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Economic Regulation of Urban Water and Sanitation Services

The design of regulation for water supply and sanitation (WSS) services has tended to follow a check-box approach: diagnose the need, prescribe an independent regulator or similar model (often developed in a different sector or country), and hope for the best. This approach has not always worked well. Regulation cannot solve all the problems that confront WSS services, and imported models may not work locally. Regulation must be based on a clear understanding of its capabilities and limits. Its design must reflect not only key principles of regulation, but also local needs, local legal instruments, and local organizations.

What is regulation? What can it accomplish?

Economic regulation addresses the problems posed by natural monopolies by compelling service providers to keep costs down, charge fair prices, and provide good service. An effective system also designates an entity to implement and enforce the regulations. Together, these functions remain limited in scope. To complement and reinforce economic regulation, a supportive policy environment and good governance of service providers are required. In short, economic regulation should be designed in tandem with other reform efforts.

A good regulatory system should be (a) coherent; (b) predictable and credible; and (c) legitimate, transparent, and accountable.

- *Coherent.* Regulatory decisions must be consistent with each other and with underlying assumptions. For example, when higher service standards require higher costs that must be covered by higher tariffs, a coherent system ensures that customers receive the value promised and that providers recover costs.
- *Predictable and credible.* When regulations are clear, predictable, and visibly enforced, providers are more willing to invest to improve and expand WSS services.
- *Legitimate, transparent, and accountable.* Regulatory processes and regulations must be understood and accepted by consumers. Lack of transparency leads the public to question the legitimacy of both regulations and regulators, and to feel that their interests are not being protected. Such situations can become volatile.

Steps in the design of a regulatory system

Designing the regulatory system involves several steps: (a) defining underlying problems; (b) assess-

This note reports the key messages and findings of *Economic Regulation of Urban Water and Sanitation Services: Some Practical Lessons*, by David Ehrhardt, Eric Groom, Jonathan Halpern, and Seini O'Connor (Washington, DC: World Bank, 2006), drawing on a related document, *Explanatory Notes on Key Topics in the Regulation of Water and Sanitation Services*, by Eric Groom (egroom@worldbank.org), Jonathan Halpern (jhalpern@worldbank.org), and David Ehrhardt (Washington, DC: World Bank, 2006). The complete documents may be downloaded from www.worldbank.org/water.

ing whether regulation can solve the problems; (c) determining regulatory objectives, and (d) choosing or creating appropriate regulatory instruments and organizations.

Defining the underlying problems. To improve services, the causes of poor performance must be identified and remedied. These often include inadequate investment or maintenance; poor operating practices; poorly defined or enforced standards; lack of clear policies; and barriers to entry for small, private providers.

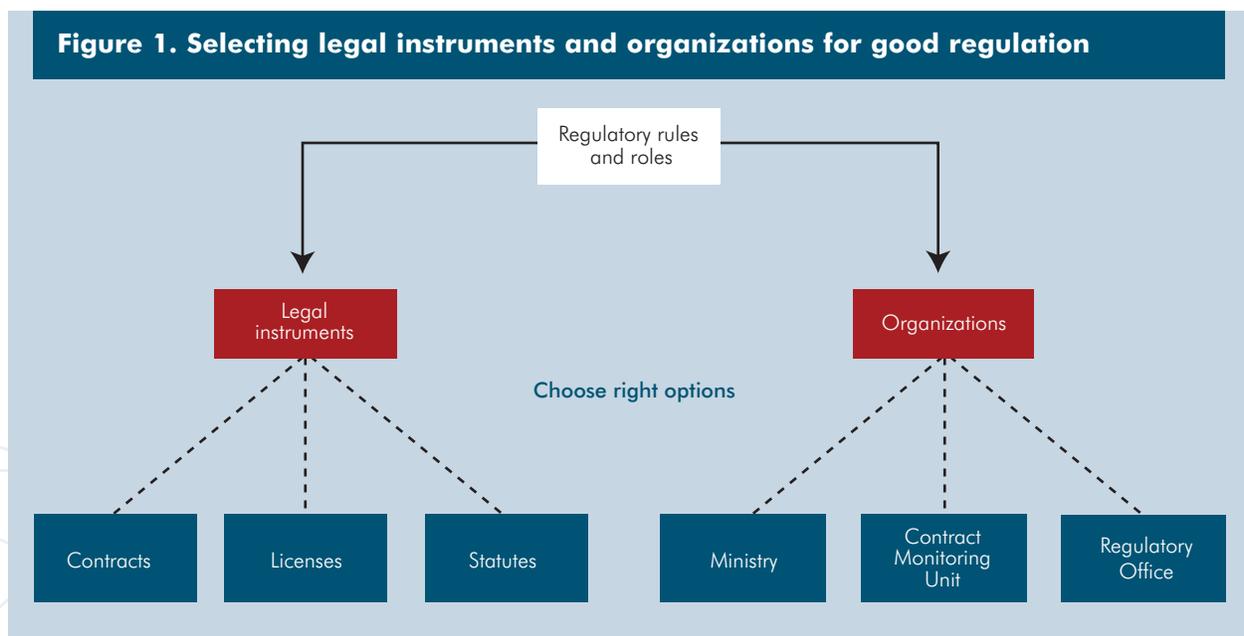
Assessing whether regulation can solve the problems. Not all problems can be solved by a regulatory system. Regulation sets and enforces reasonable tariffs and service standards, and it can help inspire lender and investor confidence. But it cannot, at least on its own, attract investors or solve internal problems, such as inefficient management or inadequate planning.

