Quality Mantra September, 2013 A Newsletter of International Certification Services **SPECIAL ISSUE ON BUILD, OPRATE & TRANSFER JAS-ANZ** NABCB Q M 0 0 0 9 ЕМОООЗ M 1900799IM



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OPERATE

TRANSFER

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Message From the desk of :-Madan Singhal

What is BOT?

Build-operate-transfer (BOT) or build-own-operate-transfer (BOOT) is a form of project financing, wherein a private organization (P.O.) receives a concession from the Govt. or public sector to finance, design, construct, and operate a facility. This enables the project proponent (P.O.) to recover its investment, operating and maintenance expenses in the project.

In a BOT project, a private company is given a concession to build and operate a facility that would normally be built and operated by government. The private company is also responsible for (Regional Manager) financing and designing the project. At the end of the concession period, the private company returns ownership of the project to the government (although this need not be the case). The concession period is determined primarily by the length of time needed for the facility's revenue stream to pay off the company's debt and provide a reasonable rate of return for its effort and risk.

> In India most fame BOT work are Road & Highway, Dame & Power Generation, Parking facility and Construction of Bridges. In foreign countries Nuclear Power Station, IT Centers, Harbors construction are also planned under this scheme. In our country several public sectors were

The three stages of a **BOT** project are:

Build: Set-up the facility and infrastructure, as per the specification and standards of contract. BUILD

Operate: Collection of Tax/Fees/Charges/Toll etc as per the set norms of contract.

Transfer: Transfer assets and handover operations after completion of specified

period or collection, to the authority as defined in contract.

Other Concerning Contract Systems:

The acronym BOT is often used interchangeably with BOOT or Build-Own-Operate-Transfer. Variant include BOO (build-own-operate without any obligation to transfer); BT (Build and Transfer); BLT and BRT (build, rent or lease and transfer); BT build and transfer immediately); BTO (build, transfer and operate), DBFO (design, build, finance and operate) and DCMF (design, construct, manage and finance); MOT (modernize, own/operate and transfer); ROO (rehabilitate, own and operate); and ROT (rehabilitate, own and transfer).

Advantages of BOT :

Pay & enjoy the well maintained facility.

Use of private sector financing to provide new sources of capital, which reduces public borrowing and direct spending and which may improve the host government's credit rating.

Ability to accelerate the development of projects that would otherwise have to wait for, and complete, for sovereign resources.

Use of private sector capital, initiative and know-how to reduce project construction costs, shorten schedules and improving operating efficiency.

Allocation to the private sector of project risk and burden that would otherwise have to be borne by the public sector.

The involvement of private sponsors and experience commercial lenders, which ensures an in-depth review and is an additional sign of project feasibility.

Technology transfer, the training of local personnel and the development of national capital market.

In contrast to privatization, government retention of strategic control over the project, which is transfer to the public at the end of the contract period.

The opportunity to establish a private benchmark against which the efficiency of similar public sector projects can be measured and the associated opportunity to enhance public management of infrastructure facilities.





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Facility Required to be Maintained by BOT Contractor at toll collection : (in case of Road & Bridge) Projects:

- If required multi pass and stand-by system has to construct.
- Collection of toll from individuals has to be completed in specified time.
- Best available technology needs to be implemented.
- Facility like Wash Room, Restaurant, First Aid, Drinking Water, Public Tele. Booth etc. needs to be maintained.
- Road Safety Rules needs to be followed.
- Regular training needs to be provided to staff for safety, behavior, emergency response etc.



How ISO Certification Help Bot Management

BOT is an inevitable techno economic architecture of improving infrastructure facilities given the very fact that government exchequer is fund starved. It is an integrated contract wherein Building of facility is combined with its day to day maintenance so that at no point of time the user of facility is put to inconvenience. These contracts are long term in nature and it is important that organization evaluates risk and reward carefully and do not do anything under over optimism by passing the system aspect. ISO certification which evaluates system soundness is very important for any BOT Project. In recent past, there has been instance when the Courts have ordered to foreclose the toll contract (e.g. XY Construction Delhi) because there were glaring mismatch in service quality i.e. time taken at toll booth. Business community has also woken up to the reality now and is seriously considering improving quality of service and getting ISO certification. This article focuses on conceptual aspect of BOT projects, its business canvass and how ISO Certification can add value to the entire business process.

