Monitoring of B.O.T. Contracting

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Abstract- Infrastructure is an essential part of our society as it helps in improving standard of living, productivity of nation and competitiveness. But actually, the infrastructure development has limitations due to scarcity of funds and scarce budgetary resources. Hence government has allowed participation of private firm, in public beneficial program; with the help of B.O.T.contracting. The success of BOT can be judged only after completion of concessional period. In the present scenario many of the projects are completed but the concessional period is not yet over and hence there is need for constant monitoring of BOT projects. This paper consisting of issues & various monitoring methods for BOT.

Keywords - BOT, monitoring methods, risks

I. INTRODUCTION

Infrastructure projects provide the basic needs of human survival and the services that are crucial for social and economic development and improvement. But actually, the infrastructure development has limitations due to scarcity of funds and scarce budgetary resources. Hence government has allowed participation of private firm, in public beneficial program; with the help of non-conventional contracting.

In the case of conventional contracting the funding or the resources are totally provided by the government or it's agencies but non-conventional contracting is that type of contracting which consist of the projects which are totally financed by private agencies in association or joint ventures with various Indian, Foreign, Private and Government financing agencies such as BOT, BOOT etc. contracts.

Now a day BOT concept is largly used. BOT means 'Build Operate Transfer'. Build Operate Transfer is a major startup business venture where private organizations undertake development and operation of a facility normally done by the government. Build-Operate-Transfer (BOT) helps in improving infrastructure efficiency and solving government financial deficiency problem. With BOT, the private sector designs, finances, constructs and operates the facility and eventually, after a specified concession period, the ownership is transferred to the government. Then a monitoring system should be worked out to keep a check on all the various activities, including finances. This will help project shareholder to know how things are going, as well as giving early warning of possible problems and difficulties. The failure in BOT can occur because of inefficient and inadequate monitoring system. So monitoring of this BOT projects is most important part in overall project. In monitoring, the factors affecting the progress shall be identified and remedial measures taken, wherever required.

II. CONTRACT MONITORING

Contract monitoring is a process of ensuring that a vendor adequately performs a contracted service. Deficiencies in contract monitoring are related to violations of good management principles. Inadequate monitoring is often the result of the following:

- 1. Poorly established criteria for evaluating vendor performance.
- 2. Perception of oversight as a responsibility to develop a partnership rather than enforce rules, regulations, or contract provisions.
- 3. Focus on rules and regulations rather than outcomes.
- 4. Failure to conduct follow-up reviews to ensure that corrective action was taken.
- 5. Failure to identify the risk and level of review necessary for each vendor.

Good management and supervision requires follow-up feedback and enough awareness of what is occurring to eliminate surprises. Monitoring is a regular activity to keep check on the different phases of the projects. Proper monitoring has got different advantages like the development of the project, correcting the technical or other types of problems to achieve the goal. Construction monitoring has become an international standard approach to oversee the actions of the constructor and evaluate the quality of the construction timely. The monitoring group may be a

state owned enterprise or a private enterprise employed by the government or the general contractor. This will help to know how things are going, as well as giving early warning of possible problems and difficulties. The failure of BOT can occur because of insufficient and inadequate monitoring system. So monitoring is the most important part in overall project. The exact monitoring requirement and methodology will depend on the nature of the contract and the project to be completed. Monitoring of contracting includes the monitoring of contractor's performance against the specific targets and milestones laid down in the contract.

Monitoring also includes inspection of completed work and random sample checks. It also includes recording complaints received from clients; specific system may need to be set up where a good complaints or customer satisfaction procedure like ISO 9000 can be prescribed.

The need of monitoring

- To provide constant feedback
- To identify risks associated with BOT.
- To identify potential problems & propose possible solution.
- To provide guideline for planning of future projects.
- To improve project design
- To improve the efficiency of project
- To avoid project delay.
- To avoid cost overrun of the project

III. COMPONENTS OF AN EFFECTIVE CONTRACT MONITORING SYSTEM:-

State agencies can mitigate the risks associated with contracting out services by developing an effective contract monitoring system. The components of an effective contract monitoring system are detailed below. State agencies should assess the complexity of the contracted service, the contract amount, and the risk if the work is not performed adequately when deciding what components are necessary. While not all contracts are monitored using the same components, a number of the components are universal and should be a part of every agency's contract monitoring system. We identified the following components as necessary for an effective contract monitoring system:

1) Training employees in Contract Monitoring:

Training in contract monitoring increases the likelihood that individuals will monitor contracts reliably by giving them the appropriate background knowledge related to contracts. Many of the topics of contract monitoring training are included are as follows:

- 1. State and agency rules related to the procurement process;
- 2. Appropriate uses of funds, licensing requirements,
- 3. Roles of different agency officials;
- 4. Standard contract clauses

2) Written Policies and Procedures:

