Management Contracts and Water Utilities
The case of Monagas state in Venezuela

The management contract for water and sanitation services in the Venezuelan state of Monagas, awarded in early 1997 to a Spanish firm, is one of very few signed and active management contracts in the water sector. Management contracts pose design challenges. Their built-in incentives do not include equity at risk, so surrogate incentives must be designed, such as a performance bonus. Deciding how to award these contracts is also a challenge, because they lie somewhere between technical assistance (which should be awarded on the basis of skill and experience) and a lease (which should be awarded on the basis of price). It is too early to say whether management contracts can evolve into a more high-powered form of private participation like a concession. But the early operational results are very positive, and the experience sheds light on when a management contract is the right choice, how it should be designed to introduce the right incentives for the contractor and the public representatives, and what steps to take in awarding it.

Why a management contract?
In 1994 the Venezuelan government, which at the time ran the country’s water and sanitation service, decided to pilot water sector reform in Monagas. Water service coverage in the state was high (93 percent urban, 80 percent rural), but service was intermittent, water quality low, and the collection effort poor. The water operator charged for about 30 percent of the water produced, billed roughly 30 percent of the customers, and collected only 15 percent of the amount billed. To stay afloat, the Monagas operation depended on transfers from the central government, going into arrears with contractors and suppliers, and delaying investments in infrastructure.

The goal of the reform was to improve cash flow, creditworthiness, and service by introducing good commercial and operational management through private sector involvement and rehabilitating the infrastructure (with funding from a World Bank loan). These changes would eventually enable the service to raise investment funds on its own and attract further private sector involvement. Several factors had led the government to conclude that arrangements other than a management contract would entail too much risk for private sector participants: the difficult water sector context stemming from a failed decentralization effort in 1990, exchange rate controls (removed in 1996), the failed attempt to concession the Caracas water and sanitation system in 1992, the small size of the Monagas service, the extremely limited information on its physical and financial condition, and the country’s limited experience with private provision of public services.

Early steps
The pilot reform immediately decentralized service from the central government to twelve municipalities and the state government through a new company, Aguas de Monagas (AdM). Together, the three levels of government designed an incentive-based management contract to be awarded under competitive bidding (box 1). To get the contract off to a good start, agreements between the Bank and the government also called for reducing the staff of the regional water and sanitation entity before the staff were transferred to AdM. That freed the private operator from having to begin its contract with large, politically unappealing staff dismissals. The authorities also put AdM on a sounder financial footing by raising tariffs twice, from 17 bolivares...
(Bs) per cubic meter to Bs 60, and maintaining their real value through a price adjustment mechanism, with little negative reaction from the population. The reform also launched a US$39 million World Bank loan to finance much of the medium-term rehabilitation needs as well as institution building activities, including the fixed cost of the management contract.

The enabling contracts

The management contract is supported by several enabling contracts and structures (figure 1). The service contract between the twelve participating municipalities and AdM and the Contrato Plan, a broad operating agreement that forms part of AdM’s contractual relationship with the private operator, establish the legal and regulatory environment for water and sanitation in Monagas. The service contract delegates to AdM the responsibility for providing water and sanitation services to the municipalities, either directly or through a private operator. The Contrato Plan spells out the division of responsibilities between AdM and its shareholders (the state and municipal governments) and sets the operating, commercial, financial, and investment targets for AdM, including the pricing of services and the price adjustment mechanism to be used by the regulator. The Contrato Plan was approved by all the municipal councils and the state legislature, giving it the weight of law.

The twelve municipalities have formed an association, the Mancomunidad, to pool their water and sanitation services, achieving the scale necessary for AdM to function effectively. But more important, the Mancomunidad offers safety in numbers for political leaders anxious about such difficult decisions as raising prices to cover costs and delegating authority to a private firm. It also provides a single contact point for the private operator, avoiding a need for it to strike bargains with twelve different entities.

AdM’s board of directors includes representatives from the state and municipal government shareholders and is chaired by an independent president. Under the terms of the management contract the private operator is responsible for the structure below the president, in a traditional general manager–type arrangement.

The board performs the regulatory function for the management contract, the service contract, and the Contrato Plan. It must approve tariff increases and adjustments to reflect cost changes proposed by the operator. An international consultant financed by the Bank loan provides support to the board in its regulatory role and will issue an independent opinion for the assessment of the operator’s compliance with the performance targets. The baseline conditions for this assessment were established through an initial technical and financial audit by an external auditor.

