



## METHODOLOGY TO CALCULATE TARIFF ADJUSTMENT

SABESP'S CONTRIBUTIONS TO THE PUBLIC CONSULTATION

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## 1 INTRODUCTION

It is with satisfaction that Sabesp takes part in this public consultation, which we deem as positive and necessary to the discussion on current tariff regulations, with the purpose of improving the methodology to calculate Sabesp's tariff adjustments. Several times, in documents previously sent to this agency, we pointed out tariff deviations that harm consumers and disregard the need of return on investments made. Therefore, Sabesp supports a review of the tariff adjustment methodology.

Pegging service tariffs to the actual operating costs and investments is an important step towards this improvement, being necessary for the universalization of basic sanitation in the São Paulo State. Nevertheless, we are extremely concerned about three issues:

1. Since this public consultation will expire on August 10, we are concerned with the adjustment scheduled for this year. August 12 is the deadline for publication in the Official Gazette so that the adjustment takes effect as of September 11. Each day the adjustment is delayed causes a substantial revenue loss.
2. We are also concerned with the fact that the published material will neither allow us to assess different parameters of the methodology, nor it will reveal the manner by which they will be calculated. For us, the discussion on these parameters is essential, since they may significantly change methodology's results. As an example, we would like to mention the "acceptable loss level" and the criteria to distinguish "remunerable assets" from "non-remunerable assets." A public process is necessary to define the parameters to be included in the methodology, valuing transparency and technical accuracy.
3. The period granted in the public consultation is not compatible with the relevance of this matter for Sabesp and sanitation in the São Paulo State. Therefore, we are requesting that, after the next adjustment, the agency re-submits the matter for discussion in a more structured manner and within the scope of a broad tariff reform, including therein the aspects pointed out in the previous item.

Then, we will now mention specific contributions to the methodology under consideration identified during this short period of time. These contributions are preliminary and do not exhaust the matter, as mentioned in item 3 above.



## 2 COMMENTS ON THE METHODOLOGY

### 2.1 FUTURE PROJECTIONS

The tariff must be sufficient to ensure the company's ability to provide quality services and to invest according to sanitation plans and targets for coming years. Therefore, it is of utmost importance that the tariff incorporates future costs and investments. This is especially important in today's scenario in which the investment level is much higher than in past years, with increased operating costs and regulatory changes, as pointed out during Arsesp's public hearing on July 16, 2009.

### 2.2 WEIGHTED AVERAGE COST OF CAPITAL - WACC

There is an inconsistency in the description of the item related to the Investment Yield (RIR). On page 10, we have  $RIR = BRR \times WACC$ . However, on Attachment 1, page 18, the formula presented to calculate the water and sewage Total Cost of Services considers pre-tax income (income tax (IR) and social contribution on net income (CSLL), which in this case would be  $T= 34\%$ ), resulting in the following formula:

$$CTS = DEX + AIBm \times tmd + PCD + \frac{(AIR + DR + ER + CR) \times WACC}{(1-T)}$$

Attachment 1 establishes that the WACC to be calculated will be after tax in real terms (constant currency), and will be multiplied over the net basis of remuneration, which on its turn is the product of gross regulatory assets less accumulated depreciation. Therefore, the way how Arsesp defines the formula for CTS implies that the WACC to be calculated would be pre-tax, which is not consistent with Attachment 1.

### 2.3 NON-LINEAR ADJUSTMENT

As explained in previously sent technical note on the 2009 adjustment, Sabesp reinforces its recommendation for a non-linear adjustment among categories so that no to worsen current tariff deviations.



### 3 COST BASIS TO BE REMUNERATED

#### 3.1 COFINS/PASEP

The inclusion of taxes on revenue (Cofins/Pasep) in the exploration expenses is essential. Similarly to other sectors, we believe that this item will be included in the exploration expenses, although the technical note does not make this explicit. In 2008, Sabesp recorded R\$487,131 thousand in Cofins/Pasep.

In addition, the regulatory chart of accounts and the technical criteria to analyze and assess exploration expenses must be defined in a public consultation specifically on this matter, with technical discussions that ensure transparency and technical accuracy of the process under consideration.

