

# INFRASTRUCTURE BRIEFING

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## Current Strategies for the Sanitation Sector

This briefing discusses the main issues regarding the sanitation sector within Brazil, five different approaches adopted by state governments, as well as private participation in autonomous operations managed by local authorities. It ends with a number of considerations regarding the postponement of investments.

### THE SECTOR AT NATIONAL LEVEL

Privatization represents one way of securing essential investments for the sector, as well as of increasing service efficiency.

**Contracts:** Brazil has over 5,000 local authorities, of which some 3,700 awarded sanitation service concessions to state companies in the 1970s. A large number of these concessions have already expired, or are due to expire in the near future. In a number of other local authorities, such state companies operate sanitation services without ever having signed a formal contract of concession. The capital cities of most states fall into this latter group, as do a series of other local authorities that were created through the subdivision of larger local authorities in which state companies were already present.

**Capacity for leverage:** The financial condition of public-sector companies, whether controlled by state governments, local authorities, or autonomous bodies, has been deteriorating for several years, reducing their ability to raise capital for financing investments. Despite the urgent need for investment within the sector, loans from the Unemployment Benefit Fund (FGTS) have fallen from R\$ 773 million in 1996 to R\$ 356 million in 1997, reflecting the poor capital raising ability of the public sector.

**Investment needs:** According to a study carried out for the Modernization Program for the Sanitation Sector, financed by the World Bank and directed by SEPURB/MPO, investments of R\$ 42 billion will be required over the next 15 years, concentrated mainly in sewage, in order to provide a global water and sewage service (including sewage treatment). Over the period 1970-96, loans from the Unemployment Benefit Fund (FGTS) amounted to R\$ 15 billion. This figure represents almost all of the investment in the sector, most of which was invested in companies controlled by state governments.

**Provision of services:** In general terms, the quality of services provided by public sector operators leaves a good deal to be desired. Losses in water supply amount to the high figure of 45% of total water produced, and there are other more specific problems regarding continuity and quality of supply. Sewage services are even more problematic.

In addition to these problems, it is not clear whether the right to operate service concessions in certain metropolitan and other urban regions and micro-regions belongs to state governments, or to local authorities that are in turn subject to state restrictions on the integration of such services.

It is important to note the National Privatization Committee's (CND) decision to authorize the BNDES to commission models for the privatization of the sanitation sector. This shows the federal government's understanding of privatization as a means of providing the necessary funding for the sector, as has been the case for other publicly owned sectors that have exhausted their funding capabilities.

At the same time, the resolution of matters in dispute, whether this is a question of changes in legislation, settling of disputes by the judiciary or intervention by the executive to promote negotiated solutions, is of fundamental importance for the privatization of the sanitation sector.

### **POSITIONS ADOPTED BY STATE GOVERNMENTS – CASE STUDIES**

5 cases have been chosen to illustrate how many different approaches have been adopted within the sector, showing the degree to which the current institutional situation is lacking in definition. By way of information, each case includes a number of parameters for the relevant state company.

#### **Rio de Janeiro – State Government decides to privatize**

Total number of local authorities within the state	81
Local authorities serviced by CEDAE	64
Provision of water supply index (1)	78%
Sewage collection index (1)	44%
Sewage treated (2) as a % of sewage produced	13%
Revenue loss index (1)	50%

Source: (1) SEPURB, (2) Consultant

\*Half of all treated sewage results from the underwater outlet in Ipanema

In 1995, Rio de Janeiro became the first state to create a privatization program (PED) for 26 companies, including the sanitation company, CEDAE. With a view to privatizing the sanitation sector, and using funding from the PMSS, the state government hired consultants to value the sector, to restructure CEDAE, and to model its sale, at the same time looking into partial alternatives. In parallel to this, the state assembly took the pioneering step of passing legislation (State Law No. 2,686, approved on February 13, 1997) to create a regulatory authority for public services within the state, ASEP-RJ, whose brief will extend beyond the sanitation sector.

