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International Experience with Contractor Driven BOT Concessions

Case:

A Contractor Promotes a BOT Project with MOT in a Developing Country

Submitted by:

Jens Vestgaard
Kampsax International A/S

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1.0 INTRODUCTION

In the traditional form of BOT projects private-sector sponsors - usually international contractors, suppliers, plant or system operators, together with local partners, incl. Government, make equity investments in a private project company that will **build** the project, **operate** it long enough to pay back the project debt and equity investment, and then **transfer** it to the host Government.

The BOT approach to building and financing infrastructure projects has been used for, among others, toll roads and bridges, power plants, port facilities, transmission lines and water supply systems.

2.0 THE INTERNATIONAL BOT EXPERIENCE

Over the past years the development of the private sector moved from the periphery to the center of economic development strategies. A new pragmatism replaced earlier doctrinal objections to an expanding role for the private sector.

The commitment of a number of developed and developing countries to increase reliance upon market disciplines and private enterprise is creating improved opportunities for more effective utilization of domestic savings and constructive international co-operation.

A number of approaches have been used to accelerate development of the private sector. The following will in general suggest conceptual and procedural activities that may be required in order for an economy to determine its own priorities for action and external assistance for developing countries.

Some **general principles** are applicable to most economies seeking to enhance private sector contribution to growth, production, employment and revenues:

The **most important prerequisite** is a strong, competent Government, capable of delivering essential public services and maintaining coherent, growth-oriented economic policies and an effective and transparent regulatory and legal framework.

A **second principle** is that a development project which cannot be sustained except with public subsidy must be appraised with special caution because of the risks of market and development distortions.

The following general components for enhancing private sector involvement in economic development can be recommended:

- Support of general economic policy adjustments designed to induce private investment,

- Execution of a phased deregulation or reduction of Governmental intervention in business, and of legal reforms which strengthen the Government's capacity to promote competitive markets, prevent abuses of monopolies and protect the environment,
- Measures to expand the availability of investment funds to private enterprises, including long-term efforts to develop efficient banking and other financial markets institutions,
- Development of infrastructure and training required by private enterprise,
- Rationalization or privatization of selected state-owned enterprises, and
- Enlarging the role of the private sector in providing basic social services and infrastructure (BOT-arrangements).

Policy reforms to establish a coherent economic environment conducive to private enterprise development are essential, but they are not sufficient. "Getting prices right" is only the first requirement of private sector development. The other listed measures, which entail institutional development, are also required. Country-based co-ordination among the national economic agents and between them and the external financial institutions is essential to accelerated private sector development.

While most of these activities are primarily designed to serve local private initiatives, they will also encourage foreign direct investment. This dual benefit stems from the fact that **a major consideration in foreign investment decisions is whether the country's own private businesses are investing and growing at home, and whether the country offers an expanding "commercial infrastructure".**

3.0 "BOT LESSONS"

This section presents the main "BOT-lessons" that have been extracted from a wide-ranging review of international BOT project experience. These lessons are generally intended to facilitate attracting private sector involvement in BOT infrastructure projects.

3.1 What to expect in BOT Projects and how to tackle them

BOT projects tend to be:

a) Complex,
b) Time / Effort Consuming,
c) Costly to Develop, and
d) Risky.

a) Complexity:

This is mainly due to:

- Various project **risks** which must be identified and allocated among:

    - Sponsors,
    - Other shareholders,
    - Creditors,
    - Governments, and
    - Others (e.g. insurance companies etc.)

- BOT is a unique concept and there are few standard solutions
- Each case seems to be different, and
- not too many people know how to structure BOT projects properly.

b) Time / Effort Consuming:

- Resolving the above complexity takes time to:

  - Devise, and
  - Negotiate solutions.

c) Cost:

- Time is money, and
- Equity and project finance is more costly than sovereign loans.

d) Risk:

- After so much time / effort / cost, many BOT projects do not materialize,
- Bad after-taste experienced by the parties involved means alienation of potential sponsors and financiers, and
- BOT may manifest negative or adverse consequences for the countries which then loses the BOT option to do large infrastructure projects in the private sector.

3.2 Why then do BOT projects?

- Add private sector (financial, management and entrepreneurial) inputs to those of Government to achieve / realize more projects,
- Mobilize privately sourced funding,
- Get on the "right" side of donors (privatization is growing as a tool for economic development),
- Gain in competitiveness / yield out of international financial institutions (IFI's),
- Stretch public budgets and managerial resources,
- Avoid "white elephants",
- Gain in potential efficiency (of private sector),
- Gain in potential technology transfer,
- Competition brought in by BOT is good for the country, and
- Philosophical (development-wise) benefits from private sponsorship.

