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*Meeting of Experts on Guidelines
for the Development, Negotiation
and Contracting of Build-Operate
Transfer (BOT) Projects*

Vienna, Austria, 7 - 10 December 1992

REPORT*

*Prepared by
the UNIDO Secretariat*

* This document has not been edited.

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I. INTRODUCTION

The first Meeting of Experts on Guidelines for the Development, Negotiation and Contracting of BOT Projects was held in Vienna, Austria, from 7-10 December 1992.

The meeting had the following objectives:

- (a) to assess the application of BOT arrangements and the advantages and disadvantages for developing countries of the BOT scheme;
- (b) to allow for an exchange of views and experience among experts and practitioners in the field of BOT and provide technical inputs to the consultants engaged on the preparation of the Guidelines; and
- (c) to discuss and define the structure, content and methodology to be followed in the preparation of the Guidelines.

II. ORGANIZATION OF THE MEETING

Participants

The meeting was attended by experts on BOT arrangements and representatives of governments, international agencies, banks and financial institutions. The meeting was also attended by staff members of UNIDO and UNCITRAL. The list of participants is attached as Annex I.

Opening of the meeting and general directives

Opening the meeting, the Chief of the UNIDO Technology Acquisition and Negotiation Section outlined the Organization's major directives and activities in technology transfer and investment promotion and the interests of UNIDO in the development of new types of business and technological partnerships. One such form is the Build-Operate-Transfer (BOT) scheme, which has been gaining popularity in some industrialized countries and several developing countries as an alternative method of implementing and financing infrastructural and industrial projects. In some countries BOT is being promoted in conjunction with privatization programmes, or as an avenue to attract foreign capital in line with investment promotion strategies. On the other hand, it offers an option for countries that are not able to finance all of their needed projects due to national budgetary constraints. As a project implementation scheme, UNIDO looks at BOT as having a good potential to promote continuous transfer of technology and know-how and build up national competence.

In this context, the attention UNIDO is giving to BOT is directed towards assisting developing countries to better understand the impact of this type of arrangement and provide them with the tools to develop strategies that will take advantage of the opportunities and benefits available under this scheme. Among these opportunities are firstly, the implementation of infrastructure and industrial facilities through BOT, which can open new

markets to national or regional industry, engineering and financing capacities in developing countries; secondly, BOT could enhance the technological basis for consulting, research, construction, operation and maintenance capabilities in the host countries; and thirdly, it could provide indispensable infrastructure facilities to support an increase in the participation of developing countries in the world economy, such as telecommunication networks, airports and seaports, transportation, energy supply, trade centres and industrial estates.

The Meeting was informed that a UNIDO programme of action had been outlined in 1992 to increase awareness and tap the full potential of the BOT scheme as a mechanism for the transferring of technology and strengthening of national competence in developing countries. The present meeting of experts to draw up a set of guidelines for the development, negotiation and contracting of BOT projects is part of this programme of action. With such guidelines, UNIDO hopes to be able to impart to users of the scheme, particularly those from developing countries, guiding principles on such issues as the legislative framework; tendering; basic and essential contractual features; the risk structure of parties involved; financing; insurance; period of operation and transfer of ownership. In addition, parties may be made aware of the changing character of risks in a BOT scheme as compared to the standard and traditional contractual structure used in the construction of large plants. At the same time, the Guidelines shall point out methods on how to meet the new risks and differentiate between the risks that should be decreased or minimized and those which are unavoidable.

Election of Officers

The assembled participants at the Meeting elected Professor Ole Steen-Olsen as Chairman and requested the UNIDO Secretariat to prepare the draft report.

During the first day, the following experts shared the chairmanship of the meeting: Dr. Mark Augenblick, Mr. Alexander Auboeck and Dr. Geoffrey Haley.

Agenda

The meeting was convened over four days. The first day was dedicated to a round table discussion with invited representatives of banks, financial institutions, governments and international agencies active in promoting or implementing BOT projects.

