This case demonstrates lessons learned from institutional and regulatory weaknesses after nine years of problematic private control of water services in the metropolitan area of Buenos Aires.

**ABSTRACT**

**Description**

This case describes the problems of privatisation of one of the largest integrated water and sewerage systems in the world in an area with ten million inhabitants having an unbalanced and asymmetric water service coverage. The process has been largely unsuccessful in terms of delivering universal coverage and reducing tariffs after nine years. The experience suggests the need to discuss what has been learned about some of the issues raised by the privatisation and regulation of these services.

The resulting failures might have been expected given the conjunction of:

♦ serious deficiencies in the design and the methods employed during the concession procedure;
♦ the weaknesses and inadequacies of both the regulatory system and the related institutional framework;
♦ repeated renegotiations of the contract;
♦ lack of real incentives for the concession holder to serve those areas where service is most lacking (lower income sectors).

**Lessons learned**

The discrepancy between the aims pursued (universal access and a substantial improvement in the quality of service) and the poor results obtained after nearly nine years of private management emphasise that important lessons can be learnt from this water supply failure in order not to repeat the mistakes elsewhere. Main points are:

- A public and parliamentary debate that leads to specific laws that provides legal security and predictability is necessary before the projects are initiated;
- An integral analysis of the possibility of incorporating competition mechanisms to limit the monopolistic power of the concessionaire(s) should be included;
- The need for any concession to include a levy payment (charges) for the exploitation of public assets and/or the requirement to make capital contributions to avoid opportunistic bids;
- The incorporation in the regulatory framework of the concept of “business risk” or, in other words, the prohibition of reinsurance to nullify this risk even under conditions of operator inefficiency;
- The achievement of universal service on the basis of effective operator incentives, appropriate cross subsidies, and, if necessary, the implementation of social tariffs that not only allow lower income sectors access to service, but also apply to those already served. This should be made compatible with a growing capacity to meter individual consumption to obtain a more rational use of the resource;
- The independence and full self-sufficiency of the regulating agency to ensure total autonomy, trained technical staff, budgets independent of the invoicing of the regulated companies, and active policies that give priority to the defence of user rights;

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• The incorporation of terms into regulations for using local suppliers and the establishment of tight controls on the practice of applying transfer prices to in-house purchases of the concessionaire companies;
• The implementation of a specific regulatory accountancy that incorporates and/or specifies information on economic/accounting/social/infrastructure aspects, deemed essential for the development of a system of control and regulation, in order to minimise information asymmetries; and finally,
• In economies with levels of poverty and indigence such as those found in a large part of the world, drinking water and sewage cannot be considered only as merchandise subject to market forces. To the contrary they are basic elements constituting the quality of life of the population. Attention must also be given to basic social needs.

**Importance of the Case for IWRM**

This study is illustrative of the limitations and deficiencies of certain public policies based on unsustainable strategies. This is manifested both in terms of inefficient use of the water resource and attempts to increase levels of service. Although lack of official action in these areas has not been studied in detail in this analysis, it is also an important factor in the problems related to this case.

The priority given to political and institutional goals overshadowed both socio-economic and environmental issues, which ought to have been given priority in such a sensitive area as the management of water and sewerage services.

Recent public questioning of the service (quality, increasing costs, impact on the environment, etc.) suggests the need to discuss whether substantial modifications to the concession contract and the regulatory institution are really possible. And, within this context, to search for real solutions that go beyond those likely to result from the difficult and uncertain current situation of the service concession (including any renegotiations currently in process).

**Tools used**

B1.6 Service providers and IWRM

B1.7 Strengthening public sector water utilities

C6 REGULATORY INSTRUMENTS – Allocation and water use limits

C7.1 Pricing of water and water services

**Key Words**

Privatisation, failures, concession design and methods, regulatory weakness, institutional capture by the concessionaire, universal service.

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**MAIN TEXT**

**1. Background and problems**

The hyperinflation crisis towards the end of the 1980s, together with the consequent inauguration of the Menem administration (in mid-1989), led to profound change in economic, social, and institutional structure with the application of basic neo-liberal policies (privatisation, deregulation, opening-up of the economy, labour flexibility and financial liberalisation).

