

## Development of public/private sector frameworks

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IN DEVELOPING COUNTRIES, private sector participation has recently been seen as the catalyst for change and improvement in the delivery of water services with the economic benefit that flows from such improvements.

However, the introduction of private sector participation in itself will not bring about the desired improvements so it is essential that framework arrangements are established, within which, the private sector can bring its commercial and business skills.

Water is fundamental to all life and every one has a responsibility for its proper use. Without good and reliable water services it is not possible for communities to fully develop and enjoy a “good quality of life”. In the forward to volume 1 of the World Bank’s toolkit for ‘Selecting an option for private sector participation’ it states

“Millions of urban dwellers, especially the poor, lack adequate access to safe drinking water and sanitation. Improving services will, in most cases, require more efficient operation of water utilities and investments in rehabilitating and extending supply systems. Many central and local governments are turning to the private sector to help them address these needs. But private sector participation is no simple panacea. Its success depends on how well the chosen private sector arrangement fits local circumstances, on whether the regulatory environment is suitable, and on how well the reforms respond to the concerns of those affected.”

### World water resources

World water resources are scarce and the availability of useable fresh water is remarkably small and is diminishing. Surprisingly with over 70% of the earth covered by water only about 2.5% of the world’s water resources are fresh water and of that it is estimated that about 70% is locked up in ice-caps and another 29% is not available for economic use for a variety of reasons. Thus only about 1% is available for human use. Overall demand for safe drinking water is growing, especially due to the considerable growth in the world population, but also the availability of clean fresh resources is declining at an alarming rate due to world-wide pollution. Not surprisingly the phrase ‘water stress’ has been introduced in many parts of the world.

Such growth arises from the following areas of demand:

- Human – for safe drinking water and sanitation
- Agriculture – for expanding production to meet human population growth
- Environment – to protect endangered species, bio-

- diversity and areas of special interest and importance
- Industrial – to provide more goods and services for the growing population.

It is estimated that 25% of the world’s population is facing water shortages. This is projected to rise to 66% by 2025, only a quarter of a century away. This is against a six-fold rise in global water consumption this century. The World Health Organisation estimates that at present some 1.3 billion people, more than 20% of the world’s population, do not have access to safe drinking, and about half (50%) of the world’s population is without access to adequate water sanitation facilities. The urban population is without access to adequate sanitation facilities. The urban population of the less developed regions is expected to grow from 2.0 billion in 2000 to 4.0 billion by 2005.

According to the global environmental fund, between US\$600-800 billion of capital expenditure is required in order to provide a basic level of water and sanitation services in the period 1995 – 2005.

### Common world-wide water factors

Numerous factors have contributed to the ‘Water Stress’ now being experienced in many parts of the world but the common ones relate to

- Under investment in the infrastructure in all aspects of water provision
- The ever increasing economic and urbanisation pressures
- The lack of adequate finance to provide and maintain the infrastructure
- Past spending on unsustainable capital solutions
- Poor maintenance of what water assets there are
- Inadequate income arising from a reluctance to pay the economic cost
- Inadequate institutional and organisational structures
- Lack of an adequate enforcement and regulation system

Urbanisation is occurring at an alarming rate with the changes in agricultural economy resulting in the concentration of the population in most countries in the world into smaller geographical areas, with increasing stress on such infrastructure for ‘public services’ (where they exist), and in particular requiring the movement of large quantities of water, both for use as clean water and the subsequent disposal of foul water. Shifting patterns of population suggest that the number of cities with more than 1m inhabitants will more than double within the next three decades, and so the proportion of people living in urban

areas will increase from one third to two thirds. In addition, it is being increasingly recognised that the provision of a safe water supply and the proper removal of sewage waste is the single most important step to improving the health and well-being for the population of the world.

Thus, adequate water and sanitation services are the essential key to economic development. Traditionally the delivery of these services has been seen as a role for the public sector, namely by Government. However, in many countries it is being increasingly recognised that a more practical alternative is to involve the private sector to take the responsibility for service delivery within a regulated framework as this will provide a different and more efficient commercial and performance driven approach.