Discussions during the first day covered issues on the negotiation and contracting of BOT projects (presented by Mr. Geoffrey N. Haley), the financial strategy and implementation of BOT projects (Mr. Ranjit Mathrani), the private banking experience on BOT (Ms. Sebnem Türkay) and the advantages and disadvantages of BOT arrangements for the host countries (Mr. Yusuf Özal).

The remaining three days of the meeting were devoted to discussions on the issues, content and format of the preparation of the Guidelines. The Agenda as adopted appears as Annex II.

III. GENERAL CONCLUSIONS AND RECOMMENDATIONS

The following conclusions relating to the preparation of the Guidelines on BOT were adopted:

- (a) The main objectives of the Guidelines are:
- i. to give developing countries basic and strategic orientation so as to strengthen their capabilities in introducing, promoting and implementing BOT strategy and projects;
 - ii. to provide practical information - in a clear and simple manner - on the structure, procedures and basic issues of BOT arrangements;
 - iii. to support dissemination and the learning process of BOT strategy;
 - iv. to contribute towards reducing the time and expenses of BOT bidding, negotiation and contracting through the preparation of standard procedures and model documentation.
- (b) The scope of the Guidelines should not be limited to large infrastructure projects, but address the widest possible range of suitable projects for promotion on the BOT basis. It should also cover small-scale social infrastructure, such as water treatment facilities, hospitals, etc. The BOT strategy could also be utilized to promote the takeover of inefficient projects by the private sector. Other areas to be addressed could be: infrastructure (water, electricity, communications, transport, etc.), industrial estates and complexes, commercial and trade centres, storage and distribution centres. The Guidelines should present a comprehensive list of possible areas and types of project.
- (c) The Guidelines should be addressed to decision makers at high government and political levels in the developing countries. They should be balanced and acceptable to banks and financial institutions, as well as investors and contractors. They should also be directed towards the planning and operational professionals engaged in BOT arrangements and projects, especially in the areas of finance, insurance and engineering, and related legal aspects.
- (d) The Guidelines should be suitable to and support educational training through seminars and workshops for policy and decision-makers and professionals (managers, officials, banking and insurance specialists, contractors, lawyers).
- (e) The Guidelines should take into account the different interests and points of view of the various actors to become a useful working instrument for government agencies and for banks and contractors acting at the international level.
- (f) The Guidelines should pool international experience on the implementation of BOT projects and the evolution of this experience should be updated accordingly.

IV. BASIC STRUCTURE AND CONTENT OF THE GUIDELINES ON BOT

The Guidelines will be structured into the following chapters:

1. Introduction to the BOT concept and strategy
2. Development phases of BOT arrangements
3. Major issues on designing, implementing and executing of BOT strategies and projects
 - 3.1. Economic viability
 - 3.2. Financial aspects and engineering
 - 3.3. Risk allocation
 - 3.4. Governmental role and support - legal and political environment
 - 3.5. Selection of sponsors and procurement issues
 - 3.6. Transfer of technology and capability building
 - 3.7. Operation, maintenance and transfer of ownership
 - 3.8. Structuring and drafting of the contract package
4. Standard Project Agreement and standard provisions for BOT contracts

The subject and content to be covered in the above mentioned chapters of the Guidelines will be the following:

1. Introduction to the BOT Concept and Strategy

The first chapter of the Guidelines should draw the attention of decision makers to the mechanism and general characteristics of the BOT concept. The text should be informative and motivating, explaining the structure of BOT arrangements and the advantages and disadvantages of using this kind of limited recourse financing scheme. Differences and similarities to other related concepts (e.g. direct investment, public loans, Build-Operate-Own (BOO) alternatives, joint ventures, etc.) should be clarified. Limitations and common problems with BOT projects should be pointed out. The areas of potential conflict of interests should be anticipated and discussed, as well as the mechanisms to resolve them. The general assumption (dogma) that BOT arrangements by nature are very complicated and risky should be discussed. The principal and potential areas and types of project subject to the application of BOT strategy must be identified. It was suggested that this chapter could be inspired by Mr. Augenblick's paper on: "BOT Approach to Infrastructure Projects in Developing Countries", World Bank, and the paper presented by Mr. Haley to the meeting, with necessary updating and revision.