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The privatisation of "Obras Sanitarias de la Nación" (OSN), the State company responsible for supplying drinking water and sewage services to the City of Buenos Aires and to the main suburbs of the Buenos Aires conurbation (amounting to close to 9 million inhabitants at the time of transference) falls squarely within this context. The speed with which the process was carried out, the lack of any public or parliamentary discussion of the form in which the transfer of the company to the private sector should take place, are consistent with the achievement of the political and institutional objectives mentioned above.

The decision to award a 30-year concession for the service area of the OSN through Presidential decree led to a process which was neither legally stable nor predictable. This created an environment which would inevitably, through various decrees and resolutions, (many of them of questionable legality and transparency), end up in the reformulation of the original concession contract.

2. Actions taken during the privatisation period

Forms of privatisation, opportunistic bids, and regulatory design

The main criteria on which the privatisation of OSN was based can be synthesised into three essential components:

- The decision to maintain the vertical and horizontal structure of the company, ignoring criticisms even from the World Bank, which had proposed its segmentation in order to introduce a certain level of comparative competition. Also rejected was the possibility of differentiating the concession of the provision of services from the construction of new infrastructure. This would have been a viable option for lessening the monopolistic power of the concessionaire;
- The maintenance of a tariff structure based on a water rate defined according to the presumed consumption per surface area and with a minimum of metering (barely 15% of the total). Both systems include crossed subsidy schemes between zones and types of buildings aiming to favour, in theory, universal service access, and
- The adoption of a new specific infrastructure charge (including a network charge and a connection charge) for the purpose of financing network expansion and the incorporation of new users.

Although the existing cross subsidies schemes in the tariff structure were not suppressed, the funding scheme established for expansion aimed at new users (mostly low income) counterbalanced the progressive nature of the other components of the tariff to the extent that the expansion fees were charged to these new users.

The mere formal replication (in most cases distorted and distorting) of some regulatory criteria used in other economies, where the levels of poverty and destitution are marginal compared to those of present day Argentina (over 50% and close to 15%, respectively), not only fails to guarantee universal access to drinking water and sewerage, but, on the contrary, aggravates the critical situation in health and the quality of life for a large and ever growing part of society.

The method of tender adopted was to award the service to the offer that, having met the technical requirements for infrastructure works and investment, proposed the greatest reduction of the tariffs from those charged by the OSN, which had risen by over 70% in the previous two years. The winning bid was presented by the consortium Aguas Argentinas S.A., led at the time by Suez Lyonnaise des Eaux-Dumez of France and the local group Soldati (later ownership changes within the group lead to majority control by Suez – ONDEO, and a minority participation by, among others, Vivendi, Aguas de Barcelona, Banco de Galicia y Buenos Aires and the International Finance Corporation). The granting of the concession was based on the percentage-value of the coefficient offered, which was 0.731, or a 26.9% reduction on the existing tariff. The concession was granted free of charge, with no obligation for the winning consortium to pay a levy, despite the fact that it would receive benefits from the exploitation of pre-existing public assets. Neither was there any requirement to purchase shares in the company nor any other requirement implying a specific financial contribution on the part of the winning consortium.

On the basis of the proposed prices and tariffs, the concessionaire company committed itself to develop a “Plan for Service Improvement and Expansion” (PMES), divided into six correlative five-year plans (the first two were incorporated in the original bid). It was established that the main variable for tariff regulation would be tied to the average income received by

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the company (according to the number of users served each year and the efficiency conditions set in each five-year plan). Two possible types of revision were established for the tariff: the “ordinary review”, to be discussed before the presentation of each five-year plan and, starting from the second period, a system where “there could only be reductions in the current tariffs and prices”. The other possibility was the “extraordinary review”, which could only be put forward if there was an “increase or decrease in the operating costs of the concession of more than 7%”.

As became clear a few months after the transfer of the company (1 April 1993), the winning bid was based on a predatory tariff, knowing that the tariff could later be renegotiated on successive occasions. Thus, beginning with an opportunistic bid, the subsequent contractual renegotiations became one of the outstanding characteristics of the normative and regulatory framework of the concession.

