mining Charge for the additional capacity.

Additional capacity for improving viability

Technical parameters

Unlike the normal practice of focusing on construction specifications, the technical parameters proposed in the MCA are based mainly on output specifications, as these have a direct bearing on the quality of mining. Only the core requirements of design, construction, operation and maintenance of the mining system have been specified, leaving enough room for the Concessionaire to innovate and add value. In sum, the framework focuses on the ‘what’ rather than the ‘how’ in relation to the production and delivery of coal by the Concessionaire. This would also provide the requisite flexibility to the Concessionaire to innovate and optimise on designs and processes in a way normally denied under conventional input-based procurement specifications.

Technical parameters for level of service

Performance standards

The efficiency of the Concessionaire would normally be reflected in the quality and reliability of coal supply. The MCA, therefore, identifies the key performance indicators relating to operation and maintenance of the mines and stipulates penalties for failure to achieve the requisite levels of performance. In

Performance standards to be enforced

particular, the Concessionaire shall be required to ensure the availability of mine at pre-determined normative levels, which will make sufficient allowance for scheduled maintenance. For monitoring the key performance indicators, monthly status reports and periodic inspections of the Independent Engineer have been prescribed.

Selection of Concessionaire

Competitive bidding on Mining Charge will be the norm

Selection of the Concessionaire will be based on a two-stage process of competitive bidding. All project parameters such as the concession period, technical parameters and performance standards are to be clearly stated upfront. Based on these terms, the short-listed bidders will be required to specify their financial offer in terms of a unit Mining Charge, without any qualifications. The bidder who seeks the lowest Mining Charge should win the contract. The financial offer for the Mining Charge shall be made only for the initial year and the actual charge payable to the Concessionaire will be revised annually based on pre-determined criteria.

Risk allocation

Risk allocation and mitigation are critical

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. These risks have also been mitigated to the extent possible. The transfer of these risks and responsibilities to the private sector would increase the scope of innovation leading to efficiencies in costs and services.

Commercial risks to be borne by Concessionaire

The commercial and technical risks relating to construction, operation and maintenance are being allocated to the Concessionaire, as it would be best suited to manage them. On the other hand, all direct and indirect political risks are being assigned to the Authority.

Financial Close

Financial close to be time bound

Unlike other Agreements for private 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 240 days for achieving financial close (extendable further upto 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.

Fulfilment of conditions precedent

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 needed infrastructure. This approach would also address the typical problem of infrastructure projects not achieving financial close for long periods.

Development of the mines

Procurement of right of way for the first phase of the mines, issuance of notification for land acquisition, procurement of permission for commencing mining operations, approval of Mining Plan for the first phase and Resettlement & Rehabilitation Plan, issuance of ToR from MoEF for environmental clearance and issuance of recommendation of State PCCF to the State Government for the first phase of forest clearance are being proposed as conditions precedent to be satisfied by the Authority before financial close. Procurement of applicable permits, including those for environmental protection, conservation of the site and forest clearance, have been proposed as conditions precedent to be satisfied by the Concessionaire. The Authority would provide reasonable support and assistance to the Concessionaire in procuring the applicable permits and completion of appraisal process for environmental **a**nd forest clearance. Damages have been prescribed for delay in fulfilling the conditions precedent by the Authority as well as the Concessionaire.

Scope of the Project to be precise

The MCA also defines the scope of the project with a fair degree of precision in order to enable the Concessionaire to determine its costs and obligations. Additional works may be specified by the Authority but only within a pre-determined limit, provided the entire cost thereof is borne by the Authority. Project Milestones have also been incorporated in the MCA. The option of phased completion has also been provided.

Tests prior to commissioning

Before commencing the commercial operation of the mines, the Concessionaire will be required to subject these to specified tests for ensuring compliance with the specifications relating to safety and quality.

Operation and maintenance

Service quality and safety must be ensured

Operation and maintenance of the mines is proposed to be governed by strict standards with a view to ensuring a high level of reliability and availability. Any violations of these standards would attract penalties. In sum, operational performance would be the most important test of service delivery.

The MCA provides for an elaborate mechanism to evaluate and upgrade the safety requirements on a continuing basis in conformity with Good Industry Practice. It provides for reviews at regular intervals by qualified experts.

Right of substitution

Lenders will have the 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 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.