3.3 How then to do BOT Projects?

- In a simplified manner,
- By a highly knowledgeable, small group
- With proper guidance
- With as high an involvement of top entrepreneurs as possible
- With a maximum element of competitive bidding
- With as attractive a legal framework for investors (e.g. for contract negotiations and administration) as possible
- With "anchor" institution,
- With full support of top authorities,

- With clear project priorities and as efficiently as possible
- With maximum project preparation
- Only as one of the options to carry out projects.

4.0 THE CITY BYPASS PROJECT EXAMPLE

A foreign Contractor is promoting on his own behalf a City Bypass Project involving an existing bridge facility and construction of new bridge and connecting road facilities. The Contractor is presenting the proposal to the local Government through MOT.

The example is designed for the purpose and does not relate to any existing project.

5.0 THE CITY BYPASS PROJECT PROPOSAL

5.1 THE INTENTION

It is the intention that the City Bypass Project should be structured as a build, own, operate and transfer project (BOOT Project). It will therefore be necessary to incorporate a privately owned limited liability company. The company would be capitalised to the extent of 25% of total project costs, estimated to be US$ 142.56 million, i.e., a total capital of US$ 35.64 million.

5.2 FINANCIAL STRUCTURE

The Project Company (the City Bridge and Road Company Limited) would have as its objectives the purchase of the existing bridge over the River BT; in phase I the construction of a new bridge over the river together with the construction of a new bypass around the city crossing the River BT at the new bridge and connecting with the Wala Road; a total of 18 kilometres approximately, of new roads; in phase II the construction of a second new bridge adjacent to the existing bridge, the upgrading of the Fund Road, flyovers on each side of the new bridge and a flyover over the railway crossing on the highway, plus upgrading of the highway through TOB Town.

The City Bridge and Road Company would seek a concession to own and operate the bridges and bypass for a minimum period of 20 years, with the estimated construction period of phase I being 36 months from the signing of the Concession Agreement, with phase II commencing on completion of phase I and being completed at the end of year 7.

The existing bridge has been valued at US$ 7 million, and it is our intention to offer a shareholding in the City Bridge and Road Company Limited to the Government, as owners of the bridge, equal to the valuation of the bridge. This would represent a shareholding of 19.64% in the Company.

We would anticipate that the foreign Supervisory Contractor would participate in the equity of the Company to the extent of 10% at a cost of US$ 3.5 million with the balance of the shareholding of 70.36% subscribed by local companies and/or local or foreign financial institutions. We have assumed a minimum return on equity for the shareholders of 18% p.a. after tax. We have also assumed that dividends will bear a dividend tax of 15% for foreign shareholders and 5% for local corporate shareholders.

Under the current Investment Law, the Government guarantee not to expropriate or nationalize equity shareholdings held by foreigners. In the normal course of events, the foreign shareholder can dispose of its shareholdings, in this case probably after a period of about 8 years which would cover the construction period and one operating year of the Company and remit the proceeds.

It is the intention that the City Bridge and Road Company will obtain availability of foreign exchange for all foreign remittances, including debt service, dividends and any management fees if applicable. In addition, the State Bank has a foreign exchange rate guarantee scheme, where for an annual premium the Bank will fix the rate between the local currency and five major currencies, including the US$ and Pound Sterling, on an agreed date at the commencement of the Project. The premium varies and is set by the State Bank on the basis of the relationship between the local and the particular foreign currency. In the recent past the premium for the US$ has varied between 3.5% and 4% p.a. To allay the foreign exchange concerns of foreign investors, under the World Bank Private Sector Development Fund the World Bank has offered a foreign exchange standby loan to the Government, to be drawn in case of need under force majeure or a shortage of foreign exchange.

The debt portion of the Project is assumed at 75% of total project cost, i.e. US$ 106.92 million. The general details of the Project and our initial financial and economic analysis have been shown to the World Bank, which has agreed in principle to consider the Project within the World Bank sponsored Private Sector Development Fund; subject to a full review by the World Bank of the bridges and road design, implementation and construction programme, the traffic forecasts and the final financial and economic feasibility study. We have therefore assumed that the World Bank would, through the Fund, provide finance up to 30% of total project cost, i.e. US$ 42.77 million. Together with equity, this would provide finance for 55% of total project cost.