### Provision of water services

All providers of water supply and sewerage services, whether a public institution or a private sector operator needs to structure its operations into an efficient, economic and financial sustainable organisation in order to undertake its obligations to its customers for the delivery of safe drinking water and provision of acceptable sanitation standards. These will include:

- Find and secure adequate fresh water resources
- Treat water to adequate minimum standards for the required use
- Collect and remove the used foul water
- Treat the used water to an acceptable standard
- Dispose of the treated water back into the aquatic environment
- Bill and collect payment from customers for the services provided
- Seek and obtain funding for all capital investment requirements
- Operate and properly maintain assets used to supply the service
- Provide services to defined levels of service
- Operate all systems on a commercially viable and sustainable basis

In order to carry out these aspects of dealing with the water cycle, the provider must deal with the following matters while discharging its responsibilities and running its operations:

- Politics
- Legal framework, constraints and regulations
- Regulatory framework and regime
- Technical and operational aspects
- Commercial and financial sustainability

Prior to a private sector operator taking over the responsibility for the operation and management of water supply and/or sewerage system, the operator will need to fully investigate the following:

- The law – that it is sufficient and appropriate for delivery of the required service

- The regulator – that a fair and independent regime will be upheld
- The political system – that there is no political or external interference or corruption
- The finance – that it is sufficient and secure to provide the required improvements
- The contract – that it is fair and not subject to unilateral variation
- The people – that they have the ability to carry out what is required

The above factors all carry a commercial risk and the operator will need to make financial provision for such, when determining the price for which they are prepared to provide the services.

The contact document determining the terms and conditions under which the operator is to be engaged needs to be drafted with care and due diligence. Failure to make proper contractual arrangements, will not only lead to increased costs for all parties, due to potential subsequent legal arguments, but also a potential reduction in levels of service provided as the concentration in effort will have been redirected.

It is therefore important to all parties to the contractual arrangements that proper identification of the factors involved are fully identified prior to entering into contractual arrangements.

### Key factors in the development of contractual arrangements

The development of good and robust contract documents takes time and there are no simple short cuts. Time spent in establishing sound contractual arrangements will be well rewarded during the period of the contract. It is important that all parties fully appreciate and understand the implications of the contractual arrangements. These include:

- Main relationships
- Protection of the parties
- Risks and risk mitigation
- Structure of the operator
- Interim arrangements
- Programme

The main relationships will need to be properly identified and should include amongst other things, an interim contractual arrangements to define:

#### The bidding process

How will this be established and how will the preferred bidder be selected.

#### Memorandum of understanding

What will this contain and what will be the obligations that flow from it.

#### Institutional reform

How is this to be implemented and when.

A typical interim contractual model to satisfy the above requirements is as shown in Figure 1.

Following establishment of the interim contractual arrangements the long term contractual arrangements will need to be developed and these should include:

**Execution of the operational contract(s)**

Which should fully outline the terms, conditions and obligation of each party under the relevant contract(s)

**Mobilisation Period**

Which should define what is to be done and by who between the date that the parties agree to enter into a contract and the date that the operator takes over full operational responsibility

**Transitional Arrangements**

Which should define the arrangements put in place to allow a smooth transfer from the ‘government’ operator to the ‘private sector’ operator.

A typical contractual model to satisfy the above requirements is shown in figure 2.

It should be noted that each set of circumstances requires its own set of contractual arrangements. The framework models in Figures 1 and 2 indicate some of the basic arrangements and agreements that need to be put in place to provide certain protection to the relevant parties to the contract.

Within a paper of this magnitude it is not possible to detail all the potential protections that are necessary to ensure a sustainable contractual arrangement. However the following indicate the ones to be addressed.

- The government will need protection, as at the end resort it is the government who is answerable to people and customers served, irrespective of who provides the services.
- The operator needs protection to ensure that they are not subjected to unilateral changes by government for which they have no redress.
- The funding agencies need protection to ensure that funds lent will be repaid in accordance with the terms and conditions.

