



### **OCCASION**

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



### **DISCLAIMER**

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

### FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

### **CONTACT**

Please contact <u>publications@unido.org</u> for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org



21601

# 



### Contents

INFRASTRUCTURE
A prerequisite for industrial development

THE BOT STRATEGY An innovative means of project finance

UNIDO
An ideal partner for BOT project

UNIDO BOT PROGRAMME
A concerted effort to support infrastructure projects

**APPLICATION PROCEDURES** 

# Infrastructure

A prerequisite for industrial development

The globalization of the world economy emphasizes the critical role of infrastructure for sustainable industrialization and competitiveness. Indeed, low cost and reliable infrastructure is essential for industries competing in global markets or participating in global production networks, particularly in the field of industrial commodities.

Continued investment in infrastructure projects is clearly one of the prerequisites for sustainable economic growth and has a multiplier effect on the economy, often generating new demands for products and services from local industry.

To meet challenges in industrial production successfully, a developing economy must have the infrastructure services (transport, electric power, telecommunications, water and sanitation, and waste disposal, along with education and health facilities) that enable it to cope with population growth, alleviate poverty and improve environmental conditions.

In many developing countries, an awareness of the importance of infrastructure led to the promotion of large investment programmes in the 1960s and 1970s. Carried out by State-owned enterprises, such programmes were largely financed from public sector resources and sovereign loans. However, economic and debt crises in the 1980s severely reduced the capacity of Governments to raise funds to implement new infrastructure programmes or even to maintain existing services in good condition.

Mobilizing private investors to modernize public infrastructure and companies is becoming increasingly relevant, and several innovative project finance schemes have been introduced in a growing number of developing countries. The Build-Operate-Transfer (BOT) strategy is one such scheme.

# The BOT Strategy

An innovative means of project finance

BOT is an intricate mechanism based on a relatively straightforward idea that allows Governments to expand and improve infrastructure by tapping resources outside their budget allocations and debt commitments.

Project finance is the cornerstone of the BOT strategy. This means that lenders focus mainly on the project's assets and revenue stream for repayment, rather than on other sources of security, such as government guarantees or the assets of the project sponsors.

Developing BOT projects is a complex task because of the numerous actors and aspects involved, the web of financial and contractual arrangements, and the need to establish a regulatory framework for private sector participation in such undertakings.

To speed up and reduce costs in the development phase and to promote a balanced business environment, Member States have increasingly requested the support of UNIDO in elaborating BOT strategies and projects.

The acronym BOT stands for "build, operate and transfer" or "build, own and transfer"; the terms are used interchangeably. Variants include BOO (build, own and operate, i.e. without any obligation to transfer); BOOT (build, own, operate and transfer); BT (build and transfer immediately); DBFO (design, build, finance and operate); DCMF (design, construct, manage and finance); and MOT (modernize, own/operate and transfer).

## UNIDO

### An ideal partner for BOT projects

In the present global market economy where the participation of the private sector is the driving force of economic growth, UNIDO has an important role to play as an ideal partner for Governments and private companies in BOT projects. As a United Nations organization, UNIDO is perceived to be neutral and free of any profit motive, thus adding to the credibility and impartiality of its services to both Governments and investors.

within the United Nations system with the mandate to promote and accelerate the industrialization of developing countries. The promotion of industrialization is carried out mainly through normative and informative work, and through technical assistance to Governments and enterprises.

In response to specific requests from Member States, and in view of the importance of BOT projects as links for the overall industrial and technological development of host countries, UNIDO has developed a comprehensive programme covering:

- Elaboration of guidelines and standard procedures.
- Advice on policy and strategy.
- Assistance in capacity building and training.
- Technical assistance for specific BOT projects.
- Certification of procedures.

The approach of UNIDO is based on the principle that the BOT strategy should be used by developing countries as an investment scheme as well as an important channel for technology transfer and development. The BOT strategy promotes technology choices that secure the required quality and minimize environmental impacts and infrastructure costs. Thus, by improving infrastructure, the BOT strategy fosters the competitiveness of local industry, and enhances living standards.

# **UNIDO BOT Programme**

A concerted effort to support infrastructure projects

The UNIDO BOT programme mobilizes various specialized in-house services, such as investment promotion, technology policy and transfer, industrial policy, feasibility studies, engineering, sectoral development, privatization programmes, procurement and environmental protection. The Technology Services coordinates these services according to the requests for assistance and the availability of resources.