2. Development phases of BOT Arrangements

This chapter should present, in a straight forward and pragmatic manner, the different phases of BOT projects. The process should be broken down in logical phases and steps, indicating the actors involved in each, with a prospect of the

chronological sequence of events. A description of the process should be supported by simple and illustrative check lists and flow charts. The annex may contain more detailed charts and lists as working references for designers and operational professionals.

3. Major Issues Concerning the Design, Implementation and Execution of BOT Projects

3.1 Economic viability

The Guidelines should address the problems related to economic evaluation of BOT strategies, i.e. the costs and benefits a BOT project may represent for the country's economy as a whole. The economic and/or strategic need for the project and its position within the host country's priorities must be clarified.

Issues such as private vs. public efficiency, public acceptancy of the project and the possibility of running regional projects between a number of countries should be discussed. On the macro-economic level, BOT projects should basically be evaluated according to their economic viability. A deviation from the economic rationale must consider other financing alternatives. The impact of exogenic economic and non-economic factors, such as e.g. subsidized or shadow pricing, taxation and environmental protection, must be carefully evaluated. Models for weighing pro's and con's should be developed.

3.2 Financial aspects and engineering

This section should address problems and methods of financing engineering or finance packages, which is the main issue of every BOT project. The financial part of the Guidelines should cover:

- . suitable methods for feasibility studies;
- . sensitivity analyses;
- . studies and prospects of financial sources and sponsor groups, taking into account the minimizing of conflicts of interest within the sponsors themselves;
- . techniques of structuring and executing the financial package -the Guidelines should present a simple financial package and expand it accordingly to different types of projects;
- . key financial factors should be discussed, such as debt/equity balance, payback period, calculating reasonable tariffs, revenues and/or price structures, escrow flows, etc.;
- . security arrangements: presentation of specific BOT safeguards, such as bank guarantees, security of supply and security of revenues and models for managing inflation and foreign exchange risk;
- . techniques for developing countries to attract foreign and domestic investors and promote appropriate working conditions to finance BOT projects;

- . appropriate sequencing of BOT financing and selection of financial services and advisors;
- . models and criteria for evaluation of BOT financing; financial aspects vs. economic viability and co-operation with alternative financing should be included; environmental and social impacts must be taken into consideration.

3.3 Risk allocation

This issue is closely related to questions of financing. The Guidelines should aim at:

- . stressing specific aspects of risk avoidance, risk awarding and risk allocation in BOT projects;
- . pointing out alternative methods for allocating risks with special regard to developing countries;
- . indicating insurance problems and alternative arrangements;
- . anticipating conflicts of interest concerning the allocation of risks among the different actors (contractors, financial institutions, operators and government).

The allocation of risks must be made very clear within the contractual structure. The text should discuss the internal project risks from the political (country) risks separately.

The explanation of the insurance package should point out:

- . what kind of risks can be covered by traditional or standard insurance (meaning comparatively lower premiums);
- . what kind of risks can be covered by special arrangements (and at higher premiums); and
- . what risks cannot be covered by the insurance arrangements.

The information given in the Guidelines should contribute to the reduction of the total risk involved in BOT arrangements.

3.4 Government Role and Support - Legal and Political Environment

Government participation should be stressed at two strategic situations: in introducing and promoting the BOT strategy within the country and in the actual negotiation and implementation of specific BOT projects.