Despite the fact that the contract itself prohibited any tariff review that could be associated with the notion of minimising or eliminating business risk, merely eight months into the concession the concessionaire asked for an “extraordinary review” of the tariffs, arguing unforeseen operating losses. Without any significant official objection, the solicited tariff increase was awarded as of July 1994 (the original coefficient was raised to 0.830, implying a 13.5% increase). Additionally, infrastructure fees were increased by over 40%. It must be pointed out that the Law of Convertibility (No 23.928) had prohibited, as of 1 April 1991, any type of adjustment or indexing of public service tariffs.

Based on this new tariff structure, Aguas Argentinas went from deficit to a strong profit situation in its second year of operation (when it invoiced nearly US$ 350 million, with net profits of over US$50 million). At that time, ETOSS (the regulator for the sector) documented a wide range of non-compliance by the company, in particular regarding progress in the investment in infrastructure that had served as the argument for the “extraordinary review” of the tariffs (among other areas, the provision of service to the “villas de emergencia” (shack housing) of Buenos Aires).

In subsequent years there were, on the one hand, repeated and unjustified delays by the company in the execution of investments and in the achievement of the promised goals and, on the other hand, increasing pressure to define the tariffs in terms of the US dollar (“dollarising”) and to procure new ways of recovering investments in the face of a high level of non-payment of the infrastructure charges.

The official answer once again favoured the company’s interests. In February 1997, the government called for a renegotiation of the concession contract, for the purpose of discussing, among other things, the elimination of the “conflicutive” infrastructure fee. This call itself was the manifestation of a new anomaly in who was included and who was excluded from the negotiations. Included was the Secretaría de Recursos Naturales y Desarrollo Sustentable – SRNyDS – (Natural Resources and Sustainable Development Secretariat), which was gaining an increasing say in the management of the concession, and the exclusion of ETOSS, the institution responsible for control and regulation, which was marginalised in the contract renegotiations.

Despite the obvious failure of the company in investment in and expansion of the network (including the substitution of water with nitrate content for surface waters), in November 1997 an agreement was approved that established:

- A peculiar way of “dollarising” the tariff (“immediate transfer to prices and tariffs of a devaluation”);
- The elimination of the infrastructure charge and its replacement by the concept of a fixed universal service charge (SUMA), indexed and re-adjustable, to be paid by all users (between 2 and 3 Argentine pesos per service, per invoice and every two months). Also, new users were required to pay a service incorporation charge (CIS) in 30 monthly instalments of 4 pesos;
- The thresholds for tariff adjustment due to increased costs were substantially reduced;
- The incorporation of the possibility of an “extraordinary review” of tariffs every calendar year. With this justification, the concessionaire company asked for the approval of an 11.7% tariff increase starting May 1998, which the SRNyDS set at 5.1%;
- Several investments originally promised were postponed or cancelled and, in some cases, others not carried out were forgiven and then “compensated for” by future investments in, for example, the business complex of Puerto Madero.
In July 1999, through resolutions of the SRNyDS, new changes were introduced in the tariff regulations. Following the guidelines of the "price cap" regulation scheme, it was established – in contravention to the Convertibility Law – that in future tariffs should be adjusted by a set price index minus an efficiency coefficient. The selected price index was the simple average between the [Producer Price Index – Industrial Commodities] and the [Consumer Price Index – Water & Sewage Maintenance], both of the USA. The global efficiency coefficient was fixed at just 0.5%. However, according to the company itself, “efficiency gains” amounted to 6.4% between 1994 and 2000, on an annual accumulative basis (CEER-UADE, 2001).

Despite the claim that they were changing to a price cap tariff regulation scheme, the possibility of adjusting tariffs according to the variations in the costs and income of the company, a mechanism of the cost plus scheme, was maintained. For this purpose, a "Net Financial Exposure" quotient (EFNQ) was established, calculated as the present value of the net cash flow required to pay for the operational expenses and the "efficient" investments of the concessionaire during the five-year plan under consideration (thus constituting a guarantee of profit). It was established that, in the event that the quotient was lower than that originally agreed, the concession income should be adjusted, through an increase in tariffs and/or through state subsidies, until the anticipated cash flow was reached.

