



## Public-Private Partnership Impact Stories

### Romania: Bucharest Water and Sanitation



The Bucharest concession was Romania's first public-private partnership in the water and sanitation sector and one of the first such transactions in the sector in Europe. IFC's role in structuring and implementing the transaction provided assurances to international operators and the municipality about this pioneering transaction. The transaction was completed in March 2000.

Vivendi of France (now Veolia) won the bid to operate and maintain the water and sanitation system for 25 years. As of 2010, the company had invested more than \$250 million in upgrading and servicing the system, providing to the Bucharest metropolitan area's 2.2 million one of the lowest water and sanitation tariffs in Europe. The concession has "massively improved water services, in Bucharest, lifting the city's standard of services above other Romanian towns and toward western European levels" (as reported in a 2010 evaluation of the concession by Castalia Strategic Advisors).

*This series provides an overview of public-private partnership stories in various infrastructure sectors, where IFC was the lead advisor.*

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## BACKGROUND

The municipality of Bucharest was facing numerous problems in meeting the city's water and sanitation needs. Because of leaks in the distribution network and waste, water losses were very high, nearly 50 percent, which together with an inadequate metering system resulted in low revenues for the municipality. In addition, some larger investments in sewerage, water storage and quality improvements were also required to meet EU standards. Furthermore, the complicated ownership structure of water infrastructure assets resulted in a lack of accountability and of incentives to improve efficiency. In addition, low tariffs meant that insufficient funds were available to invest in the necessary improvements.

## IFC'S ROLE

The municipality hired IFC as transaction adviser to assess various options for private sector participation and to help structure and implement a transaction for a private partner. The government's objectives were to bring about efficiency gains so that consumer service levels could improve with minimum tariff increases, to transfer most of the investment responsibilities to the private sector and make it as self-sufficient as possible, and to avoid the dangers of a private monopoly. Based on a thorough review, IFC recommended a long-term concession whereby the private operator would be responsible for managing water and sanitation services and for all capital investments. The municipality would, however, retain ownership of the assets. After the municipal council approved this approach, IFC:

- Launched a promotion campaign to attract major international water and sanitation companies.
- Conducted a prequalification process to ensure that potential bidders had the requisite technical experience and financial strength.
- Drafted a detailed concession contract that included a process and methodology for adjusting tariffs and performance targets for service quality and expansion.

## TRANSACTION STRUCTURE

Under the structure adopted by the municipality, a joint venture concessionaire company was established to manage all water and sanitation services in metropolitan Bucharest under a 25-year concession contract. An international private operator took 80 percent of the shares of the concession company, while the municipality retained 20 percent.

Because of the differences in costs and investment needs in various parts of the water and sanitation system, IFC helped structure time-based performance targets for improvements to service quality and delivery. Obligations of the concessionaire were clearly defined in the concession contract. The concessionaire is responsible for all operations and investments. Service level targets exist across all categories with penalties for non-compliance. The tariff structure and adjustment process are also set out in the contract. The lowest average tariff based on seven future bid tariffs formed the bid criterion. A tariff review is scheduled every 5, 10,

and 15 years with readjustment in the event of project returns being above or beyond a predefined band. This band provides an additional incentive for the concessionaire to be efficient.

## BIDDING

Six major international companies were prequalified to participate in the bidding. The prequalified bidders submitted bids based on their proposed tariffs for years 1, 2, 3, 4, 6, 11, and 16 of the concession period, which were then discounted to a single net present value average tariff. Three of the prequalified bidders submitted bids: France's Vivendi (now Veolia) and Lyonnaise des Eaux, and the United Kingdom's International Water. Vivendi won with an average net present value tariff of €0.17 per cubic meter. Apa Nova București, a subsidiary of Veolia is the operating entity.

## POST-TENDER RESULTS

- Water quality has improved: in 2000, 69 percent of samples complied with the standard for residual free chlorine; in 2009, 100 percent of water samples met or exceeded Romanian and E.U. quality standards.
- Overall customer satisfaction increased from 46 percent in 2002 to 75 percent in 2009.
- Coverage is high (92 percent) in the service area included in the concession contract, and access to and quality of service improved in the entire city, including in poor areas.
- Water consumption decreased from total consumption of 516 liters per capita per day in 1999 to 239 liters per person per day in 2009, and is decreasing at a compound annual rate of 8 percent due to reduced leakage.
- Apa Nova Bucuresti has reduced non-revenue water (including leakage and commercial losses due to under-billing, theft etc.) from 350 cubic meters per kilometer of network per day in 2002 to 176 cubic meters per kilometer per day in 2007.
- Apa Nova Bucuresti has invested \$258.8 million.
- The combined water and sewerage tariff has been maintained below the average for other Romanian cities.

\* Unless otherwise stated, monetary values are presented in 2008 US dollars. Results are from a post-completion evaluation completed May 2010.