Termination

Pre-determined termination payments should provide predictability

In the event of termination, the MCA provides for a compulsory buy-out by the Authority, as the site is owned by the Authority. Termination payments have been quantified precisely as compared to the complex formulations in most concession Agreements relating to infrastructure projects. Political force majeure and defaults by the Authority would qualify for adequate compensatory payments to the Concessionaire and will thus guard against any discriminatory or arbitrary action by the Authority. Such termination payment shall not be less than an amount equal to the lower of (a) the product of thirty and the Mining Charge due and payable for and in respect of the last month of the Concession Period and (b) the Total Project Cost. Further, the project debt would be fully protected by the Authority 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 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. Some additional limitations have been specified in respect of buy out of moving equipment.

Upon expiry of the specified concession period, the Concessionaire would be entitled to a termination payment which will be a pre-determined multiple of monthly Mining Charge. However, either Party would have the right to seek an extension of 5 years in the concession period and in such an event, no termination payment shall be due and payable after expiry of the extended period. The extended concession period shall expire when the deposits of coal have been excavated or cannot be mined on a commercially sustainable basis.

Monitoring and supervision

Day-to-day interaction between the Authority and the Concessionaire has been kept to the bare minimum by following a 'hands-off' approach, and the Authority 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 through an Independent Engineer

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 through a transparent process. Its independence would provide added comfort to all stakeholders, besides improving the efficiency of project implementation.

Selection of auditors

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 by the Authority.

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.

Revenue shortfall loan

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

Specifications & Standards

Output specifications to be emphasised

The accountability for providing safe and reliable mining ultimately rests with the Government and the MCA therefore refers to Specifications and Standards that the Concessionaire must conform to. These specifications rely mainly on the Mining Plan and the extant rules and regulations applicable to mines. The Mining Plan and the rules, by reference, form an integral part of the concession agreement for a specific project and shall be binding on the Concessionaire. The MCA stipulates that only the basic requirements of design and construction shall be laid down in the MCA with reference to the Mining Plan and applicable laws, and greater emphasis shall be placed on specifying the output specifications that have a direct bearing on the reliability and quality of mining.

Land acquisition

Land to be acquired by the Authority

The Authority shall initially procure only that land which may be necessary for development of first phase of the mines, including the land on which essential infrastructure and facilities are to be constructed or operated. This should be sufficient for sustaining excavation and delivery of coal for about 3 years. The land for the remaining phases of the project shall be procured and provided in a phased manner. In the event of Authority failing to provide land for fulfilling production obligations during forthcoming 180 days, the MCA provides for termination of the agreement by the Concessionaire.

Concessionaire to provide support

Issuance of notification for land acquisition shall be the responsibility of the Authority. The Concessionaire shall assist the Authority in respect of the acquisition proceedings, physical possession and other associated activities, in consideration of a lump sum payment at the rate of five per cent of the amount of awards to be paid for land acquisition. At all times, the Authority shall provide the required assistance and support to the Concessionaire in acquisition of land and taking over its possession.

Rehabilitation and Resettlement

Concessionaire to assist in R&R

The Authority shall be responsible for procuring approval of the plan for Rehabilitation and Resettlement (R&R) of Project Affected Persons (PAPs). The Concessionaire shall assist the Authority and undertake R&R operations on behalf of the Authority. The Authority shall pay the entire cost of R&R operations and shall also pay five per cent thereof towards expenses incurred by the Concessionaire. The Concessionaire shall also employ the PAPs on behalf of the Authority in accordance with its R&R policy and the expenditure incurred in this regard will be reimbursed by the Authority.

Environment clearance

Authority and Concessionaire to share responsibility

The Authority shall be responsible for obtaining the statutory 'in principle' clearance under the applicable laws relating to environment and forests. All follow-up action for getting final clearances shall be undertaken by the Concessionaire.

Miscellaneous

An effective dispute resolution mechanism is critical

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. It incorporates the best practices that would enable a fair and transparent framework for private participation.

Conclusion

Together with the Schedules, the proposed contractual framework addresses the issues that are likely to arise in financing of coal mining projects on DBFOT basis. The proposed policy and regulatory framework contained in the MCA is critical for attracting private participation with the concomitant efficiencies and lower costs, necessary for accelerating growth and enhancing coal availability.