#### 3.2 INTANGIBLE ASSETS

Intangible assets shall be included in the regulatory basis of remuneration. In the current regulatory framework, assets pegged to program contracts will be recorded together with intangible assets and shall be amortized and remunerated until the effective assets reversal to their titleholders, when these will be revaluated according to the assets criterion as originally agreed upon in the respective feasibility studies.

#### 3.3 DEPRECIATION (DEP) (PAGE 13)

Similarly to the previous item, the amortization of intangible assets shall be considered in the calculation.

Replace:

*In order to calculate the Depreciation composing the Total Cost of Services the restated amounts of Gross Fixed Assets at the end of each half-yearly period (June/2008, Dec/2008 and June/2009) and the Average Depreciation Rate (tmd) of SABESP's operating assets, obtained based on depreciation amounts and operating fixed assets included in the balance sheet and trial balance sheets of each half-yearly period, will be used.*

*The Depreciation amount to be considered will result from the application of said Average Depreciation Rate (tmd) over Average Gross Operating Fixed Assets (AIBm) calculated for the last tariff period (July/2008–June/2009). These assets correspond to the half-yearly average gross fixed assets included in the balance sheets and trial balance sheets of SABESP, monetarily restated and recognized by ARSESP as exclusively destined to SABESP's rendering of water and sewage services.*



With:

*In order to calculate the Depreciation composing the Total Cost of Services, the restated amounts of Gross Fixed Assets at the end of each half-yearly period (June/2008, Dec/2008 and June/2009) and the Average Depreciation/Amortization Rate (tmda) of SABESP's operating assets, obtained based on depreciation and amortization amounts, as well as operating fixed assets and intangible assets included in the balance sheet and trial balance sheets of each half-year period, will be used.*

*The Depreciation amount to be considered will result from the application of said Average Depreciation/Amortization Rate (tmda) over Average Gross Operating Fixed Assets (AIBm) calculated for the last tariff period (July/2008–June/2009). These assets correspond to the half-yearly average gross fixed assets included in the balance sheets and trial balance sheets of SABESP, monetarily restated and recognized by ARSESP as exclusively destined to SABESP's rendering of water and sewage services.*

## 4 CALCULATION OF VARIABLES

### 4.1 WATER LOSS

“VFA = Volume of Water Billed considering efficient loss levels in regulatory terms, expressed in  $m^3$ ”: This note does not lay down comparison criteria or parameters to define this variable. We highlight that this variable has a quite significant impact on the formula's result. This variable's definition requires a detailed study, public process and technical discussions that ensure transparency and technical accuracy of the process under consideration.

The efficient loss level is related to the Marginal Cost Preventing Losses versus the corresponding Marginal Revenue. Sabesp develops programs for preventing losses (physical and apparent) and has been adopting progressive targets to reduce them, which includes planning and costs. In this context, an efficient loss index must generate incentives for the concessionaire. This index shall be established in a public consultation before the tariff adjustment, allowing technical discussions involving the technical characteristics of the service rendered by SABESP in various municipalities in which it operates, i.e., at the beginning of a tariff period, a maximum level of loss reduction that is economically feasible should be established, considering the tariff level and “X factor” defined upon its review, as well as the characteristics of the concession.

### 4.2 ALLOWANCE FOR DOUBTFUL ACCOUNTS – PCD (PAGE 14)

Three issues are important when calculating PCD:



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- The program contracts include revenues evasion assumptions in the economic-financial studies. The adoption of general methodology may impact the contractual conditions. This fact should be better assessed in the decision-making process.
- Modern practices reveal that the amount to be considered for PDD shall be calculated over billing and not over the “balance of accounts receivable” account as proposed in the technical note.
- The index of 1.5% is a fairly reduced index and lower than benchmarks of other companies. It should be especially considered without technical studies setting up this figure, in the first year when such operating efficiency starts to be required from the services provider. The proposed calculation results in a figure very distant from current PDD volume.