Despite the political resolve of the state government, the transfer of sanitation services to the private sector did not take place either within the timeframe or in the manner predicted, due to a number of complicating events and setbacks:

-In the second half of 1996, the state government decided to put out to tender the water/sewage concession for Barra da Tijuca, Recreio and Jacarepaguá, covering 600,000 residents, with programmed investments of US\$ 200 million. The tendering process was halted after several modifications to the tender document (e.g. the exclusion of Recreio from the concession area, revision of the tariff structure), following which, the state decided on the full-scale privatization of CEDAE, including all of its concession area;

-The local authority of Campos declared that CEDAE's concession there had expired (the local community had launched a legal action against the local authority for its failure to provide an adequate service), and held its own tender to offer the concession to the private sector, which was won by a consortium that included the company, Águas do Paraíba. CEDAE launched its own counteraction to prevent the new concessionaire from assuming the concession, and succeeded in overturning the tender;

-In the Lagos region, the state government was successful in its negotiations with the local authorities of Cabo Frio, Búzios, Arraial do Cabo, S. Pedro da Aldeia and Iguaba (the concessionaire Prolagos), as well as with the local authorities of Saquarema, Araruama and Silva Jardim (the concessionaire Águas de Juturnaíba), securing the relevant concessions. The state government signed a letter of agreement with these local authorities, whereby it received authorization to proceed with the preparation for the sale of sanitation service concessions for their areas of jurisdiction, culminating in the launch of a joint tender.

-On December 16, 1997, the state assembly approved Complementary State Law No. 87, which created the Metropolitan Region of Rio de Janeiro as well as the micro-region of Lagos, and defined services of public interest in these areas, including basic sanitation, which encompasses water production and distribution, as well as the collection and treatment of sewage. The state government will assume responsibility for such services;

-Shortly afterwards, in January 1998, the Democratic Workers' Party (PDT) presented an appeal to the Supreme Federal Court (STF) to suspend Complementary State Law No. 87, and Ordinary Law No. 2,869, which regulates the same state law, on the grounds that both were unconstitutional. The appeal highlighted the 'state government's attempt to usurp powers and authorities that infringe the constitutional autonomy of municipalities';

-On February 3, 1998, the public hearing on the structuring of the privatization of CEDAE finally took place. The tender document proposed the sale in a single lot of 89.9% of the company's share capital to a new owner, with 10% of its share capital to be offered to the company's employees at a 30% discount to the determined sale price. The state government currently holds 99.9% of the company's share capital.

-On February 17, 1998, the Local Authority of Rio de Janeiro published an advertisement, stating that it would take judicial action against the sale of CEDAE unless it was included in the privatization process. The local authority claimed that Complementary State Law No. 87, which transferred sanitation service concessions to the state government, was unconstitutional;

-On February 19, 1998, the Local Authority of Niterói also published an advertisement regarding the privatization of CEDAE, pointing out both that the company did not own the relevant operating assets within its concession area, and that the local authority's sanitation company, EMUSA, had already held a tender for the local authority's sanitation service concession that had been awarded to the consortium, Águas de Niterói. The local authority has already notified CEDAE that it must relinquish the concession immediately (its contract with the company has already expired).

At the time of going to press, the definitive prospectus for the privatization of CEDAE still awaits publication. The example of the state of Rio de Janeiro shows that, despite the state government's determination to privatize, the general situation remains undefined, and that the privatization process itself faces certain risks.

### **São Paulo – State government to retain control**

Total number of local authorities within the state	625
Local authorities serviced by SABESP (1)	358
Provision of water supply index (1)	99%
Sewage collection index (1)	73%
Sewage treated (2) as a % of sewage produced	19%
Revenue loss index (2)	36%

Source: (1) Annual report -1997, (2) SEPURB

The São Paulo Sanitation Company, SABESP, provides services to 24 million customers, or 70% of the population of the state of São Paulo, and is the largest sanitation company in Latin America by revenues. The company also has significant investment requirements, which reached R\$ 2 billion over the period 1995-97, with a further R\$ 1.1 billion budgeted for 1998, most notably in the São Paulo Metropolitan Area. Under the control of the current state government, a number of steps have been taken:

-Starting in 1995, the company underwent a significant restructuring, with its operations reorganized into 16 business units under the control of four vice-presidencies: Metropolitan Area Production, Metropolitan Area Distribution, Upstate (Interior) and Coastal (Litoral). At the same time, SABESP restructured its tariff system, raising its water and sewage rates, and reduced headcount. In 1994-95, these and other measures resulted in a 23% rise in gross revenues, a 22% reduction in operating costs, as well as a reduction of 45% in expenses with third-party services and a 20% reduction in employee numbers;

-The State Government hired consultants, with the aid of the PMSS, to study a prospective regulatory system for sanitation services within the state. This work is nearing completion, and is likely to recommend the creation of a regulatory body at state level that will be autonomous, exclusively devoted to the sanitation sector, and associated with the Water Resources Department;

