

# GRID LINES

Sharing knowledge, experiences, and innovations in public-private partnerships in infrastructure

## Improving water services in a postconflict situation

### The case of the management contract in Kosovo

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**C**ountries emerging from a devastating conflict need to rapidly restore access to basic water and sanitation services for their population. While donors usually stand ready with generous reconstruction packages, the conflict may have left local institutions ill equipped to make good use of those resources. The traditional solution, involving technical assistance delivered by international consultants, has often proved disappointing. An alternative is to bring in a professional operator for a few years through a management contract. In postwar Kosovo the sizable improvements achieved under a three-year management contract for water services in the Gjakovë-Rahovec area suggest that it can be a promising approach for postconflict situations.

The conflict of the late 1990s between ethnic Serbs and ethnic Albanians left municipal water services in Kosovo in a critical situation. Among the most severely damaged areas was that containing the towns of Gjakovë and Rahovec and 56 surrounding villages, with a combined population of about 200,000. Before the conflict this area had had satisfactory water services: customers received continuous service, they were all billed on the basis of metered consumption, and water losses were estimated at about 25 percent. But the devastation of the infrastructure during the war, followed by the exodus of many capable employees and a lack of maintenance, took a heavy toll.

By the end of 2000 supply interruptions were frequent and water quality had deteriorated. Water losses had more than doubled, and most

meters had been broken or stolen. Although most households had access to the water network, half of these were not registered as customers, and most of those receiving water bills failed to pay them. With revenues too low to cover operating costs, the situation had become unsustainable.

#### Why a management contract?

For donors and other relief agencies, the traditional route in postconflict reconstruction has been to provide large amounts of money to help restore basic services through emergency repairs. This is often combined with technical assistance from foreign experts. Such an approach has several pitfalls. Responsibility for civil works rests with local teams often ill equipped to carry out an investment program. Even when outside experts are there to help, coordination problems tend to arise because these outside experts focus on supervising civil works and delivering specific outputs (such as reports or training) and have no stake in the program's ultimate success or failure.

The United Nations Interim Administration Mission in Kosovo (UNMIK) recognized that this approach might not work in the challenging context of Kosovo. The issue was not just the urgent need to rehabilitate the physical infrastructure. A whole new water utility had to be

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put in place, from establishing the customer database to organizing the staff and implementing the right operating procedures. Operational performance would have to be significantly improved to make the investment sustainable—which meant, among other things, increasing the revenue stream through better billing and collection procedures and reducing water losses.

A management contract with a competent foreign operator could combine all these objectives in one package. In addition, the weak governance and uncertain political environment in postwar Kosovo made bringing in a professional operator for an interim period to help in managing the services an attractive option. UNMIK therefore decided in 2001 to go forward with this option. But two questions remained: Would a competent private operator be willing to take the risks involved in signing a performance-based contract in such an uncertain environment? And would it be able to attract qualified managers to live and work in Kosovo?

### The contract design

As part of a broad reform conducted under a UN-mandated recovery program, seven regional water companies were established in Kosovo—one of them, Hidrodrini Radoniqi (HSR), to cover the area around Gjakovë and Rahovec. The Kosovo Trust Agency (KTA), established by UNMIK to assist in the administration of publicly owned

water and wastewater enterprises, controlled HSR, while the municipalities retained ownership of the infrastructure.

Under the proposed management contract, the private operator would take full control of operations, maintenance, and billing and collection in the area. It would also be in charge of an emergency repairs investment fund established through a World Bank grant, with responsibilities that would include identifying, selecting, contracting for, and supervising the civil works to be carried out. The contract had two main objectives: improve services for the customers, and establish a viable public utility capable of operating on its own by the end of the contract. A supervisory board was created, with representatives from KTA and the two municipalities. It had the authority to adjust customer tariffs and monitor the management contract (with the support of an international consultant). A number of technical deliverables were specified as outputs in the contract, representing the systems needing to be in place to establish a working water utility.<sup>1</sup>