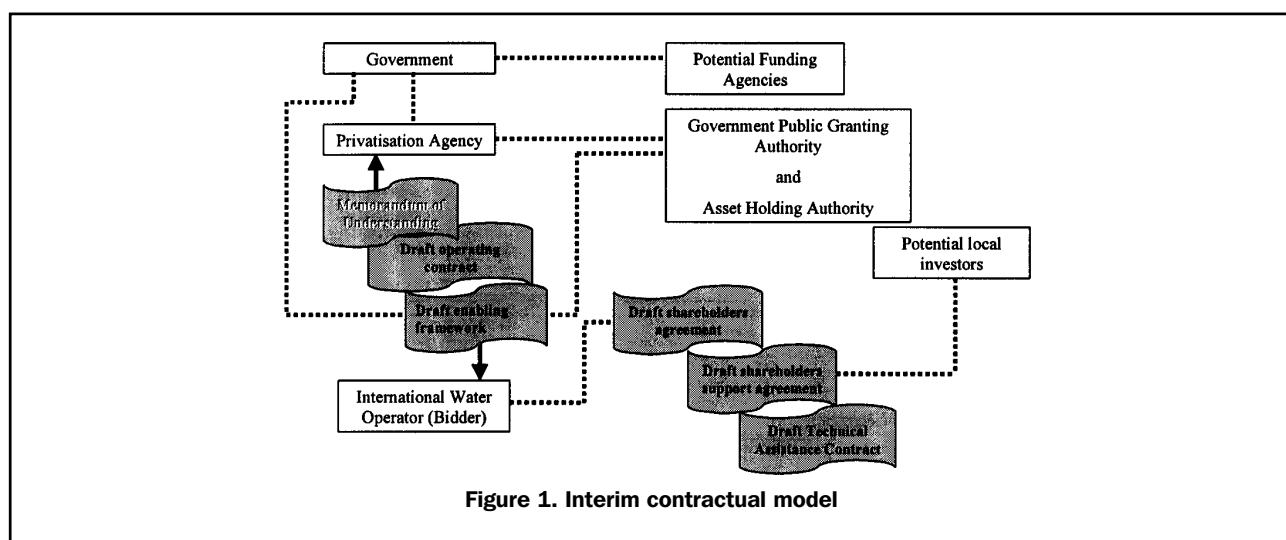


Figure 1. Interim contractual model

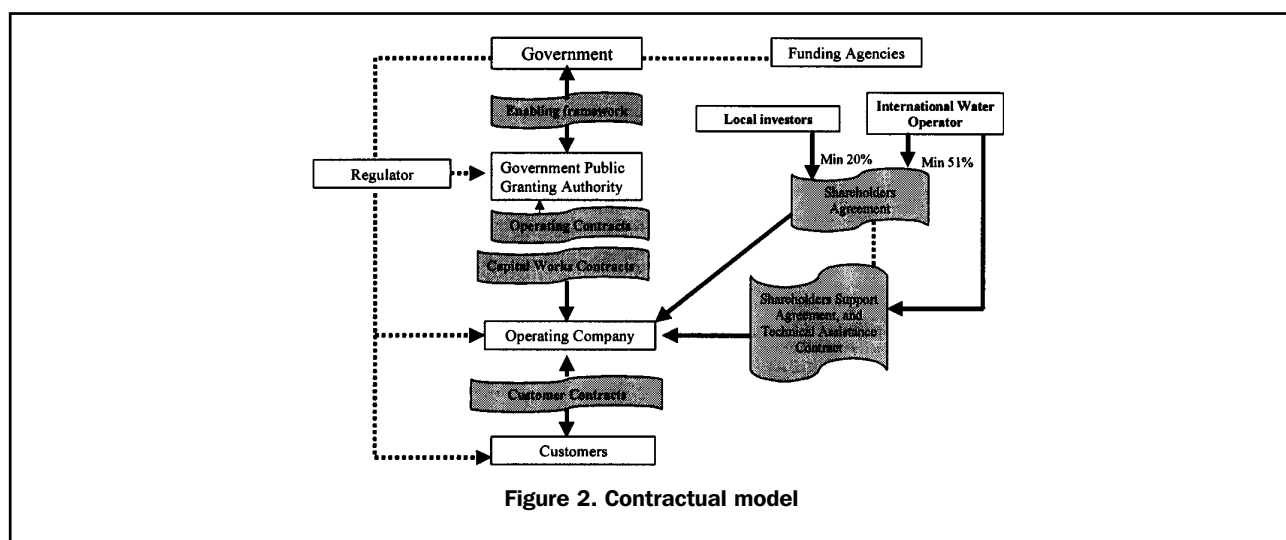


Figure 2. Contractual model

### **Implementation programme**

A key factor in successful private sector participation is the establishment of a clear and realistic implementation programme. All too often programmes are set by political agenda and not the timeframe necessary to incorporate all the relevant contractual arrangements within an integrated and robust plan.

It is essential that key policy matters are addressed and agreed upon prior to the drafting of specific contract clauses. Failure to follow this procedures will result in prolonging the implementation programme and the appointment of a private sector operator. Experience has shown that a timeframe of 2-3 years from concept to private

operator in place, may be realistic and should be planned for.

Remember that it took the UK over 20 years to go from numerous uncoordinated local government run water and sewerage undertakers to a fully integrated , privatised and commercially operational water sector and the developing world is trying to accommodate similar changes in about one tenth of the time it took the UK.

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