-SABESP has presented proposals to a number of local authorities, with a view to expanding its concession area. In 1997, it won concessions in 28 new local authority areas, of which 12

resulted from the expiration of previous concessions. This expansion by SABESP into new areas without an open bidding process has been contested (a legal opinion issued by the Brazilian Association of Public Water and Sewage Concessionaires – ABCON, maintains that such a bidding process can only be waived in cases where the issuer of the concession and the concessionaire are controlled by the same branch of government). Against this, it is worth noting the decision by the Municipal Chamber of Santos, which at the end of 1997, decided to remain independent from SABESP (in a similar manner to Diadema, in June 1993, and Mauá, in September 1994);

-SABESP is currently preparing the sale of a strategic stake, equivalent to 20% of its share capital. At present, the company's traded free float amounts to only 8.3% of its total share capital. Following the sale of this stake, the company will remain under public control, albeit under the supervision of a private partner that will sign a management contract as well as an agreement with shareholders.

The case of São Paulo thus demonstrates that state government policy is directed towards maintaining control over sanitation services. At the same time, the state authorities are trying to improve the efficiency of their services through partnerships with the private sector. It is worth noting that other companies in the South of Brazil are in the process of seeking a stock market listing with a view to selling their shares, even if it is too early to conclude that São Paulo will take the same approach.

### **Espírito Santo – Intention to sell**

Total number of local authorities within the state	71
Local authorities serviced by CESAN*	52
Provision of water supply index	95%
Sewage collection index	12%
Sewage treated as a % of sewage produced	8%
Revenue loss index	28%

Sources: SEPURB

\* CESAN/ Govt. ES

The formal commitment by the state government of Espírito Santo to sell its shares in CESAN dates from the end of 1996. In December 1996, the government agreed a pioneering experimental operation with the BNDES, that included an advance on the proceeds from the sale, and that was intended as a pilot study for the privatization of the sector. The privatization process has developed as follows:

-In mid-1997, discussions were in progress with the five local authorities within the Vitória Metropolitan Area, under the terms of the proposed model. The state government recognized the local authorities' right to participate in the management of water distribution, as well as collection and treatment of sewage, while CESAN would remain responsible for water production. The local authorities and the state government intended to draw up agreements that established rules for the awarding of concessions by the local authorities to the private sector, as well as the prices that the new concessionaires would have to pay for these, in order to allow

local authorities to indemnify CESAN for the undepreciated balance of its investments. Four concessions would be put out to tender (Vitória, Vila Velha, Serra, and the double Cariacica-Viana concession), with the state government and local authorities making a joint selection of concessionaires. Under the proposed scheme, CESAN would retain the concession for the interior of the state;

-By adopting a joint management approach, the state government hoped to obtain the necessary funding for its Coastal Ecosystem Environmental Recuperation Program for the State of Espírito Santo, which is being financed in part by the World Bank.

-At the start of 1998, the proposed model is being re-examined, in order to determine whether the state government should sell control of CESAN together with all its local authority concessions. Such a move would entail an advisory role for the BNDES. The state government and the local authorities also intend to define a new legal and regulatory framework for the sector, using PMSS resources, and plan, in particular, to create a specific regulatory body.

### **Mato Grosso do Sul - Privatization with local authority participation**

Total number of local authorities within the state	77
Local authorities serviced by SANESUL	75
Provision of water supply index	94%
Sewage collection index	10%
Sewage treated as a % of sewage produced	1.5%
Revenue loss index	34%

Sources: IBGE - SEPURB - SANESUL

A number of factors led SANESUL to rethink its operational strategy, starting in 1995:

-Following the approval of the Law of Concessions (Law No. 8,987) on February 13, 1995, a number of problems arose with regard to the validity of concessions. The local authority of Dourados, for example, ruled that its contract with SANESUL, that had already been approved by the Municipal Chamber, was null and void, since it had not been accompanied by a tender process;

-In August 1995, the company's contract with Campo Grande expired;

-At the end of the same year, as part of a debt renegotiation agreement with the Treasury, as well as the agreement of a bridging loan with the Caixa Econômica Federal, the state government of Mato Grosso do Sul agreed to privatize both the state electrical company, ENERSUL, and the state sanitation company, SANESUL, by the end of 1997, under the terms of the State Privatization Program (PED), that was introduced on May 23, 1996.