The management contract was performance based, with a fixed fee plus a performance bonus based on the achievement of selected performance targets. The fixed fee portion of the contract, which also formed the basis for international competitive bidding, was \$1 million. The performance bonus was initially capped at \$0.6 million. The international tender launched by KTA proved successful: the contract was awarded in December

Two main objectives: improve services and establish a viable public utility

**TABLE 1**  
Targets and actual performance under the Kosovo management contract

Indicator	Baseline	First year		Second year		Third year	
		First semester	Second semester	Third semester	Fourth semester	Fifth semester	Sixth semester
Customers metered (%)	10	25 (47.6)	40 <sup>a</sup> (51.53)	60 (65.72)	80 <sup>a</sup> (80)	90 (85.5)	90 <sup>a</sup> (90)
Customers in cadastre (%)	50	80 (n.p.)	90 (n.p.)	95 (100)	95 (98)	98 (100)	98 (100)
Collection ratio (%)	n.d.	30 <sup>a</sup> (64.4)	60 <sup>a</sup> (61.27)	70 <sup>a</sup> (76.93)	80 <sup>a</sup> (90.33)	90 <sup>a</sup> (78.4)	90 (81.29)
Operating ratio	n.d.	n.a.	0.7 <sup>a</sup> (1.07)	1.2 <sup>a</sup> (1.18)	1.5 <sup>a</sup> (1.06)	1.06 <sup>a</sup> (1.1)	1.06 <sup>a</sup> (1.2)
Nonrevenue water (%)	n.d.	50 (70)	50 (65.44)	40 (57.75)	35 (59.14)	59 (59.6)	59 (61.9)
Supply chlorinated (%)	80	100 (100)	100 (100)	100 (100)	100 (100)	100 (100)	100 (100)

Source: Project files.

Note: Figures in parentheses are actual performance levels.

a. Performance target with incentive payment.

n.a. = not applicable; n.d. = no data; n.p. = no progress.

2001 to a German utility company, Gelsenwasser AG. The contract was initially for two years but was later extended for a third year, with the total cost reaching \$2.1 million.

### Sizable gains despite scaled-down investment

During the three years of the management contract the private operator achieved sizable improvements in the operational and financial performance of HSR (table 1). Full chlorination of the water distributed was achieved in the first months, and a continuous supply of potable water was gradually reestablished in both towns thanks to the emergency rehabilitation works identified and carried out by the private operator. All contractual outputs were delivered on time. A critical element was the updating of the customer cadastre, which had become obsolete because of population movements. Half the actual customers were not registered initially, but an updated GIS-based cadastre was in place by the end of the second year. Much progress was also made in metering coverage, which increased from about 10 percent to 90 percent by the end of the contract.

The municipalities remained responsible for disconnecting nonpaying customers reported by the private operator.<sup>2</sup> While this arrangement worked well in Rahovec, the municipality in Gjakovë usually failed to diligently prosecute the illegal connections and payment defaulters identified by HSR. This prevented the operator from meeting the collection target in the third year. Even so, the collection ratio increased from 64 percent in 2001 to 81 percent by the end of the contract, with the average time taken to collect payments dropping from 13 months to just 4. All this led to a dramatic turnaround in the financial situation of HSR. The utility went from an operating loss of about €50,000 in 2001 to an operating profit of more than €100,000 in 2004, even with no increase in tariffs during the contract period.

Progress in reducing nonrevenue water fell short of expectations, however. Only 10 percent of customers were metered when the operator took over, and the initial baseline for nonrevenue water proved to be grossly underestimated. Rather than the 50 percent initially estimated, nonrevenue water actually exceeded 70 percent. But the private operator was unable to reduce this by more than about 8 percentage points over the three years of the contract. This was in part because of problems in executing the investment program, which was financed by a World Bank grant denomi-

nated in U.S. dollars. The sharp devaluation of the U.S. dollar during the contract meant a significant reduction in the amount available in euros. Some of the rehabilitation work on the network had to be scaled down or discontinued because of lack of funds.

