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Draft Paper on Project Risk Assessment for PPP Projects sponsored by Government/ Government agencies/PSUs prior to bid

I. Ordinarily, a normal credit rating expresses an opinion on the probability of timely payment of interest and principle by the borrower. On the other hand, Project Risk Rating is the probability of the project being completed on time and generating sufficient cash flows to service debt. Both these types of ratings take into account variables dependent upon the project developer or promoter, in addition to project features, terms of the contract etc.

II. In the present structure of PPP being followed by Government of India, the project details are worked out by the sponsoring Ministry. This in most cases includes the Detailed Project Report, the terms of the Concession, i.e., the Concession Agreement which specifies risk allocation, the location of the project, the design and technology specifications etc. All of these come with their own inherent risks which are there irrespective of the project developer who comes in at a later stage and brings his own strengths and weaknesses to the overall risk rating.

III. Prior to the bid, the PPPAC appraises the project financials, the contingent liabilities of the Government and whether the risk allocation is optimal as per the terms of the Concession Agreement. The project is also expected to adhere to the technical specifications that have been drawn up for such projects by the respective Administrative Departments.

The pre-bid conference is a method used to make appropriate changes in the project features before the RFP. However, it is

not a foolproof method of assessing a project although it is better than the single stage bidding with no pre-bid conference.

IV. As part of overall policy efforts to attract greater private sector participation in Government sponsored projects, Department of Economic Affairs had engaged in discussion with CRISIL on the issue of rating of projects at the stage where the developer has not been selected. Such rating would assess the risks emanating out of the project structure without being dependent upon the specific developer. It would assess the implementation risk and the post-implementation risk comprising the business risk and financial risk, but would not include implementation risks related to the capabilities of the successful bidder, ability of the selected bidder to bring in adequate funds in the form of debt and equity to complete the project and the developer's ability to run the project.

V. It is now proposed that Project Risk Assessment be made a part of the overall appraisal procedure through which each PPP project passes prior to the bid and prior to submission to the PPPAC for final approval. For the purpose of rating, the risks can be categorized into Key Implementation Risk Drivers and Key Post Implementation Risk Drivers. For implementation risk, a scale of 1 to 5 has been used with 1 indicating the lowest risk. For post implementation risk, a scale of A to E has been used with A indicating the lowest risk. A combination of the two would give a two dimension matrix as output. 1A would indicate the lowest risk and 5E the highest when the two are looked at together.

The idea of this kind of risk assessment is that prospective investors get an idea of the risks associated with the project due to characteristics inherent in the structuring of the project, the contractual features, existing market conditions associated with demand and supply of the product/services offered, raw

materials/equipments etc. required. A project with 1A rating would be very attractive to the prospective investor while a project with 5E rating would be approached with a great deal of caution. However, what would be more important from our viewpoint is that such a system of Project Risk Assessment would help Government to bring in modifications in the project to mitigate the risk associated with particular variables and improve its rating and therefore, make it more attractive to the prospective investor thereby ensuring that the project is able to get a good bid from experienced players in the market.

VI. Under the Key Implementation Risk Drivers the following have been identified:

1) Availability and status of project related infrastructure

- (a) Land Availability
- (b) Construction Equipment and related skill set availability

2) Status of statutory clearances and approvals (This list would vary depending upon the type of project)

- (a) Environmental clearance
- (b) Any other clearances required

3) Status of tie-up for raw material

- a) Identification of source
- b) Extent of Availability
- c) Supply Arrangement

4) Off-take arrangement for the product if any (tie-up with prospective consumers)

- status of contract for the same and regulator's views on proposed tariff ( In some cases, this may not apply in this form)

5) Selection process for bidder

6) Track records of projects using similar technology

VII. Under Key Post Implementation Risk Drivers are the following:

1) Business Risk Analysis which includes the following

(a) Contractual Risk Assessment

- (i) Vetting of fairness of projects for the concerned parties
- (ii) Force majeure risks

(b) Off-taker Risk Assessment

- (i) Credit profile of oftaker
- (ii) Payment security
- (iii) Oftaker's ability to pass any rise in generation cost

(c) Raw material supply risk analysis

- (i) Source's ability to meet supply obligation
- (ii) Price setting mechanism
- (iii) Long term Contract

2) Financial Risk Analysis

(a) Analysis of key financial indicators

- (i) IRR-WACC
- (ii) Discounted pay back period
- (iii) Cash DSCR (average and minimum)

- (iv) Sensitized projections and ratios
- (v) Break even Point

(b) Validity of assumptions used to calculate VGF

VIII. The above model would change marginally with the type of project under consideration but would essentially remain the same. Largely, all project associated issues before bidder stage have been captured in the above.

IX. A policy decision has to be taken to apply this model to all the PPP projects being sponsored by Government Ministries/Organizations. This would not only make the project credentials clear at the time of bidding to the prospective bidder, but would also give us the opportunity to improve the project before PPPAC approval/bidding in terms of identified variables.

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