The benefits from private participation in water and sanitation depend on the level of risk and responsibility the government hands over to the private sector. But strong government commitment and careful preparation are required if the private sector is to take on significant risks and responsibilities. A government about to enter into a concession contract for twenty-five or thirty years, for example, needs to be sure that it does not, in haste, gloss over details that will later land it in messy renegotiations, with loss of face to all concerned and reduced benefits to consumers. But governments often worry that detailed preparations take too much time. This Note, based on a set of World Bank toolkits compiled from experiences in involving the private sector in water and sanitation, reviews the essential factors in choosing a privatization option and argues that preparation pays dividends.

What makes the business special?

The activities of urban water and sanitation utilities range from impounding and treating raw water, to distributing water and collecting sewage, to treating sewage. In many ways, decisions about how to involve the private sector in these operations resemble decisions about privatization in any other utility sector. All such privatizations, for example, require decisions on how to set up an independent regulator and how to set and enforce service standards. But water and sanitation have special features that governments must take into account in choosing and designing a contract and in designing a supporting policy framework:

- Water and sanitation systems are characterized by a high degree of natural monopoly. Although competition is feasible in such limited areas as building capacity and providing plumbing services, it is difficult to achieve in distribution and collection, core activities in water and sanitation (table 1). So governments wanting to involve the private sector have been able to rely little on competition to assure good outcomes for consumers and have instead had to devise regulatory systems for this purpose.
efficient use. In India, for example, many cities go short of water while farmers continue to receive subsidized water for irrigation.

- Water and sanitation are well suited to local management, and in many countries, responsibility for service provision is decentralized to the provincial or municipal level. As a result, complex interjurisdictional issues often need to be resolved before the private sector can be brought in.

- Many of the assets of water and sanitation systems are buried, so obtaining accurate information about them is costly—increasing the cost of preparing for private sector participation, and the chance of surprises after the contract is signed.

- Broad access to water and sanitation yields important public health and environmental benefits. Government interventions to promote these benefits are likely to remain after privatization.

None of these issues is a barrier to private sector participation—all arise under both public and private provision. But governments often systematically confront their implications only when they begin to contemplate private sector involvement. Failure to adequately address these issues increases the risk that a government will be unable to find a partner for its pre-
ferred form of private sector participation or that a private sector arrangement will fall short of its broad policy objectives.

The main private sector options—and who's doing what

Different countries have adopted different options for private sector participation. Trinidad and Tobago is using a management contract for water and sewerage services and plans to replace it with a concession. Guinea has a lease arrangement for water treatment and supply in seventeen cities. Buenos Aires and several other Argentine provinces have concessions for water and sewerage. And England and Wales have divested their water and sanitation utilities.

The main options can be clearly distinguished by how they allocate responsibility for such functions as asset ownership and capital investment between the public and private sectors (table 2). The more risk and responsibility are passed to the private sector, the more powerful are its incentives to improve services. Service contracts, which confer little risk and responsibility on the private sector, offer commensurately small gains—and are simply not designed to address managerial inefficiency or chronic underinvestment. Concessions and divestitures are well suited to tackling these problems—but demand more from government in commitment and preparation.

In practice, private sector arrangements are often hybrids of these models. For example, leases may pass some responsibility for small-scale investment to the private sector, and management contracts may, like leases, have revenue-sharing provisions that pass on some commercial risk. Options can also be used in combination—for example, a build-operate-transfer contract for bulk water supply might be combined with a management or lease contract for operating the distribution system.

**Key factors in choosing an option**

Governments seeking to involve the private sector in water and sanitation may have a range of objectives—introducing greater technical and managerial expertise and new technology, improving efficiency, constructing large-scale projects, cutting the cost of public subsidies or redirecting them to the poor, and making the sector more responsive to customers. All forms of private sector participation can be designed to improve technical and managerial capacity. But whether the other objectives can be met depends on which option is chosen and whether the government can do a good job on the enabling and regulatory environment. A poor job can lead to dissatisfied customers and difficult renegotiations with the private partner. Under the Guinea lease, for example, consumers have lost out because disputes over the division of responsibilities between the government and the operator have hampered new connections and service improvements. The Buenos Aires concession has led to better service, but there have been costly disputes over the definition of the regulator's role (for example, in determining investment requirements) and the handling of adjustments in tariff levels and structure.