The foreign operator left in January 2005, once the contract was completed. Plans to expand this successful public-private partnership experience to other regional utilities in Kosovo failed to materialize. The political situation in Kosovo has prevented the adoption of a clear, long-term strategy for the sector, and many urban water systems are in a critical situation.

Since the end of the contract, HSR has been operated as a purely public utility, remaining under the supervision of KTA until 2008, when the Kosovo government took over. HSR is one of the best regional utilities in Kosovo and has sustained most of the improvements achieved by the private operator under the management contract. In 2008 the share of customers billed stood at 99 percent and the metering ratio at 94 percent, higher than the levels achieved by the end of the management contract and well above the averages for the seven regional utilities (92 percent and 80 percent, respectively). The utility has maintained full continuity of service, though it has made no further progress in reducing the level of nonrevenue water. HSR is the only regional water utility in Kosovo to achieve a potability compliance rate of more than 99 percent. It has sufficient revenues through tariffs to fully recover its operating costs, and has the highest coverage in Kosovo (95 percent). And while the bill collection ratio fell to 71 percent in 2008, HSR still had the second-best performance among regional utilities, above the national average (65 percent).

### Lessons learned

The Kosovo experience shows that introducing a professional outside operator through a management contract—to operate the system while at the same time implementing urgent repairs—can be a viable and attractive option for a postconflict situation.

Despite the inherent difficulties of the postconflict environment in Kosovo, the management contract broadly achieved its original objectives. Both the quality of services and revenue collection improved substantially, though some other areas of efficiency improvements fell short of original expectations. By the end of the contract HSR had reached a much better financial and

**The improvements were sizable—and were sustained even three years after the end of the management contract**

operational situation—with no increase in tariffs for customers. Local staff had received extensive training, and all systems and procedures necessary to run a modern water utility were in place. Given the difficult context, it is unlikely that the same level of improvements would have been achieved under a more traditional technical assistance approach. The total cost of the management contract was equivalent to about \$3.50 per inhabitant a year, in line with what a more traditional service contract would have cost. Most important, the improvements proved to be sustainable, even three years after the private operator had left.

The Kosovo management contract offers lessons for consideration by policy makers interested in replicating it elsewhere. Some are linked to the contractual design, others to the special challenges posed by postconflict areas.

- Transferring to the private operator, through an emergency work fund, the responsibility for making decisions on repairs and implementing the corresponding civil works proved to be a good idea. It allowed more flexibility and speed in carrying out the investment program and ensured that investment choices were driven by operational needs. But with the budget for the work fund established in U.S. dollars and the costs essentially in euros, the devaluation of the U.S. dollar limited the ability of the operator to achieve the targeted improvements in operational efficiency.
- Realism should prevail when setting targets under short-term management contracts, particularly in a postconflict situation. Dealing with high levels of physical losses can be difficult, as repairing leaks in a highly deteriorated network usually takes many years. It is better to focus on “low-hanging fruit” where an impact can be made in a relatively short time, such as improving bill collection. And in the Kosovo case there was no point in setting a high target for bill collection, since the responsibility for prosecuting nonpaying customers rested with the partner municipalities.

- Establishing the baseline from which to measure progress is always a problem for public-private partnerships. But it is particularly so in a post-conflict situation, where operational data are usually nonexistent and most meters have been destroyed. That the baseline for nonrevenue water proved to be grossly underestimated suggests that it would have been better to wait until after the first year of operation to determine the true level, under the oversight of an independent technical auditor.
- The frequent rotation of staff from the foreign operator was a recurrent concern for the public counterparts. There is no simple solution to this problem, because it is hard to find competent professionals willing to live in a postconflict area for more than a few months. Yet a management contract was probably the “least inefficient” solution in this context, since the foreign operator had much more at stake than it would have had under a simple technical assistance contract—forcing it to ensure that suitable personnel were always in place to manage the systems.

#### Notes

1. These deliverables included manuals on standard operating procedures; financial management and procurement systems; customer information systems, including a GIS-based cadastre and computerized billing system; a staff training plan; and water quality control systems.
2. Only nonpaying customers not qualifying under a social program of subsidized tariffs targeted to the poor were proposed for disconnection.

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