### Scope of BOT services provided by UNIDO

### Policy and legal advice

- Defining BOT policies to facilitate sustainable industrialization and competitiveness.
- Carrying out assessment studies for the application of BOT or similar mechanisms to selected infrastructure sectors.
- Developing policy and the regulatory and institutional framework for attracting foreign capital investment for BOT projects.
- Defining procurement rules and regulations.
- Drafting standard concession agreements and other BOT-related agreements and contracts.
- Designing technology transfer and capacity building programmes.
- Enhancing technology choice capability in relation to the quality, environmental impact and cost of infrastructure.

### Institution building

- Developing guidelines and administrative procedures for the promotion, approval, monitoring and evaluation of BOT projects.
- Developing information systems and databases.
- Defining staffing and training requirements for handling BOT projects.
- Providing training programmes to the staff of institutions involved in BOT projects on specific topics, including study tours, training abroad and training material.

# **Application Procedures**

UNIDO services are accessible to all Member States in a pragmatic and businesslike manner. There is no standard form to be completed or project document to be prepared by the client. Application procedures are as follows:

A Government agency or company should send a letter of request to the local United Nations Development Programme or UNIDO office or to UNIDO Headquarters at Vienna, specifying the services needed:

After this initial contact, UNIDO will evaluate its capacity to deliver the requested service within the framework of the financial resources available:

The programme manager of UNIDO will then prepare a project document for approval by the client as well as the Programme and Project Review Committee of UNIDO;

As soon as funds for the project are available, UNIDO begins implementation according to a previously established schedule.

### Contact address

The Managing Director
Investment and Technology Promotion Division
United Nations Industrial Development Organization
Vienna International Centre
P.O. Box 300
A-1400 Vienna
Austria

Telephone: (+43-1) 21131-3730 or 3731 or 3350 or 3737

Fax: (+43-1) 21131-6809 E-mail: BOT@unido.org

- Implementing local consultancy services.
- Promoting the involvement of national technology institutions in BOT projects.

### Project management

- Preparing business opportunity, pre-feasibility, feasibility and other investment studies.
- Performing project or concession financing studies.
- Promoting a BOT project among potential investors.
- Defining the appropriate quality system and surveillance procedures.
- Drafting and evaluating concession agreements and other BOTrelated agreements and contracts.
- Drafting and evaluating bid documents for BOT projects.
- Monitoring BOT projects.
- Procuring equipment and services.

The introduction phase of the

BOT strategy in the host

country, the pre-investment

phase of BOT projects, and

the evaluation and certification

of critical steps during the

implementation of the BOT

the cornerstone of the UNIDO

BOT programme.

### Engineering

- Providing technical advice on project design.
- strategy or projects are a Formulating and providing quality control services.
  - Formulating plans to increase the local content of BOT projects enabling local industry to supply goods and services.
  - Supporting the technical monitoring of the project during implementation.

# Environmental assessment and management of energy, water and waste projects

- Defining the scope of and needs for environmental assessment and monitoring of the project.
- Identifying environmental management responsibility in the BOT contract.
- Defining environmental performance standards.
- Devising methods for the control and safe disposal of wastes generated by the BOT project.
- D Specifying technology that will achieve the optimum balance between environmental impact and economic performance.



### UNIDO BOT Guidelines

The Guidelines for Infrastructure Development through Build-Operate-Transfer (BOT) Projects prepared by UNIDO cover the entire spectrum of financial and legal issues faced by government authorities and project managers in the development of BOT projects, while offering developing countries the basic orientation needed to design effective BOT strategies. The Guidelines also provide essential practical information on the structure and procedures of BOT arrangements and are intended to help reduce the time and costs involved in developing and contracting BOT projects.

The Guidelines contain chapters on the following subjects: introduction to the BOT concept; phases of a BOT project; economic framework for BOT schemes; the Government's role in providing for successful BOT projects; transfer of technology and capability building through BOT projects; procurement issues and selection of sponsors; financial and economic appraisal of BOT projects; risk identification and management; financial structuring of BOT projects; the contract package; the project agreement; the construction agreement; operation and maintenance contract; transfer of ownership; and factors that determine success.

To order the Guidelines, please contact:

Public Information Section
United Nations Industrial Development Organization
P.O. Box 300
Vienna International Centre
A-1400 Vienna, Austria
Fax: (+43-1) 206 2669

# Infrastructure for Industrial Development