Fee structure and targets

The management contract gives the private operator responsibility for managing the entire company, with direct authority over commercial policies and practices, human resources, services contracting, and investment planning and execu-
The operator has full control over resources for small capital works, such as repairs, metering, and improvement of the distribution network (pumps and valves) and the commercial system.

The contract links the payment of the private operator to its achievement of the performance targets set in the Contrato Plan. The payment has two parts: a fixed monthly payment, financed by the World Bank loan, and a variable incentive payment, financed by AdM’s cash flow, contingent on the operator’s surpassing the annual targets for unaccounted-for water and collection efficiency. The contract also includes penalties for failing to meet these targets and to take specific actions set out in the contract (such as setting up a water quality laboratory and a cost management system).

The variable payment is based on the idea of short-run sharing of the benefits from the activities of the operator and is limited to 50 percent of these benefits. The performance indicators used to calculate the payment—unaccounted-for water and collection efficiency—add a physical and financial dimension to the evaluation of the operator’s effect on efficiency. The unaccounted-for water index (water billed, metered, or used in the flat billing as a percentage of water produced) creates an incentive to increase metering and billing, which are key to controlling demand. The collection efficiency index addresses a critical problem, the lack of progress toward cost recovery. Although other indicators were considered, the choice was limited to these two to simplify the remuneration and because most other indicators are directly related to them.

Another key performance incentive for the operator is reputation effect. Monagas is the first of possibly many projects in Venezuela involving the private sector in the management of a water utility, and the project’s success or failure could affect the operator’s chances for entering other projects.

**Initial results**

The contract started with difficulties because more than a year elapsed between preparation of the bid and the arrival of the private operator. While awaiting new management, AdM postponed important decisions and the company’s finances deteriorated. As a result, when the private operator arrived, it found a far different company from that described in the bid documents. On top of all that, partway into the contract the government changed the labor laws in a way that dramatically increased the cost of labor.

Nevertheless, after a year and a half of operation under the management contract, AdM has made significant improvements. For the first time it has a reliable accounting and cost control system that gives a clear picture of its financial situation. Six months after the operator took over, it completed a detailed cadastre of users that increased registered connections from 48,000 to 81,000, out of a total of 110,000 urban users in Monagas. As a result of the new cadastre and monthly tariff adjustments to compensate for cost increases, billings almost doubled in real terms between January and December 1997 (figure 2). Collections have tripled. And AdM has reined in both personnel costs and total costs.
The private operator has taken several actions to reduce costs, setting the conditions for a rapid improvement in the company’s financial situation: it restructured the operation of urban systems; reformulated or terminated expensive and ineffective third-party contracts for operating parts of the system; evaluated AdM’s staff and reorganized them into work teams according to skills, renegotiated the labor contract, and dismissed unsuitable staff, financing redundancy payments from AdM’s improved cash flow; and introduced a new organizational structure. These actions have produced improvements in both operations and service quality—water supply, for example, is up from twelve to twenty-two hours a day on average—garnering a positive response from consumers and local authorities.

The Contrato Plan has played a key part in the regulatory framework and in monitoring the performance of AdM and the private operator. It is similar in concept to contract plans that have been used by public entities in many other countries but which have had a mixed or poor record of success. The Monagas plan may be more successful because it forms part of the contractual obligations of the private operator under the management contract, and of AdM under the Bank loan.

The relationship between the board and the private operator has proved to be critical to the success of the contract. The management structure has made it hard to separate the roles of regulator and operator, and the board has had a tendency to intervene in day-to-day business decisions. In addition, hindsight suggests that the performance indicators for the first year should have given more weight to actions that build institutional capacity (such as developing systems, a cadastre, and personnel) than to detailed numerical targets for unaccounted-for water and collection. Such an emphasis would have encouraged the operator and the board to develop knowledge of the company’s true situation with more urgency.

**Conclusion**

The management contract has allowed the private operator, under circumstances of controlled risk, to learn about the condition of the water utility, to initiate the most urgent actions for its recovery, and to develop working relationships with the public authorities. The approach appears to be fostering greater private sector participation in three ways: It is expected to lead to a full concession. It has encouraged private sector participation in other water and sanitation systems in the country. And it has stimulated interest in private sector management of other public services in Monagas.

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