The balance of the debt we have assumed would be met by a loan of US$ 28.51 million from financial institutions such as the Asian Development Bank, the Islamic Development Bank, the Commonwealth Development Corporation, and a loan of US$ 35.64 million from local banks. Should it prove difficult to raise this amount of local finance then we would increase the amount borrowed from the foreign banks or financial institutions. The terms and conditions applicable to the loans from the World Bank, the Asian Development Bank and the local banks are set out in the Financial Plan - ref. Annex B.

In case of cost overruns or project delays for whatever reason, an Overrun Finance Facility has been incorporated in the financial structure for an amount of 20% of the initial estimated total project cost, i.e. 20% of US$ 142.56 million. The maturity of this facility will be the construction period and the cost will be 1/2% Commitment Commission on the amount of the facility undrawn, payable every six months in arrears during the construction period. The facility will lapse on completion of both phases, i.e. at month 84 from signing of the Concession Agreement.

In the Concession Agreement there would be a clause to protect the City Bridge and Road Company preventing any other party or parties building another bridge within an agreed distance of the existing and new bridges over the River BT during the concession period. There would also be a clause to the effect that if traffic growth was in excess of the independent forecasts, the City Bridge and Road Company during the concession period, would have the first option to make a proposal to handle the additional traffic, either through modifications and extensions to the existing bridges and bypass, or by the construction of another new bridge and the necessary link roads.

5.3 MANAGEMENT

With regard to the management of the City Bridge and Road Company, it is expected that the normal commercial and financial management of the Company will be provided by the supervising foreign contractor, together with a proper training scheme to train local management to take over this responsibility at the date that the supervising foreign contractor disposes of its shareholding in the Company.

As regards responsibility for the collection of the tolls, three options appear to be available:

- The local company providing the commercial and financial management is also responsible for toll collection.
- One of the other local company participants could be responsible for toll collection.
- Responsibility for toll collection could be sub-contracted by the Company to an acceptable, responsible local third party.

5.4 CONTRACTUAL STRUCTURE

The principal contract is, of course, the Concession Agreement between the Project Company (City Bridge and Road Company) and the Government Agency granting the Company the right to purchase the existing bridge over the River BT, construct two new bridges and a bypass around the City, with upgrading of the Wala Road and the Highway in two phases, together with the concession to collect tolls on all the bridges for the 20 years.

The second contract between the Project Company and International Contractor will appoint the Contractor as the design and engineering consultants as well as the financial adviser.

The third principal contract will be the Construction Contract between the City Bridge and Road Company and the supervising foreign contractor. The foreign contractor will arrange for the construction work to be bid to suitable local contractors on a sub contract basis for construction of the bypass including associated structures (18 kilometres) and the upgrading of 12.2 kilometres approximately of the Fund Road and the highway at TOB Town.

The fourth contract will be a Management Contract between the Project Company and probably a major local company holding a major share of the equity.

A plan of the contractual arrangement is set out in the enclosed figure, Annex A.

5.5 ECONOMIC AND FINANCIAL EVALUATION

We have carried out an in depth economic and financial evaluation of the City Bypass Project. On the basis of a 20 year concession and a total capital cost, including the purchase of the existing road bridge and construction insurance, of US$ 142.56 million, the project can meet debt service, operating costs and provide a real equity return of not less than 18% p.a. with an average toll in year 3, when the first new bridge opens, of the equivalent to US$ 1 per vehicle. This toll could be reduced to US$ 0.90 if the Project Company were allowed a five year tax holiday from the opening of the first new bridge by the Government.

This evaluation is based on the following other assumptions:

- **Inflation** - A dollar inflation of 6% p.a. and a local inflation of 10% p.a.
- **Foreign Exchange Rate** - The start up foreign exchange rate will be fixed at the date of commencement. The interest rates on the foreign exchange loans include a State Bank exchange guarantee premium of 3.5% p.a.
- **Value of Existing Bridge** - The existing bridge has been valued by the Government at US$ 7.0 million.
- **Traffic**- The traffic over the existing bridge in 1992 was 43,000 vehicles per day with a growth rate of 6% p.a. giving traffic in 1994 when construction starts of 50.38 million. At this traffic growth rate the total capacity of all bridges of 50.38 million vehicles p.a. is reached at the end of year 18.
- **Tolls** - Tolling on the existing bridge will commence year 1. The toll level will be reviewed annually subject to local inflation.
- **Maintenance and Insurance Costs** - Maintenance is assumed at 0.5% of construction costs. Insurance is assumed at 0.2% p.a. on the value of the bridges with loss of profits at 0.2% of revenue.
- **Debt** - The full debt profile is set out in the Financial Plan.
- **Depreciation** - Calculated on the declining balance : plant at 10% p.a., bridges and roads at 5% p.a. Cost of plant and equipment is assumed as being 15% of construction costs.
- **Tax**- A corporate tax of 55% with losses carried forward for up to six years. We have also included a dividend tax of 15% for foreign shareholders and 5% for local shareholders.
- **Debt Service Coverage** - A debt service coverage of 1.5 : 1. No dividends are paid until this debt coverage ratio is met and opening cash flow is positive without borrowing.
- **Drawn Down** - We have drawn down equity and debt on the basis of maintaining the debt equity ration at all times at 75 : 25.
- **Equity Return** - An inflated equity internal rate of return of not less than 18% p.a.

5.6 SUMMARY OF CITY BYPASS PROJECT PROPOSAL

We believe the results of the economic and financial evaluation are satisfactory, the internal real rate of return of the project of 23.46% p.a. and to equity holders of 24.59% and a deflated return of 13.18% are acceptable and compensate for the delay in dividend payments until year 7, with a minimum debt service coverage of 1.5 : 1 which is reached initially in the first year, demonstrates the Project's ability to meet its debt service.

We also believe an average toll of the equivalent to US$ 1, which is only reached after the first new bridge comes into operation, should be acceptable to road users as a reasonable price to pay for the removal of the present major traffic congestion in and around the City. This level of toll compares favourably with tolls currently charged other places in the country.

6.0 COMMENTS TO THE CITY BYPASS PROJECT PROPOSAL

The following comments are based on a review of the project proposal and are intended to help in the preparations for negotiations between the host Government and the contractor.

The comments do not pretend to be exhaustive in any way.

1. Normally, Letter of Intent is issued after review of the full feasibility study and supporting details (e.g. project costs, designs, traffic, sponsors, organization, financing, operating cost, maintenance, quality of service, IRR). The review is intended to determine adequacy of the proposal and of the sponsors, and that the component elements of the project are competitive and in line with the market. Here, Letter of Intent is being issued before full feasibility study. This approach should be adequately justified, otherwise it may be open to criticism.

2. The feasibility study and the detailed formal proposal should be independently evaluated, as indicated in 1 above.

3. The Government is giving the sponsor 9 months to do the full feasibility study, present the detailed proposal and agree / sign the concession. In so doing, it might be discouraging other potential competitors. The suggestions are: not to give exclusivity; and remain open to other potential sponsors who may wish to study the project, do feasibility study and make proposals. However, the same time frame, as above, should apply to others as well.

4. It is not clear from the proposal why the existing bridge is said to be worth USD 7 million.

5. The Government and the project financier will want to know who is the local sponsor, who is the foreign contractor, and how suitable are they to perform the role of the main sponsors. Are they professional and high calibre? Can they be expected to attract financing from leading financial institutions based on their experience, reputation and strength? What are their track record and motivation in this project? Their equity commitment may not be large enough.

6. The foreign contractor apparently intends to sell its shareholding on year 8, following project completion. Project finance institutions usually require the main sponsor to remain in charge while their debt is outstanding. This way the foreign contractor will be interested in looking after the project throughout its life, and not merely during the construction stage. This should be addressed in negotiations.

7. Project financiers will likely want an independent traffic study and confirmation of traffic percentage in the mix and reasonableness of average toll.

8. Another independent check will be to ensure that the fees indicated by different shareholders / suppliers (e.g. foreign contractor, management contractor, toll collecting contractor, financial advisor) are in line with the services to be provided and with market conditions.

9. It is doubtful that the Government will want to pass along the World Bank loan (through the Private Sector Development Fund) at cost. Usually, there is a charge for the guaranty of the Government; or market rates are used.

10. Project financiers would expect: that the main sponsors would be prepared to provide (or participate significantly) in the overrun financing facility that is mentioned in the proposal; and that a significant part of it be equity.

11. Maintenance expense projected at 0.5% of capital cost appears low. One wonders about the state of repair / quality of the assets that Government will receive after 20 years. The standards (for quality of assets, maintenance, service) need to be defined and agreed upon.