Above is the fact findings of M/S Prakash Asphalting And Toll Highways (India) Limited, who is the major operator in M.P.

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- All requirement of contract can very well be managed by adopting ISO System Requirement. Normally BOT Top Management does not have their seating near construction site or at TOLL collection, hence to operate at distance ISO System is the best support.
- Customer Satisfaction in the main requirement of contract and ISO system support the same on the top of all.
- Preventive Action helps in avoiding potential failures. There are several examples where BOT contractors are benefited. One single unseen failure cause major delay in project and in BOT, delay is directly proportionate to losses and graph is hyperbola. One agency working on Road project in MP, completely lost they were not having ISO certification, while another ISO certified company has given the good attention on PA* and completed project well within time (* Railway do the job according to their planning only, hence BOT contractor has started Railway formalities from the very day of bridge construction).
- Safety requirement can be meticulously followed by adopting OHSAS 18001 certification.

HOW 9001 CERTIFICATION HELPS IN BOT OPERATION SYSTEM (IN CASE OF TOLL COLLECTION BASED CONTRACT FOR ROADS & BRIDGES)

ISO 9001 all requirements are highly beneficial to run the management system of BOT. As a sample we are explaining here some points, like: BOT operation become important from the stage of tendering. Any failure in survey analysis and competing in tender may cause a big loss to operator. Second important point is Potential Failure Study. In several cases project was delayed because possible potential delays were not envisage or analyzed. This delay reduced the period of collection therefore or/also cause the higher burden of Bank Interest. Third important point is construction activity and fourth is Public Satisfaction. Details are as following:

- Before quoting rates in tender, BOT Operator (BO) needs to have detailed survey of traffic and possible collection. Once rate quoted and if job awarded in L1, it is liability of BO to complete the job in best possible minimum time so that collection can be started earliest.
- Please see following requirement of ISO 9001, which cover almost every care of above:



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O ISO clause 7.2.1 & 7.2.2 state that:

7.2.1 Determination of requirements related to the Services/ Product:

The organization shall determine

- a) requirements specified by the customer, including the requirements for delivery and post-delivery activities,
- b) requirements not stated by the customer but necessary for specified or intended use, where known,
- c) statutory and regulatory requirements applicable to the Services, and

d) any additional requirements considered necessary by the organization.

NOTE Post-delivery activities include, for example, actions under warranty provisions, contractual obligations such as maintenance services and supplementary services such as recycling or final disposal.

7.2.2 Review of requirements related to the Services/ Product:

The organization shall review the requirements related to the **Services**. This review shall be conducted prior to the organization's commitment to supply **Services/ Product** to the customer (e.g. submission of tenders, acceptance of contracts or orders, acceptance of changes to contracts or orders) and shall ensure that

a) product requirements are defined,

b) contract or order requirements differing from those previously expressed are resolved, and

c) the organization has the ability to meet the defined requirements.

Records of the results of the review and actions arising from the review shall be maintained (see 4.2.4).

Where the customer provides no documented statement of requirement, the customer requirements shall bemconfirmed by the organization before acceptance.

Where product requirements are changed, the organization shall ensure that relevant documents are amended and that relevant personnel are made aware of the changed requirements.

- Before Starting construction work, BO needs to do potential failure analysis, so that any type of delay can be avoided. These potential Failures may be:
 - * Delay in working of other supporting authority: like Railway, Local authority etc
 - * Natural disaster.
 - * Political disturbance.

Please see following requirement of ISO 9001, which cover almost every care of above:

8.5.3 Preventive action

The organization shall determine action to eliminate the causes of potential nonconformities in order to prevent

- their occurrence. Preventive actions shall be appropriate to the effects of the potential problems.
- A documented procedure shall be established to define requirements for
- a) determining potential nonconformities and their causes,
- b) evaluating the need for action to prevent occurrence of nonconformities,

c) determining and implementing action needed,

d) records of results of action taken (see 4.2.4), and

e) reviewing the effectiveness of the preventive action taken.