On this subject the Guidelines should address five main points:

- . policy statement concerning the position of the BOT arrangement in connection with the industrial policy and private investment conditions;

- . legislative framework concerning general private and foreign investment and exchange regime, and specific legal terms on BOT: the Guidelines should stress which laws are essential to support the BOT strategy;
- . administrative support: the Guidelines should indicate the institutional framework alternatives needed to foster and co-ordinate the promotion and implementation of BOT arrangements;
- . measures to facilitate or support BOT projects: the Guidelines should list and explain the possible arsenal of measures to attract sponsors and facilitate the implementation of the project. Among other matters to be considered are guarantees, incentives, taxation, equity contribution, supply contracts, land and facilities, documentation and statistics. The disposal of these measures should contribute to clarifying the investment climate and accelerate the process of negotiation;
- . environmental protection and social commitments.

3.5 Selection of Sponsors and Procurement issues

The objectives of this section are to contribute to reducing the costs of developing, negotiating and bidding and point out the specific procurement issues typical to BOT projects. The tension between the need to preserve the integrity of competitive bidding and a government's desire to get the best possible price should be addressed. The text should present innovative solutions both for the bidding documentation and for the criteria when choosing sponsors.

On the subject of public bidding, reference should be made in the Guidelines to the bidding procedures followed by UNCITRAL and the European Economic Community.

3.6 Transfer of Technology and Capability Building

Technology transfer as a wide concept should be taken as highly important in the BOT approach.

The Guidelines should stress the potential of the BOT arrangements to enhance national capabilities in all aspects relating to the project implementation process.

This section should give information and solutions as to the creation of mechanisms for collaboration between the contractors/sponsors and local construction companies, research and educational institutions and consultants. Training and employment of local manpower should be stimulated. Recent experience on technology transfer through BOT arrangements should be discussed and explored for further development.

Special attention should be paid to the drafting of technology transfer clauses and innovative procedures developed to minimize additional costs due to the introduction of technology transfer clauses, and even use technology transfer criteria objectives for the bidding procedure.

3.7 Operation, Maintenance and Transfer of Ownership

The Guidelines should point out some alternative solutions for negotiating and drafting the contract framework that relate to the conditions and period of operation, maintenance procedures and the process of transferring ownership of a facility by good working conditions. Typical cases and exceptions should be indicated.

3.8 Structuring and Drafting of the Contract Package

The objective here is to explain the basic structure of the contract package of BOT arrangements. The chapter should point out and clarify the importance of the project (or contract) agreement as the controlling document of the package. The Guidelines should pay attention to the most important contracts and provisions when drafting a typical BOT agreement and should give warnings of pitfalls and negative experiences with specific contracts and provisions. Special attention must be drawn to the timing of the BOT contracting.

4. Standard documentation

The Guidelines should prepare a basic model of the project agreement and indicate contracts and alternative clauses specifically related to BOT arrangements.

5. Annexes

An annex should include some case studies of BOT projects from different sectors.

Detailed checklists and flow charts presenting the development phases and steps of BOT arrangements should be included.

V. PREPARATION OF THE GUIDELINES

The Guidelines will be prepared according to the following steps and schedule:

- (1) drafting of the various chapters of the Guidelines by the assigned consultants: mid-January to mid-March 1993
- (2) review of the draft chapters by the back-up consultants: mid-March to mid-April 1993;

- (3) organization of the draft Guidelines by the UNIDO Secretariat on the basis of the consultants' inputs: until end-April 1993;
- (4) circulation of the draft Guidelines among the consultants for comments: until end-May 1993;
- (5) consultation meeting to discuss the integration and elaboration of the draft Guidelines: 31 May - 01 June 1993;
- (6) revision and final integration of the document: until end-August 1993;
- (7) circulation of the document among experts and professionals on BOT: 01 September to 31 October 1993;
- (8) second meeting of experts for presentation of the document and discussion with professionals on planning, financing, contracting and implementing BOT projects: 01-04 November 1993, in Vienna;
- (9) final revision, editing and printing of the Guidelines: until end-February 1994;
- (10) promotional workshops of the Guidelines: (to be defined).