### Replace:

*This amount shall be established by the regulatory agency as a percentage of users Accounts Receivable Balance and shall be based on companies' parameters with high business efficiency. Therefore, bad debt-related expenses to be included in the Cost of Services will be limited to a ceiling corresponding to 1.5% of the Accounts Receivable Balance.*

### With:

*This amount shall be established by the regulatory agency as a percentage of **Gross Operating Revenues** and shall be based on companies' parameters with high business efficiency. Therefore, bad debt-related expenses to be included in the Cost of Services will be limited to a ceiling corresponding to **4% of the Gross Operating Revenues**.*

### Reasons:

Non-recoverable commercial losses generated by default are related to two groups of factors. The first one refers to the company's management quality and its capacity of recovering accounts receivable. The second group concerns with a set of institutional, legal, economic and social factors that go beyond the company's managerial control. These factors contribute to worsen the commercial loss risks.

Even if SABESP knows and it is capable of assessing risk differences faced by the company in the concession segment and various classes of consumers, SABESP is forbidden by laws from practicing different tariffs or even reject the supply for consumers with high default probability (high risks). Thus, an adequate risk analysis and its implementation which would improve default management are impracticable.

In addition, in several situations, we verify it is impossible to systematically use the natural instrument of coercion and removal of losses as last resort, i.e., supply cut. In cases this line of action is not possible, default is typified as caused by factors that go beyond company's performance, such as for



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instance, those deriving from the public sector incapacity of complying with its responsibilities, such as hospitals, prison, health centers, etc. Likewise consumers, in view of the protection they receive from the public authorities, they go beyond SABESP's scope, which in practice is not able to collect.

Other legal-institutional and social-economic factors also significantly influence the default trend, such as poverty groups existing in several municipalities, where it is impossible to adopt efficient policies to reduce default.

In this context, it is worth mentioning that the utilization of criteria mentioned in the Technical Note does not allow to strictly measuring SABESP's efficient default level.

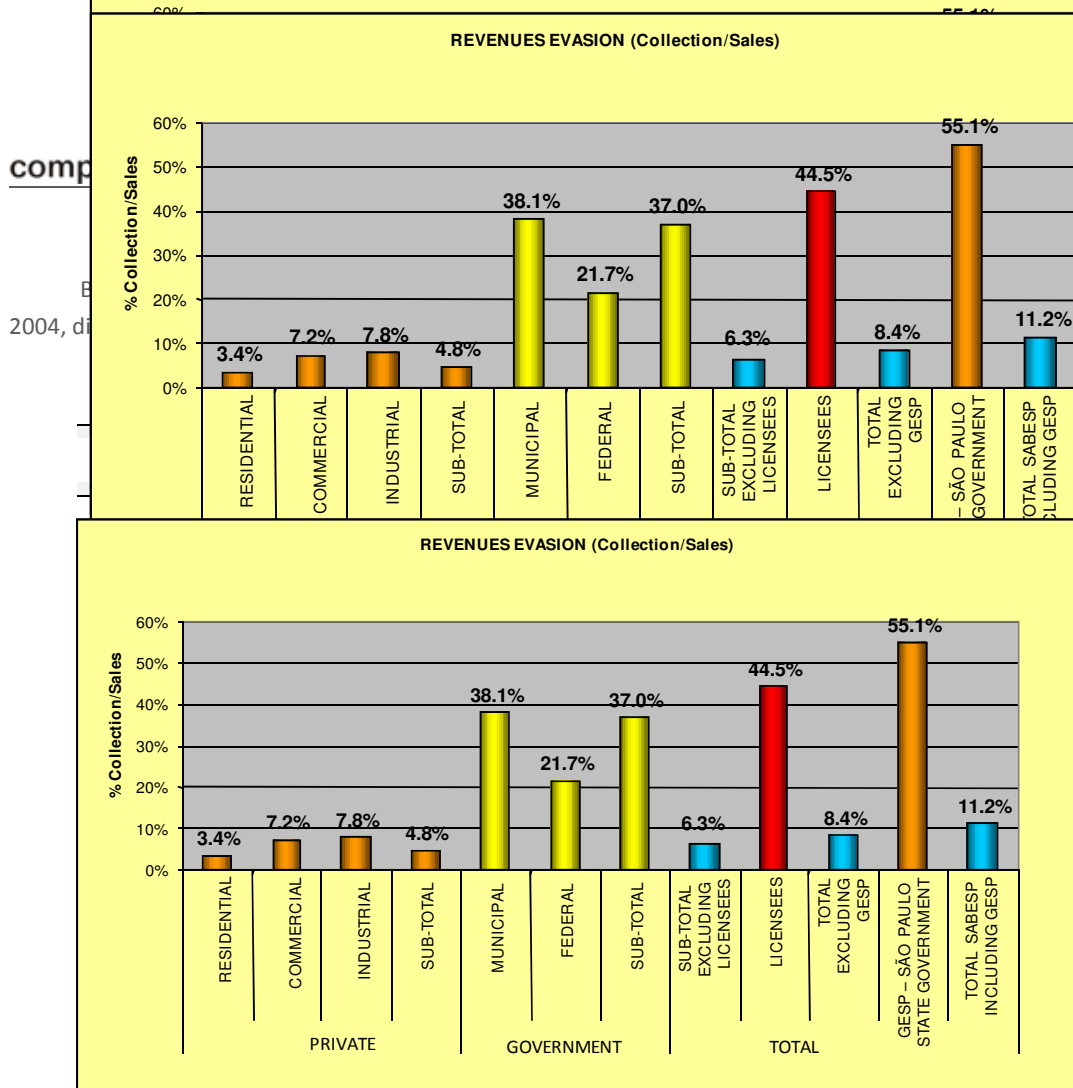
The application of a ceiling of 1.5% of the Accounts Receivable Balance may be systematically undervalued due to several factors, such as for instance, it does not include the accounts not received from the public authorities, as well as renegotiation of debts. Another criterion that may influence is the definitive write-off of amounts recorded as allowance for doubtful accounts that may also lead to results that only partially reflect the dimension of default. The write-off of uncollectible amounts does not necessarily occur when administrative and judicial means for collection are exhausted. Firstly, procedures laid down by prevailing laws shall be observed concerning the write-off of these amounts (Article 9 of Law 9,430/96). In addition, it is worth mentioning that SABESP has the discretionary power of whether or not writing-off the amounts, seeking a more efficient tax planning. Thus, written-off amounts may not correspond to the amounts effectively deemed as uncollectible (probably, data will be undervalued).