Written policies and procedures serve as a guide to agencies and their personnel in ensuring a consistent, high-quality contract monitoring process. Agencies may have written policies in place to cover the procurement process, but policies for contract monitoring are less common. This is despite the fact that an agency may have dozens of employees responsible for monitoring aspects of vendor performance and significant portions of its services contracted out. The American Management Association and the National Institute of Governmental Purchasing recommend that many of the following subjects be included in policy and procedure manuals:

- 1. Roles and responsibilities of the agency personnel Define who is responsible for contracting Contract correspondence Guidance on documenting interaction with the vendor.
- 2. Reports detailing contract monitoring efforts Types of reports and the information should be included.
- 3. Conflicts of interest Define a conflict of interest and steps that should be taken to avoid them.
- 4. Documentation of contract administration decisions.
- 5. Standard contract terms and conditions of contracts.

- 6. Monitoring of contract performance Guidance on assessing risk of poor performance and the methods that should be used to monitor performance.
- 7. Contract completion activities Assuring that all state property is returned including security items, that there are no outstanding claims, and that the vendor has met all the deliverables of the contract.
- 8. Dispute resolution Guidance on how disputes between the agency and vendor will be resolved, including what offices or officials should be involved and what documentation should be used.

3) Contingency Plans:

Contingency planning is a necessary component of the overall planning process that is often overlooked by agencies. It addresses how the agency would respond in the event of an interruption of service delivery. Contingency planning allows the program or service to be quickly resumed. While contingency plans are always necessary, the level of risk and contract amount will determine the formality and detail necessary in the plan. Detailed, written plans may not be necessary for small, low risk contracts, as long as the agency has analyzed and determined its course of action in case of vendor default. Agencies without contingency plans may pay additional costs for taking them back. A number of options are available for a default contingency plan: contracting with the next lowest bidder from the original solicitation; using another current vendor; delivering the service in-house; and contracting with another government entity.

4) Communicating Clear Expectations to Vendors

Effective contract performance is largely dependent on the vendor's ability to understand the requirements established by the agency. Creating a detailed Statement of Work, having performance measures in the contract and holding a post-award meeting with the vendor all contributes to the vendor understands of what is required and essential under the contract. By clearly stating contract requirements and performance goals, the agency reduces the potential for poor performance. This component includes detailed statement of work, performance measure and goal and meeting with vendor to clarify the work.

5) Contract Administration Plan

The development of a contract administration plan is essential to ensuring that a contract is properly monitored. A contract administration plan is a view of planned and completed activities and can be utilized throughout the contract period as a status report. Among the items that can be included are identification of deliverables, milestones, due dates, list of all contract modifications issued, summary of all invoices submitted and paid, and renewal dates. It should also detail the methods that the agency will use to monitor the vendor and the individuals or offices that will be responsible for the monitoring. The lack of a contract administration plan can result in gaps in the monitoring process.

6) Organized Contract Files

Maintenance of well-organized contract files is fundamental to contract monitoring. Contract files should be organized in a manner that allows someone to reconstruct the contract and understand its history in the absence of the contract administrator. Contract files should hold all the information necessary to know what was expected and what was received under the contract. At a minimum, files should contain the following:

- 1. Signed copy of the contract and purchase order;
- 2. Modifications to the contract;
- 3. Contract monitoring plan;
- 4. Contingency plan;
- 5. Sources solicited:
- 6. Method of evaluation and award;
- 7. Meeting minutes;
- 8. Contract correspondence;
- 9. Reports from any on-site visits;
- 10. Performance reports;
- 11. Records of complaints and vendor disputes; and,
- 12. All invoices and vouchers.

7) Payments Linked to Satisfactory Performance

Payments should not be made to a vendor unless the agency has some assurance that the vendor is making satisfactory progress in fulfilling the contract. An agency should hold the vendor responsible for meeting all contract requirements for quality, quantity, and timeliness. For contracts that involve monthly or quarterly payments, agencies should require a vendor to submit programmatic reports in advance of or concurrent with its invoices. The programmatic reports should be directly related to the terms of the contract. This arrangement permits the agency to delay payment of the invoice if all required reporting is not submitted in a timely and complete manner.

8) Regular Programmatic Reports from Vendor

Regular programmatic reports from the vendors are an effective method for the state agency to determine whether the vendor is adequately providing the contracted services. Reviewing monthly or quarterly reports allows state agencies to identify and act promptly in cases of actual or potential default. Agencies that fail to continuously monitor vendors' performance may allow problems to persist and may send signals to vendors that poor performance is permissible. The contract should require the vendor to provide specific programmatic information on a scheduled basis to determine if the performance measures are being met. At a minimum, programmatic reports should require information related to the performance measures (outputs and outcomes) in the contract and any deliverables required by the contract. In addition to stating what data is to be collected, the contract must also address the method of submitting the report, the person the report should be submitted to, the frequency of reporting, and what actions the agency may take in response to evaluation of the data. Agencies should require programmatic reports to be submitted at the same frequency as invoices submitted by the vendor. This allows the agency to review the vendor's performance before making a payment.