- During construction BO will have work strictly on PERT/CPM planning and should have to follow all standard method/procedures/practices.
- Please see following requirement of ISO 9001, which cover almost every care of above:

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7.1 Planning of product/Service realization

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The organization shall plan and develop the processes needed for product realization. Planning of product realization shall be consistent with the requirements of the other processes of the quality management system (see 4.1).

In planning product realization, the organization shall determine the following, as appropriate:

a) quality objectives and requirements for the product;

b) the need to establish processes and documents, and to provide resources specific to the product;
c) required verification, validation, monitoring, measurement, inspection and test activities specific to the product and the criteria for product acceptance;

d) records needed to provide evidence that the realization processes and resulting product meet requirements (see 4.2.4).

The output of this planning shall be in a form suitable for the organization's method of operations.

NOTE 1 A document specifying the processes of the quality management system (including the product realization processes) and the resources to be applied to a specific product, project or contract can be referred to as a quality plan. NOTE 2 The organization may also apply the requirements given in 7.3 to the development of product realization processes.

• During the TOLL collection operation "customer satisfaction" is the basic requirement of authority.

Like: no unwanted delay to passengers, facility of smart card, restaurant, Public Booth, washroom,

first aid etc.

• Please see following requirement of ISO 9001, which cover almost every care of above:

5.2 Customer focus

Top management shall ensure that customer requirements are determined and are met with the aim of enhancing customer satisfaction.

8.2.1 Customer satisfaction

As one of the measurements of the performance of the quality management system, the organization shall monitor information relating to customer perception as to whether the organization has met customer requirements. The methods for obtaining and using this information shall be determined.

NOTE Monitoring customer perception can include obtaining input from sources such as customer satisfaction surveys,customer data on delivered product quality, user opinion surveys, lost business analysis, compliments, warranty claims and dealer reports.

CORPORATE JOKES

WHAT A FEED BACK:

- A: I have the perfect son.
- B: Does he smoke?
- A: No, he doesn't.
- B: Does he drink whiskey?
- A: No, he doesn't.
- B: Does he ever come home late?
- A: No, he doesn't.
- B: I guess you really do have the perfect son. How old is he?
- A: He will be six months old next Wednesday.

WHAT A ROOT CAUSE ANALYSIS:

A man goes to the doctor and says, "Doctor, wherever I touch, it hurts."

The doctor asks, "What do you mean?"

The man says, "When I touch my shoulder, it really hurts. If I touch my knee - OUCH! When I touch my forehead, it really, really hurts."

The doctor says, "I know what's wrong with you - you've broken your finger!"



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<u>Horoscope Month Of September</u>

Aries: This month you will get relaxed mentally and physically. Most of the stressful situations will come to an end. You can able to put check to some major issues with your ability and skill. Your public communications may improve, filled with full of confidence and capabilities. It is very important to put your best foot forward and take care of any blocks that may flow you from your goals. On the whole the month will go with full of joy and energy. **Taurus:** - Good days ahead! Success will be in every step of life. Public communications and your own efforts are quite appreciable and growthable. Your efforts will come in true, long travels or any confirmation on that gives pleasure and happiness. Taking steps ahead for betterment of life will give full of confidence and success. Over all it is a quite remarkable month.

Gemini: - This month seems to be a better month. More family comforts are going to seen. You can able to see good results in personal front. Physically and mentally you will go perfectly this month. Keep patience. Don't give commitments. Skills will improve this month. Overall this month you can able to see more comfort time. Financial improvement will put you happy. Hectic schedule will put you some physical stress.

Cancer: - This month will be neutral in all aspects. Put control on actions. Respect elders, commitment on words and actions should be strictly followed. You can able to see stress in personal life. More public relations are required, involve yourself in general work. Take some more time in finishing assignments don't repeat mistakes. Pending funds from government officials or loans may get clear with hard work.

Leo: - This month you will get more suffocated in personal life, you can't able to take a proper decision in your general work. But ascendant lord will put you strong mentally. Don't take help from others. Some family issues may pull you in controversies. Put control on expenses. Spend some more time with family. Keep patience. Be neutral and worship lord subrahmanya.