In relation to the amounts due by the public authorities, these are hardly written-off from the contra provision accounts so that data informed do not properly reflect actual losses. In case of city governments, negotiations take place concerning the payment of several years' accounts and they are usually negotiated with significant reduced interest rates and adjustment for inflation, signaling the recovery in a single period, considerably deviating annual effective losses.

It is essential to define a criterion that properly reflects the portion of revenues effectively not received by SABESP. With a view to efficiently managing the "Overdue Accounts Receivable", SABESP controls on a managerial basis, the receipt date of each bill. Thus, it is possible to accurately know the payment flow behavior of accounts billed in a certain month. Otherwise, at every month it is possible to know the percentage of each previous billing not yet paid. It is expected that after few months, this percentage is stabilized in a level corresponding to the unpaid billing that resisted all company's manageable collection actions and attempts. This type of measure is known as "Aging" (Horngren, C. and Harrison Jr., W. (1992), "Accounting", Second Edition, Prentice Hall), i.e. the aging of billing.

A study contracted by SABESP called "Tariff Study for the Rational Use of Water" developed an analysis on this theme and deemed the annual revenues evasion index as proper indicator as  $\{[1-(\text{gross receipts}/\text{net sales or receivables})] \times 100\}$ , which better reflects the monetary resources the company may or not receive in the long term, due to its clients default.