9) On-Site Monitoring

One method of monitoring performance is through visits to the vendor's facility. On-site monitoring visits can be used to verify actual performance against scheduled or reported performance and ensure that the vendor is dedicating sufficient resources and appropriate personnel to the contract. Agency officials should conduct random inspections of vendor records and the delivery of services to ensure all terms of the contract are being fulfilled. On-site monitoring visits are most effective when based on a specific methodology or a checklist of review tasks. Although simple face-to-face contact with the vendors may be helpful, a structured review provides more useful information to assess whether the vendor is fulfilling the contract terms. A written report detailing findings of the on-site review should be produced.

10) Use of Incentives and Consequences for Poor Performance

Performance reinforcements, such as incentives and consequences for poor performance, are helpful in obtaining optimal performance from the vendor. Financial incentives can be one of the most effective methods of inducing a vendor to perform a desired service, while consequences for poor performance written into a contract provide agencies with the ability to take disciplinary action against a vendor that fails to comply with contract terms. There are two types of incentives that agencies can provide to vendors – a bonus to the vendor for superior performance or allowing the vendor to keep a percentage of revenue collected. There are several types of consequences for poor performance as liquidation damages or termination of contract.

11) Access to Records/Right to Audit Clauses

When government services are contracted out, the vendor represents the state in providing the service. Agencies have a responsibility to verify the information that the vendor reports to them and to ensure that funds are expended properly. Because the records are the property of the vendor, the contract must include an agreement that the agency has access to and can audit those records.

12) Measuring Customer Satisfaction

All government services have a customer in the form of government agencies, private organizations, or a portion of or all of the general public. When a state agency contracts out a service, it does not abdicate its responsibility for the customer's satisfaction. There are numerous methods of measuring customer satisfaction, including the use of surveys, forums, and complaint/compliment forms.

A common way of measuring customer satisfaction is through the use of surveys. Survey feedback can be used by the agency to notify the vendor when contract terms are not being met. A second common method of measuring customer satisfaction is the use of forums. The contracting agency can arrange for meetings with customers, who are allowed to discuss any positive or negative experiences with the vendor. Finally, agencies may allow customers to express their opinions through complaint or compliment forms or phone lines. These may include paper forms, an online form on a website, or a phone number.

13) Dispute Resolution Procedures

Clear contract language should limit the number of disputes, but most contracts have at least minor disagreements between parties. The goal of a resolution process is to resolve all problems as soon as possible, especially before they escalate to contract termination or litigation. Disputes vary significantly in level of severity, with many being minor and worked out between the agency officials performing the day-to-day monitoring of the vendor and the vendor personnel actually performing the contracted service. However, if the dispute cannot be settled quickly, the agency should have procedures in place for the monitoring officials to notify the agency's procurement office. Agency officials should provide notification of problems and a timetable for resolution to the vendor in written form.

14) Closeout Procedures

Formal, written closeout procedures are recommended at the completion stage of the contract so that important elements are not overlooked. Contract closeout begins when the contract has been completed, all services have been performed and all products delivered. The use of a checklist of closeout procedures helps to assure that all actions have been completed. A contract closeout checklist should include verification that:

- 1) All invoices have been paid.
- 2) All property has been returned.
- 3) All deliverables have been accepted.
- 4) There are no pending lawsuits.
- 5) All required reports have been received.
- 6) Contract audit has been completed, if necessary.
- 7) There are no outstanding classified materials.
- 8) There are no outstanding changes or amendments.
- 9) All disallowed costs have been settled.

15) Post-Contract Review

At the end of a contract period, agencies should evaluate the vendor's performance and their own method of monitoring the vendor. These evaluations should provide the feedback necessary to determine whether a vendor should be awarded contracts in the future and whether the agency should improve its contract monitoring system. Even though these reviews are generally conducted after a contract has ended, contracts subject to renewal must be reviewed prior to the renewal decision being made (late in the contract period). In their evaluation of a vendor, agencies should consider conducting a programmatic review and a financial audit. All contracts should be subject to a final evaluation of whether the vendor has performed the services sufficiently to fulfill the contract terms. Agencies should also review their own methods for monitoring the contract to determine whether they were sufficient. This review should cover all aspects contract monitoring such as:

- 1. Did the contract and meetings with the agency give the vendor a clear understanding of the agency's expectations under the contract?
- 2. Did the agency's policies and procedures sufficiently address all issues that arose during the contract?

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3. Was the contingency plan used and did it work adequately?