12. If the Government gives a first option now (for this company to do a new bridge before 20 years should need arise), it should consider charging for it.

13. The foreign contractor appears to be both contractor and supervisor. This may generate conflict of interest of appearance thereof. Roles and responsibilities must be defined.

14. Foreign Exchange Risk. The swap cost may be 5.5% per year instead of 3.5% assumed in the proposal.

15. Optical impression is: Contractors' main interest is in high cost contracts and not in a top company, self sufficient and capable of excellent performance. This is likely to hinder raising the remainder of the equity, as potential shareholders want the main sponsors to make their money at the same time they will (i.e. through dividends rather than up-front fees). Project financiers may require delaying and subordinating (i.e. yielding payment priority) contractor fees to debt service.

16. There will be substantial negotiations on risk allocation / reduction with project financiers; and on performance requirements with contractors. The suggestion is to prepare for negotiations while the full feasibility study is underway.

17. One suggested option: Approach regional IFC Representative informally for his reaction. Then develop options and preparations for evaluation of detailed formal proposal and for negotiations.

18. The Government should retain a say in every important aspect of the project (e.g. should not agree now to any financing terms + conditions or source of financing).

19. If sub-contractors obtain much lower cost, who benefits? How much is project cost being increased on account of risk? What will be the handover procedures and responsibility? What will be oversight / regulatory procedures and institution performing it?

20. The company that implements the project should be an open capital company.

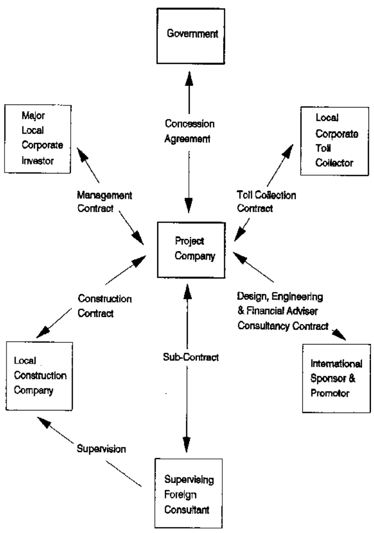
7.0 CONCLUSION

As can be seen from the above set of comments the proposal is not in line with the best international practices on a number of issues. The Government could - based on arguments related to general BOT principles and procedures - decline the proposal right away. However, if the Government is still interested substantial changes will have to be negotiated in the proposal in order not to end up with a less successful project as well as a potential financial burden on the Government.

Contractor driven projects are possible and a number of concessions do exist, including sucesssful ones. It should, however, be recommended that both host Governments and active contractors consult the international best practices when engaging in BOT arrangement. The BOT concept has interesting potentials - also with contractors in the driver's seat. The BOT option is also a very fragile instrument and should therefore be treated with caution in order not to generate too many bad after-taste experiences and as a consequence the Governments loose the dynamic force provided by contractors for doing large infrastructure BOT projects in the private sector.

ANNEX A: CONTRACTUAL STRUCTURE

Example: Contractual Structure



ANNEX B: CITY BYPASS PROJECT - FINANCIAL PLAN

		US$ amount	Interest Rate	Grace Period	Repayment Period	Fees	Remarks
EQUITY							
Govt.	19.64%	$ 7.00 m	18% p.a. Equity Return After Tax	NA	NA	NA	Dividend Tax Foreign Shareholders: 15% Dividend Tax Local Shareholders: 5%
Foreign Contractor	10.00%	$ 3.56 m					
Local Companies & Foreign/Local Financial Institutions	70.36%	$ 25.08 m					
TOTAL EQUITY	100.00%	$ 35.64 m					
DEBT							
World Bank		$ 42.77 m	8.5% p.a.	5 years	14 years Semi-annually	1/2% p.a. Commitment Commission	+ 3.5 % p.a. FX Rate Premium
ADB/IDB-CDC		$ 28.51 m	11% p.a.	4 years	7 years Semi-annually	1% p.a. Commitment Commission + 1 1/2% flat	+ 3.5% p.a. FX Rate Premium
Local Banks		$ 35.66	15% p.a.	4 years	6 years Semi-annually	3/8% per quarter Commitment Commission + 1 1/2% flat	
TOTAL DEBT		$ 106.92 m					
TOTAL PROJECT COST		$ 142.56 m					