To sum up, this is a tariff regulation scheme supposedly based on the price cap system, but without incentives for increasing efficiency, which should be a central aspect of this system. The scheme includes trigger clauses for tariff increases due to increases in costs or to insufficient income, in terms of the net financial exposition quotient. It is in reality an ad hoc mechanism combining an inverted price cap, ensuring that the company gets an increase in tariffs, with elements of the cost plus mechanism, such as the transfer to tariffs of any increase in costs or insufficient income. Moreover, each new user pays for his connection to the network, but the universal service charge (SUMA) created for this purpose was not eliminated.

The delayed first five-year review

The recurring renegotiations of the contract carried out during the period 1997 to 1999 laid down the substantive bases for confronting the delayed first five-year review of the concession (in relation to the Plan for Service Improvement and Expansion, to tariffs, and to environmental goals). It was not until January 2001 that an agreement between Aguas Argentinas and ETOSS was signed approving the second five-year plan (which should have come into effect in May 1998).

In exchange for a commitment to fulfil the delayed investment plan and to advance in some future works, the company was favoured with an annual and accumulative tariff increment of 3.9% between 2001 and 2003, an adjustment of 1.5% for inflation in the USA and two additional fixed bimonthly fees (1.55 pesos per invoice).

In summary, as a result of the successive tariff increases authorised, between May 1993 and January 2002 the average tariff for residential service was increased, by 88.2% (Lentini, 2002). This percentage not only amply compensated the initial reduction of 26.9%, but also was comfortably superior to the variation registered by the consumer price index for the same period (just 7.3%).

As a result of this delayed ordinary review, the State sanctioned an important number of breaches of the contract with clearly regressive implications within a regulatory environment that does not much resemble the original.

During the first five-years of the concession, considering only the investment carried out by the company (excluding the expansion arising from works carried out by third parties and the regularisation of informal connections), the failure of the concessionaire to comply in service coverage amounts to 63% of the population goal contained in the original bid for the provision of drinking water service and to 88% of that corresponding to sewage services (Comisión de Usuarios del ETOSS, 2000).

Outcomes

The economic performance of the concession holder
The configuration of a new regulatory framework resulted in the internalisation of privileges that were reflected in the economic performance of the concessionaire. Between 1994 and 2000, the tariff regulation variable “income per user” went from 145 pesos/dollars to 195 pesos/dollars. On the other hand, between 1994 and 2000, according to the annual balance sheets of the company, Aguas Argentinas registered on average a net benefit over capital quotient of 19.1%, and if the average profits over sales are considered, of 12.8% (Azpiazu y Forcinito, 2002).

Further, as a constituent part of the original “opportunistic” bid, the failure to comply with the commitments regarding network expansion was compounded by management reluctance to make capital contributions of its own and consequently systematically and increasingly recurring to loans (in particular to external loans, much less expensive than local credit). Indeed, due to the lack of any restriction on the level of debt of the concession holder, the company has been steadily increasing its external debt (particularly with the International Finance Corporation, which owns 5.0% of the shares of the consortium and the European Investment Bank, plus various emissions of Negotiable Securities). Thus, for example, the balance sheet at December 31, 2000 shows that the ratio of total liabilities over net worth rose to 2.49, when in the original bid it was foreseen that this indicator could not surpass 0.8.

The Current Situation

Between 20 December 2001 and 6 January 2002, radical changes occurred in the context in which the concession operated. During this period, the following events occurred: the resignation of President De la Rúa and all of his ministers; the designation of five constitutional presidents within two weeks; the unilateral declaration of default in external debt; the designation of President Duhalde; the approval of an emergency law; the abandonment of convertibility and the consequent devaluation of the peso; the decision to renegotiate all contracts with private companies based on the prior “de-dollarisation”; and the “de-indexing” of the tariffs.

Prior to initiating this process of renegotiation, Aguas Argentinas circulated a note in which it demanded compensations including, among others, exchange rate insurance (recognition of the peso/dollar parity) in order to meet its large external debt (close to US$ 700 million), the maintenance of this parity for their imports (the in-house purchases of the concessionaire are almost US$ 600 million), and the suspension of the investment commitments of the contract.