- 4. Did the contract administration plan allow the agency to properly and quickly assess the performance of the vendor?
- 5. Did agency personnel have the skills necessary to properly monitor the contract?
- 6. Did the agency receive vendor reports that allowed it to determine if contract goals were being met?
- 7. If incentives and penalties were included in the contract, were they useful in compelling vendor compliance?
- 8. If dispute resolution was necessary, were the agency's procedures adequate?

IV. METHODS OF MONITORING AT CONSTRUCTION STAGE

1) Monthly progress report -

During the construction period, the concessionaire shall send, no later than 7 days after the close of each month to independent consultant a monthly report on progress of the construction works and shall promptly give such other relevant information as may be required by the Independent Consultant.

2) Inspection -

During the construction period, the Independent Consultant shall inspect the project at least once in a month and make a report of such inspection (the "Inspection Report") stating the reasonable detail of the defects and deficiencies, if any, with particular reference to the scope of project and specification and standards. It shall send a copy of the Inspection Report to concessionaire within 7 days of such inspection and upon receipt thereof, the concessionaire shall rectify and remedy the defects or deficiencies, if any, stated in the inspection report.

3) Tests -

For determining that the construction work conforms to the specifications and standards, the independent consultant shall require the concessionaire to carry out tests, at such time and frequency and in such manner as may be specified by the independent consultant from time to time for quality assurance. The size of sample for such tests shall normally comprise 10% of the quantity and number of tests prescribed by IRC. In the event that the results of any tests conducted establish any defects or deficiencies in the construction work, the concessionaire shall carry out remedial measures and a report to independent consultant.

4) Video recording -

During the construction period, the concessionaire shall provide for every calendar quarter, a video recording, which will be compiled into a 3 hour compact disc or digital video disc, as the case may be, covering the status and progress of construction works in that quarter. The first such video recording shall be provided within 7 days of the appointed date and thereafter, no later than 15 days after the close of each quarter.

5) Delay during construction -

If the concessionaire does not achieve any of the project milestones or the independent consultant shall have reasonably determined that the rate of progress of construction works is such that project is not likely to be achieved by the scheduled project date it shall notify the concessionaire to this effect and the concessionaire shall within 15 days of such notice by a communication inform the independent consultant in reasonable detail about the steps it proposes to take to expedite progress and the period within which it shall achieve the project completion date.

V. METHODS OF MONITORING AT OPERATION AND MAINTENANCE STAGE -

1) Monthly progress reports -

During Operation Period, the Concessionaire shall, no later than 7(seven) days after the close of each month, to the Independent Consultant a monthly report stating in reasonable detail the condition of the project including its compliance or otherwise with the maintenance Requirements, Maintenance Manual, Maintenance Programmed and Safety Requirement, and shall promptly give such other relevant information as may be required by the Independent Consultant.

2) Inspection -

The Independent Consultant shall inspect the Project at least once a month. It shall make a report of such inspection (the "O&M Inspection Report") starting in reasonable detail the effects or deficiencies, if any, with particular reference to the Maintenance Requirements, Maintenance Manual, the Maintenance Programme and Safety Requirements, and send a copy there of to the Concessionaire within 7(seven) days of such inspection.

Tests -

For determining that the Project conforms to the Maintenance Requirements, the Independent Consultant shall require the Concessionaire to carry out, or cause to be carried out, tests specified by it in accordance with Good Industry Practice. The cost of such test shall be borne by the Concessionaire. The Concessionaire shall, with due diligence, carry out or cause to be carried out all such tests in accordance with the instructions of the Independent Consultant and furnish the results of such tests forthwith to the Independent Consultant.

4) Monthly Fee/ Toll Statement -

During the Operation Period, the Concessionaire shall provide within 7 (seven) days of completion of each month, a statement of Toll/ Fee substantially in the form set forth in Schedule-M (the "Monthly Toll Collection Statement").

VI.CONCLUSION

- 1) The infrastructure development has limitations due to scarcity of funds and scarce budgetary resources. Hence government has allowed participation of private firm, in public beneficial program; with the help of contract such as BOT contract. (BOT) helps in improving infrastructure efficiency and solving government financial deficiency problem.
- 2) Insufficient and inadequate monitoring system hamper progress of the work and hence monitoring should be carried out at right time, in right manner so as to reduce losses in form of time and money. It has been observed that with the help of constant monitoring methods, the project delay can be avoided.
 - 3) Extra construction cost may be reduced by constant checking and monitoring.
 - 4) There is reduction in shortfall in performance.
- 5) With the help of two cases, it can be summerise that development is very essential for economic growth and contracts like BOT for economic growth. So, monitoring of this type of contracting are becoming essential.
- 6) We know that monitoring can't be done due to some circumstances but if we try to monitoring for possible activities, it will prove more beneficial to project. There are some simple but effective methods of monitoring to find out risks and to keep the project in right schedule.

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