To determine which private sector options are feasible—or what must be done to make a preferred option possible—a government needs to undertake a range of analyses:

- An analysis of the state of the utility—looking at the current level and standard of service, the condition and serviceability of assets, the human resources, and the financial performance. Is information about the utility's assets good enough to serve as a base for long-term contracts? If not, can better information be produced rapidly? Where information about the quality of underground pipes, for example, is partial or inaccurate, revelations about the true state of the system that come after a concession contract has been signed may lead to costly renegotiations.

- An analysis of the existing regulatory framework—both general laws that might affect private participation in the sector and sector-specific laws and institutions focusing on pricing and quality standards. Does the existing regulatory framework provide sufficient support for the private sector so that it will take on commercial risk? If not, can the necessary changes be made fairly easily? And if not, can parts of the regulatory function be simplified or contracted out in the short term? Where
TABLE 3  PREREQUISITES FOR SUCCESSFUL IMPLEMENTATION OF DIFFERENT PRIVATE SECTOR OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Stakeholder support and political commitment</th>
<th>Cost-recovering tariffs</th>
<th>Good information about the system</th>
<th>Developed regulatory framework</th>
<th>Good country credit rating</th>
<th>Potential benefits of the option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service contract</td>
<td>Unimportant</td>
<td>Not necessary in the short term</td>
<td>Possible to proceed with only limited information</td>
<td>Minimal monitoring capacity needed</td>
<td>Not necessary</td>
<td>Low</td>
</tr>
<tr>
<td>Management contract</td>
<td>Low to moderate levels needed</td>
<td>Preferred but not necessary in the short term</td>
<td>Sufficient information required to set incentives</td>
<td>Moderate monitoring capacity needed</td>
<td>Not necessary</td>
<td></td>
</tr>
<tr>
<td>Lease</td>
<td>Moderate to high levels needed</td>
<td>Necessary</td>
<td>Good information required</td>
<td>Strong capacity for regulation and coordination needed</td>
<td>Not necessary</td>
<td></td>
</tr>
<tr>
<td>Build-operate-transfer</td>
<td>Moderate to high levels needed</td>
<td>Preferred</td>
<td>Good information required</td>
<td>Strong capacity for regulation and coordination needed</td>
<td>Higher rating will reduce costs</td>
<td></td>
</tr>
<tr>
<td>Concession</td>
<td>High levels needed</td>
<td>Necessary</td>
<td>Good information required</td>
<td>Strong regulatory capacity needed</td>
<td>Higher rating will reduce costs</td>
<td>High</td>
</tr>
<tr>
<td>Divestiture</td>
<td>High levels needed</td>
<td>Necessary</td>
<td>Good information required</td>
<td>Strong regulatory capacity needed</td>
<td>Higher rating will reduce costs</td>
<td></td>
</tr>
</tbody>
</table>

Note: The shading signals the degree of importance: □ not significant □ low □ moderate □ high

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regulatory capacity is weak, for example, collection of information on the utility’s technical and financial performance could be contracted out to a private auditing company.

- An analysis of which stakeholders (employees, consumers, environmentalists, government agencies) support private participation and which oppose it. Can processes and policies be put in place to meet stakeholder concerns? Can the risk of political interference be minimized? Often, a key factor in the success of a private sector project is identifying the concerns of employees early on and finding constructive ways of addressing them—rather than allowing those concerns to derail the reform process later.

- An analysis of the financial viability of alternative options. Do current tariffs cover costs? Can the private sector reasonably be expected to boost efficiency enough to meet the proposed service objectives without increasing tariffs? If not, will consumers be willing to pay higher tariffs? And if not, can grant finance (or subsidies to needy households) support service improvements? This kind of financial analysis can sometimes lead to redefinition of a private sector project—for example, re-balancing planned investment expenditures between new production capacity and the rehabilitation of existing distribution systems.

As table 3 shows, in a very simplified way, the results of these analyses can point the government to an appropriate choice of private sector option. If regulatory capacity is weak and political commitment is low, for example, a concession will be difficult to implement. Even with strong political commitment to a concession or divestiture, however, countries that lack a good business climate or a strong track record of successful private investment may not immediately be able to attract large-scale private financing for infrastructure projects. These countries may need to start out with a management contract and work up to options that demand more of the private sector.

Penelope J. Brook Cowen (pbrookecowen@worldbank.org), Private Sector Development Specialist, Private Sector Development Department