In May 2002, the decision was released on the specific treatment to be given to the water supply and sewerage contract in the renegotiations (López Raggi, 2002). It was decided that the concessionaire must fulfil all of its investment commitments and expansion goals previously agreed to without any tariff increase whatsoever. This would be feasible only if the company renegotiated its external debt and suspended all money transfers abroad (both dividend payments and management fees).

In August 2002, the Ministry of Economics demanded that each of the privatised companies file an informed request for the tariff adjustments required, during which time the Ministry would allow them not to comply with the conditions of service quality required. This new direction in the renegotiations would seem to be a paradoxical result of strategies and conflicts of interests of various types.

On the one hand, pressure was increasing from the private companies involved in contract renegotiations (61) from many of their countries of origin and from the IMF itself (which included as one of the preconditions for a possible agreement with Argentina an increase in the tariffs of the privatised services). On the other hand, pressure from the government authorities themselves, who appeared to want to delay as much as possible the resolution of the tariff question, conscious of the impact it would have on the cost of living and on the forthcoming presidential election.

In summary, the uncertainty about the future of the concession of water and sanitary services in the Metropolitan Area of Buenos Aires is emerging as an anticipation of more of the same in a process that, after more than nine years, has accumulated all manner of errors and failures.

Lessons Learned and replicability

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The Argentinean experience is paradigmatic and suggests the need for a discussion of its underlying lessons for the challenges posed in the privatisation of water and sewerage services. By way of illustration, some of these lessons can be highlighted:

- The need to carry out a wide-ranging public and parliamentary debate that, based on appropriate technical and economic principles, could result in the passing of a specific law to provide legal security and predictability and create the possibility of altering the established regulatory framework;

- This requires an integral analysis of the possibilities of dividing the system, as well as the configuration of bidding mechanisms for the construction of some types of new infrastructure, in order to limit the monopolistic power of the concessionaire;

- It is necessary that any concession includes a levy payment for the economic use of public assets and/or that capital contributions be required (such as through a share purchase agreement) so as to prevent opportunistic bids. Also, as it is public assets that are subject to concession, the possibility ought to be explored of setting coefficients (or short intervals) for capital contributions, as well as for the debt to net worth ratio;

- The incorporation in the regulatory framework of the concept of “business risk” or, in other words, the prohibition of re-insurance that nullifies this risk even under conditions of operator inefficiency;

- The promotion of universal service access through effective operator incentives, appropriate and transparent cross-subsidy mechanisms and, if necessary, the implementation of social tariffs that not only allow lower income sectors access to the service, but also apply for those who already have access. This policy should be accompanied by increased metering to encourage a more rational use of the resource;

- Granting the regulating agency independence and full self-sufficiency, which guarantees complete autonomy, trained technical staff, budgets that do not depend on the invoicing levels of the regulated company, use of active policies giving priority to the defence of the rights of users and, most importantly, an organisational structure (legislative monitoring, external and/or cross auditing with the active participation of users) that eliminates the risk of capture either by the regulated company or by the political power itself;

- The incorporation into the regulatory equation of the implementation of local supplier development programs and the establishment of tight controls over in-house purchases by the concessionaire, particularly over the practice of applying transfer prices, open to over or under-invoicing;

- The putting into practice of a specific regulatory accountancy system that includes and/or requires specific information on economic, accounting, social, and infrastructure matters that are essential for the development of a system of control and regulation so as to minimise information asymmetries;

- In economies with levels of poverty and indigence such as those found in a large parts of the world (as is increasingly the case in Argentina), drinking water and sewage cannot be considered as mere merchandise subject to market forces, but rather as a basic and vital element for the quality of life of the population.

References and web sites


Privatisation of the drinking water and sewerage system of Buenos Aires, Argentina, Case # 159
• Commission de Usuarios de ETOSS: “Propuesta de la Comisión de Usuarios frente a la revisión quinquenal del contrato de Aguas Argentinas”, August 2000.


• www.etoss.org.ar
• www.mecon.gov.ar
• www.aguasargentinas.com.ar
• www.defensor.gov.ar
• www.uade.edu.ar/economia/ceer
• www.flacso.org.ar/econo
• www.auspa.org.ar
• www.mentedelaciuad.gov.ar

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