The preparation of the Guidelines will be conducted by a group of consultants. For writing purposes, the chapters and sections will be divided among the assigned consultants. Each chapter will be drafted by a lead consultant and reviewed by another back-up consultant.

Note: All experts should prepare their texts on word processors, preferably in WordPerfect 5.1 software. If this is not possible, experts can write in other word processing programs, which must be convertible to WordPerfect 5.1. Chapters and paragraphs should not be numbered and the text should be written basically in similar a style: main sections' titles should be bold, while subtitles should only be underlined; numbering will be done at the end of the entire work: text should not be written in italics and the general principle should be to use as little program codes as possible; the font to be used should be Courier 10 point.

ANNEXES**Annex I: LIST OF PARTICIPANTS****Consultants**

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Oslo, NORWAY
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Organizers

1. **Mr. J.M. de Caldas Lima, Chief,
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2. **Mr. Ricardo Seidl da Fonseca, Industrial Development Officer,
Technology Acquisition and Negotiation Section**
3. **Ms. Rowena S. Paguio, Industrial Development Officer
Technology Acquisition and Negotiation Section**

**Annex II: Agenda of the 1st Meeting of Experts on BOT
7-10 December 1992, Vienna**

First day: 7 December 1992

Participants: Roundtable discussion with representatives of banks, financial institutions, construction companies and officials.

Place: Conference Room Nr II, C07, VIC

<u>Time</u>	<u>Activities</u>
09:30-10:00	Opening: the UNIDO Programme on BOT Mr. J.M. de Caldas-Lima, Chief, Technology Acquisition and Negotiation Section, UNIDO
10:00-11:00	Negotiating and Contracting of BOT Projects Mr. Geoffrey N. Haley, Theodore Goddard (U.K.)
11:00-11:15	Coffee break
11:15-12:15	Financial Strategy and Implementation of BOT Projects Mr. Ranjit Mathrani, Chartered West LB Ltd., (U.K.)
12:15-14:00	Lunch
14:00-15:00	Private Banking Experience on BOT Ms. Sebnem Türkay, Chase Manhattan Bank (Turkey)
15:00-16:00	Advantages and Disadvantages of BOT Arrangements for the Host Countries Mr. Yusuf Ozal, Member of the Turkish Parliament (TURKEY)
16:00-16:15	Coffee break
16:15-18:00	Briefings and discussions
18:00-19:00	Cocktail

Second day: 8 December 1992

Participants: Discussion of the issues of the Guidelines by the assigned experts.

Place: Seminar room Nr. C0343, VIC

<u>Time</u>	<u>Activities</u>
09:30-11:00	The Objective of the Guidelines
11:00-11:15	Coffee break
11:15-12:15	Basic elements and structure of the Guidelines
12:15-14:00	Lunch
14:00-15:30	The BOT Concept and Strategy
15:30-15:45	Coffee break
15:45-17:30	Development phases of BOT arrangements

Third day: 9 December 1992

Participants: Discussion of the issues of the Guidelines by the assigned experts group

Place: Seminar room Nr. C0343, VIC

<u>Time</u>	<u>Activities</u>
09:30-11:00	Economic issues
11:00-11:15	Coffee break
11:15-12:15	Financing Issues
12:15-14:00	Lunch
14:00-15:30	Risk allocation and insurance

15:30-15:45 Coffee break

15:45-17:30 **Governmental support and incentive.
Bidding and procurement issues.**

Fourth day: 10 December 1992

Participants: Discussion of the issues of the Guidelines by the assigned experts group.

Place: Seminar room Nr. C0343, VIC

<u>Time</u>	<u>Activities</u>
09:30-11:00	Transfer of Technology
11:00-11:15	Coffee break
11:15-12:15	Period of Operation and Transfer of Ownership
12:15-14:00	Lunch
14:00-15:30	Standard Project Agreement for BOT Contracts
15:30-15:45	Coffee break
15:45-17:30	Definition of the basic structure and the elaboration strategy of the Guidelines and division of work among the experts