As a result, SANESUL adopted the following measures:

-The company carried out a wide-ranging restructuring program, that included a reduction in employee numbers, staff training and an improvement in performance indicators through the introduction of information technology and loss control systems;

-The company commissioned a study (in mid-1996), to devise a model for its privatization, adopting as a basic premise the fact that the relevant local authority would be responsible for granting concessions;

-The company made presentations of its proposals and held discussions with the principal parties involved in the process, most notably the state government and relevant local authorities (1997).

The model proposed that concessions be negotiated by local authorities on a case-by-case basis, with the participation of SANESUL, and aimed to devolve control of services to individual local authorities, grouping neighboring municipalities together, with a view to increasing the attractiveness of concessions to the private sector. A number of mayors who were consulted nevertheless objected to this form of negotiation, expressing fears that they would be obliged to assume responsibility for services if negotiations proved unsuccessful. The state government also expressed concerns that smaller local authority concessions would prove less attractive to the private sector, and that it would remain responsible for these. The current situation is as follows:

-A new alternative is under study: tenders will involve concession areas that are more attractive to private investors, that include a larger number of municipalities, and will include provisions aimed at maintaining quality of service;

-The company is examining the relevant legal considerations, and is likely to commission a new study to determine the best way of carrying out the intended privatization.

### **Mato Grosso - Opting for control by local authorities**

Total number of local authorities within the state	126
Local authorities serviced by SANEMAT	93
Provision of water supply index	92%
Sewage collection index	14%
Sewage treated as a % of sewage produced	3.6%
Revenue loss index	48%

Sources: IBGE - SEPURB - SANEMAT

The process of devolving control of sanitation services to local authorities is being carried out without the active participation of SANEMAT, by the 'Department of Modernization', which is implementing a wider-ranging modernization program within the state. At the same time, SANEMAT is serving as the project's source of information, or 'database'.

-The State Government, with the support of the PMSS, has signed a series of agreements with local authorities to cover a transition period with a proposed length of 90 days, which may be extended for a further 90 days. These agreements fall into three categories:

1. *Technical Co-operation Agreements* - these are the simplest kind of agreement, and are being used for local authorities that have not yet decided how they will manage their sanitation systems in the future, as well as for very small local authorities (with less than 1,000 clients). Through this agreement, local authorities gain access to information on the financial and operational condition of their systems. Some 38 local authorities have signed this kind of agreement.

2. *Mutual Co-operation Agreement* - this kind of agreement has been signed with local authorities that have already decided to transfer concessions to the private sector. In addition to access to information on its systems, the local authority receives model tender documents, together with all the documentation necessary to grant legal approval, from a consultant hired by the state government. Five local authorities have already signed this kind of agreement: Cuiabá, Cáceres, Nobres, Alta Floresta and Jauru.

3. *Shared Management Agreement* - such agreements have been signed with three local authorities whose concession contracts with SANEMAT had already expired: Jaciara, Várzea Grande and Rondonópolis. Under this kind of agreement, the local authority participates in the management of the concession, even if operational control of the system remains the responsibility of SANEMAT.

-There are plans to create a regulatory agency within the state that would establish rules and act as arbiter in disputes, as well as a State Sanitation Commission, and a number of regional councils. Under the terms of the proposed system, tariffs would be defined at local authority level.

--The proposal for the creation of the agency has already been submitted to the office of the Attorney General of the state, where it is currently being examined. At a future date, it will be presented to the state assembly.

-The intention with regard to the proposed State Sanitation Commission is that it should collaborate with the regional councils to establish priorities for sanitation on a periodic and region-by-region basis.

## **CURRENT STATUS OF AUTONOMOUS LOCAL AUTHORITIES**

This is the part of the sector where private investors have found the most favorable institutional conditions. To date, 23 concessions have been formally transferred, two of which relate to consortia of local authorities in the state of Rio de Janeiro. Details are given in the following table:

### **PRIVATE CONCESSIONS - BASIC SANITATION**

MUNICIPALITY-STATE	POP'N.	CONCESSIONAIRE (GROUP)	NATURE OF CONCESSION
Araçatuba – SP	157,467	SANEAR (Amafi, Multiservice, Resil, Tejofran)	Sewage
Birigüi – SP	84,016	AQUAPÉROLA (Isratec/ Hidrogesp)	BOT deep well
Cajamar – SP	33,707	ÁGUAS DE CAJAMAR Ltda. (Multiservice, Rek)	Water
Campos – RJ	350,000	ÁGUAS DO PARAÍBA (Developer, Cowan, Queiroz Galvão, Carioca)	Full (water + sewage)
Itu – SP	112,939	CAVO ITU (Cavo, Camargo Corrêa)	Sewage
Jaú – SP	97,354	ÁGUAS DE MANGADA (Amafi, Multiservice, empr. Portugal)	Water
Jaú – SP		Consórcio C.R. Almeida, SILEC (Itália)	Sewage
Jundiaí - SP	288,644	CIA. SANEAMENTO DE JUNDIAÍ (Augusto Velloso, Coveg, Tejofran)	Sewage
Limeira-SP	217,489	ÁGUAS DE LIMEIRA (Lyonnaise des Eaux, CBPO)	Full
Mairinque - SP	35,000	CIÁGUA (Grupo Villanova)	Full
Marília - SP	173,841	ÁGUAS DE MARÍLIA (Hidrogesp)	Water (BOT well, conduit, reservoir)
Mineiros do Tietê - SP	9,462	SANECISTE	Full
Niterói - RJ	448,736	ÁGUAS DE NITERÓI (Cowan, Carioca, Trana, Q. Galvão, Developer)	Full
Ourinhos - SP	79,148	ÁGUAS DE ESMERALDA (Hidrogesp, Multiservice)	Water - deep tubular well
Ourinhos-SP		TELAR (Telar Eng.)	Sewage
Paranaguá - PR	110,000	ÁGUAS DE PARANAGUÁ (Castilho, Carioca, Developer)	Full
Pereiras - SP	4,850	NOVACON	Full
Petrópolis - RJ	263,838	ÁGUAS DO IMPERADOR (Cowan, Trana, Q. Galvão, Developer)	Full
Lagos region -I RJ (Araruama/Squarema/Silva Jardim)	200,000	ÁGUAS DE JUTURNAÍBA (Cowan, Trana, Q. Galvão, Developer, ERCO)	Full
Lagos region-II RJ (C. Frio/ Búzios/ Arraial/ S.P. Aldeia)		PROLAGOS (Monteiro Aranha/Águas de Portugal/ PEN)	Full
Ribeirão Preto - SP	450,960	AMBIENT (CH2MHill/Rek)	Sewage
Salto – SP	100,000	SANECISTE DE SALTO (Saneciste)	Sewage treatment
Tuiuti – SP	3,000	RIBEIRÃO DO PÂNTANO - Emp. Saneamento Tuiuti (Novacon)	Full

Source: ABCON; BNDES

The state of São Paulo has the largest number of private concessions (covering 16 local authorities), and has a total of 270 autonomous municipalities, of which 103 have over 50,000 inhabitants, that in theory could offer attractive concessions to private operators.

Having said this, the rate of entry of private investors into the sanitation sector has not reflected that sector's own claims of investment opportunities with attractive returns. This implies that:

-On the one hand, local authorities have been slow to implement privatization programs, suggesting that they also have certain concerns regarding the process, most notably as a result of the poor quality of available information on which they must base decisions. To make

matters worse, in many cases where concessions had already been transferred to the private sector, a general lack of clarity regarding the inspection and regulation of concessions became a source of uncertainty. There were also a number of instances where tariff adjustments were rejected due to local political considerations;

-On the other hand, the private sector has lacked the necessary guarantees. While the institutional situation of autonomous municipalities is clearer than that of other municipalities, concerns remain regarding a number of divergent legal positions for those municipalities located in metropolitan areas, urban regions and micro-regions, that derive from draft laws currently being examined by congress (draft laws of Senator Serra and Federal Deputy Lima Neto).

Lending programs by the BNDES and the Caixa Econômica Federal to finance expenditure by local authorities, as well as the hiring of consultants to identify problems, devise models, carry out feasibility studies, and design the new regulatory agency, PROPAR, are measures that are intended to reassure public sector authorities in the process of taking decisions on privatization, as well as to aid private investors in evaluating opportunities within the sanitation sector.

## CONCLUSION

Delays in the definition of legal directives will result in delays in investment, even if there is scope for limited initiatives, such as the sale of equity stakes by sanitation companies. The price of these shares will nevertheless be affected by the current legal/institutional situation, while the growth of funding to the sector will depend on whether state governments reinvest the proceeds from the sale of their shares in sanitation companies in those companies. In so far as the same companies remain under the control of state governments, they will continue to have only limited access to funding, and will remain subject to public sector rules.

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