Virgo: - Stress on work this month. Your capabilities will be recognized. Don't give oral commitments. Put control on expenses which are seen in personal life. Put proper transactions in bank. Loans may be cleared with hard work. Your ability will give negative impression.

Libra: - This month will go average. You have to monitor on expenses this month. More mental tension put you worry. Heavy work in profession, you may get insulted with your colleagues or higher authorities. Efficiency in professional front may put you strong acquiring new positions or employment opportunity will give happiness. Second half of month will be a bit relaxed.

Scorpio: - Struggle time this month. Most of the things will get pending or postponed unwontedly. Less family satisfaction. Take care of your health. Pending finance will get more delay. You may get more mental stress and behavior is completely different this month. Everybody surrounding look like an enemy. Do Lord Ganesh aradhana for better results.

Sagittarius: - This month will be a fruitful month. You may able to see family satisfaction in a slow motion. Far trips with family keep you happy. But put control on your thoughts and behavior. This month you may get short temper or impulse on unnecessary issues. Unnecessary financial expenses will put you in worry. Hectic schedule in profession, may give more responsibilities in profession. You will meet new friends this month.

Capricorn: - This month will be quite average. More stress on personal life, not able to finish assignments in stipulated time. Bank loans may get cleared. Your travels may confirm in second half of the month. You may lose your patience. More expenses on travel is seen. Things will get procrastinated unwontedly. There are lot of issues in your social life, your friends may leave due to some sensitive reasons.

Aquarius: - This month will be good to you in all ways and means. Most of the things will take you in to success mode. You will be fully energetic and also in a stressful situation. Things will settle in a slow motion this month. You can have good social status and favorable time in profession. Plenty of small travels are seen in this month. Public communication is going to be good this month. Some unexpected expenses put you in worry and tense.

Pisces: - It is an average time for this sign. Even putting great efforts results will be like zero. Loss of confidence may give more mental and physical stress. Put control on unnecessary expenses which put you in worry and tense. With your broad mindedness you may overcome some issues. Government officials may be strictly follow the rules and regulations. Unexpected expenses will give more stress.

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QUALITY THOUGHT

लहरों से डर कर नौका पार नहीं होती, कोशिश करने वालों की कभी हार नहीं होती।

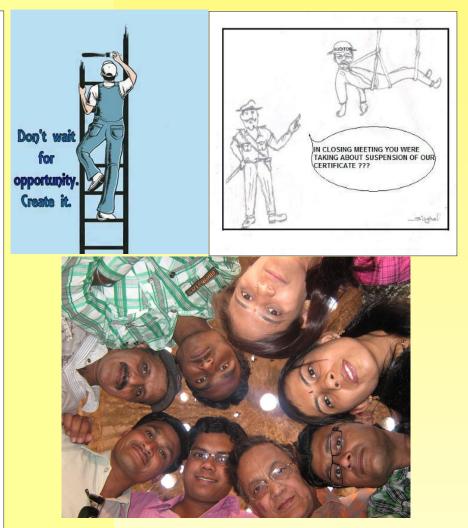
नन्हीं चींटी जब दाना लेकर चलती है, चढती दीवारों पर, सौ बार फिसलती है। मन का विश्वास रगों में साहस भरता है, चढकर गिरना, गिरकर चढना न अखरता है। आखिर उसकी मेहनत बेकार नहीं होती, कोशिश करने वालों की कभी हार नहीं होती।

इबकियां सिंध में गोताखोर लगाता है, जा जा कर खाली हाथ लौटकर आता है। मिलते नहीं सहज ही मोती गहरे पानी में, बढता दगना उत्साह इसी हैरानी में। मद्वी उसकी खाली हर बार नहीं होती, कोशिश करने वालों की कभी हार नहीं होती।

असफलता एक चनौती है, इसे स्वीकार करो, क्या कमी रह गई, देखो और सधार करो। जब तक न सफल हो, नींद चैन को त्यागो तम, संघर्ष का मैदान छोड़ कर मत भागो तम। कछ किये बिना ही जय जय कार नहीं होती, कोशिश करने वालों की कभी हार नहीं होती।

In respect of : Harvansh Ray Bachhan.

Disclaimer



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