Determining regulatory objectives. Regulatory objectives depend on the country context. In developed countries, regulators usually aim to keep tariffs low and service standards high. In developing countries, the goal may be to ensure that tariffs can be increased when service improvements prove necessary.

Choosing appropriate legal instruments and organizations. The choice of the regulatory model should be based on whether it is likely to perform the necessary functions competently, predictably, and in a manner consistent with local culture and capabilities. Figure 1 illustrates the instruments and organizations available to create systems that are structurally different but functionally equivalent.

The regulatory organization must fit with existing institutions and with the legal instrument used for regulation. Most Anglo-Saxon countries have a history of support for independent regulatory bodies with regulatory rules embodied in a statute that can deflect political interference. However, that model will not necessarily be effective in developing and transition countries, where political intervention often undermines regulatory independence. In environments where politicians may make incoherent, unpredictable, or illegitimate decisions—but where contracts can generally be enforced—a contract may be a more effective regulatory instrument. Francophone countries often have a culture of regulation by contract.

Combining different models that have developed in different legal contexts—for example, combining



Source: Castalia.

an Anglo-American style regulatory agency with concession contracts from the French tradition—will not be optimal.

Regulating public service providers

Effective regulators are able to reward good performance and punish poor performance. The refusal of a regulator to grant a tariff increase to a privately owned utility will usually induce the owners into corrective action to protect their profits. But independent regulation of public utilities has often failed to produce similar results because of the difficulty of applying sanctions to public utilities. If the regulator punishes a publicly owned utility by withholding a tariff increase, the government, as the utility's owner, will have to cover the deficit through taxes or by cutting spending. In either case, the public suffers.

To deal with this problem, it often makes sense to separate the government's regulatory responsibilities from its responsibilities as owner. For example, when government-owned companies are asked to pursue objectives similar to those of private utilities, they may need to be regulated in the same way and for the same reason as private utilities. An independent regulator may protect governments from political pressure, making necessary tariff increases easier. And a competent independent body can provide an alternative source of information, benchmarking data, and oversight. It may be able to force the utility to collect and disclose information related to its performance and to respond to criticism.

When a government wants to separate the functions of ownership, policy, and regulatory functions, it has a spectrum of options from which to choose, ranging from no regulatory oversight to a full-fledged independent regulator. Mid-range options include a unit in a government ministry that develops a competence in water utility monitoring, or an independent body that issues public reports on the efficiency and service performance of the utility but does not set tariffs or service standards.

Improving regulatory design

Observation and experience in developing countries have identified several ways to improve the

coherence, predictability, legitimacy, and accountability of a regulatory regime. Chief among them are (a) working within the existing organizational framework; (b) creating an appropriate role for politics; (c) limiting discretion in decision making; and (d) trading sophistication for simplicity.

Working within the existing organizational framework. The regulatory system has to be able to get results within the existing environment of laws, policies, organizations, and established relationships among politicians, service providers, and the public. Building on an existing foundation, even if imperfect, promotes credibility and legitimacy.

Creating an appropriate role for politics. Designers of regulation often strive to keep politics out of their decision making. But political engagement may be inevitable and even beneficial. Providing a legitimate, limited role for politics helps build predictability and accountability into the system.

When politicians are involved in regulation, their decisions are often based on immediate interests. To curry favor with the public they may call for lower tariffs or demand service improvements—without fully understanding the trade-offs required. The proper role for politics is to encourage the government to make decisions consistent with the regulatory framework and its contractual commitments. One regulatory mechanism that gives politicians some discretion is to allow them to set or approve tariffs—but within a structure that guarantees service providers a fee that is independent of tariff revenues.

Limiting regulatory discretion. The extent of discretion held by regulators depends on the precision of the regulations. The regulation-by-contract model usually allows only limited discretion; the independent-regulator model (regulation by agency) is associated with greater discretion. Beyond these generalities, practices vary. Many contracts fail to adequately specify provisions for revising tariffs—giving rise to a high degree of discretion. On the other hand, the discretion of an independent regulatory agency may be limited if legislation or subsidiary instruments specify the schedule for tariff increases and the criteria to be used in adjusting them.

Low-discretion rules are usually a better choice for countries with limited institutional capacity and regulatory traditions. They result in

more transparent and predictable decisions and allow decisions to be made more quickly and with fewer resources.

Trading sophistication for simplicity. Regulations must always be detailed, but they should not be complex or difficult to apply. Rules that require large amounts of information or technical expertise may actually reduce effectiveness. For example, a tariff-setting methodology that uses complex bench-

marking and modeling techniques to calculate theoretically efficient tariffs may have technical merit but be relatively costly—and incomprehensible to most stakeholders. Simpler methodologies, based on the service provider's actual costs, enable the provider to cover costs and invest in improvements. While not ideal, the simpler methodology may be adequate and appropriate within the country context, especially if other mechanisms are used to promote efficiency.

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