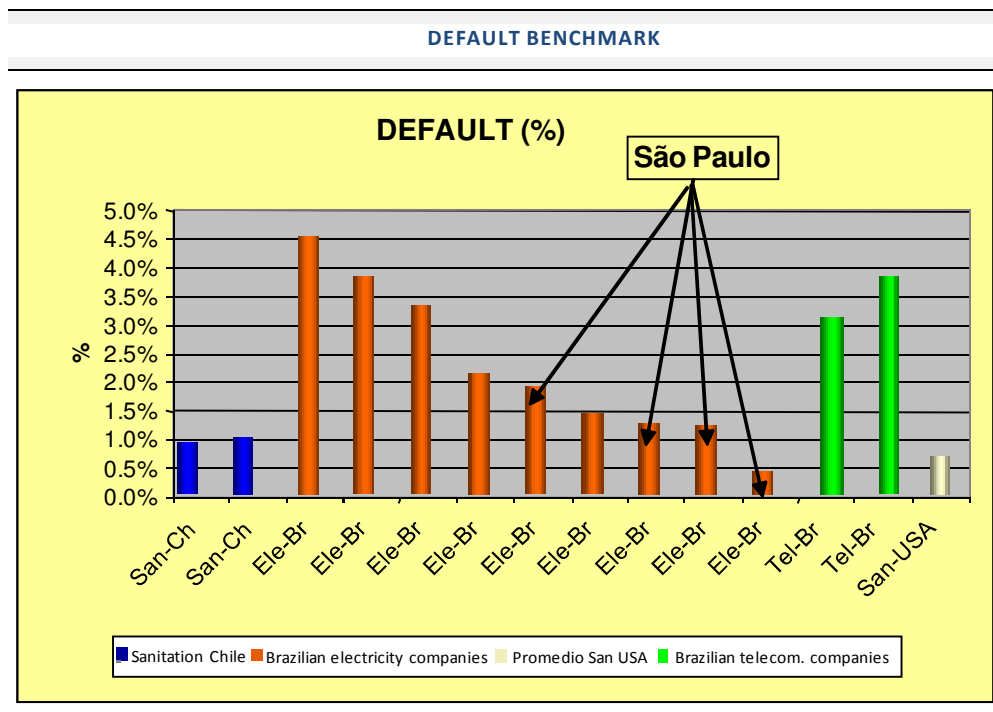
Historical amounts recorded by SABESP were analyzed under this concept, as well as their comparison with other companies, especially in Brazil, and this index amount is proposed as default index to calculate efficient costs.



Source: prepared by the INECON-GERENTEC consortium

We observed that SABESP shows average revenues evasion of 4.8% for residential, commercial and industrial customers, i.e., the “private segment” of its customers. Nevertheless, this index increases to 6.3% when the evasion of government customers, such as municipalities and federal institutions, is included. In addition, when evasion of revenues attributable to the licensees and the São Paulo State Government (GESP) is included, percentages of 8.4% and 11.2% of the total amount are reached, respectively.

In order to compare SABESP’s default amounts and adopt an adequate value for the calculation of efficient costs, information on this theme is compiled from different Brazilian and international companies related to the sanitation sector and other public utility services. This information is summarized as follows:



Source: prepared by the INECON-GERENTEC consortium

Therefore, this study adopted the value of 4.0% positioned at the upper limit of São Paulo's electricity and telecommunications companies and also accounts for the revenues evasion index of SABESP's "private" customers segment.

## 5 CORRECTIONS TO THE TEXT

### 5.1 METHODOLOGY USED IN THE 2008 ADJUSTMENT (PAGE 9)

Since the implementation of IRT formula by SABESP in 2003, IrB corresponds to IPCA-IBGE accumulated over 12 months until July of the year in which the adjustment has been applied. When comparing indexes, IrB is obtained dividing July 2009 index by July 2008 index.

Replace:  $IrB = \frac{IPCA_{Jun2009}}{IPCA_{Jun2008}}$

With:  $IrB = \frac{IPCA_{Jul2009}}{IPCA_{Jul2008}}$



**5.2 REMUNERABLE FIXED ASSETS (AIR) (PAGE 14)**

Change the text from:

*This asset corresponds to the average half-yearly gross fixed assets, included in the balance sheets and trial balance sheets of SABESP, monetarily restated according to the criteria presented in item 3.2.2.1 less respective accumulated depreciations, submitted to these same monetary restatement criteria. As emphasized in item 3.2.2, these assets shall correspond to those assets and rights exclusively destined to the rendering of water and sewage services by services provider.*

To:

*This asset corresponds to the average half-yearly gross fixed assets, included in the balance sheets and trial balance sheets of SABESP, monetarily restated according to the criteria presented in the **Attachment 2** less respective accumulated depreciations, submitted to these same monetary restatement criteria. As emphasized in item 3.2.2, these assets shall correspond to those assets and rights exclusively destined to the rendering of water and sewage services by services provider.*

**5.3 VARIABLES ASSESSMENT PERIOD(PAGE 10)**

We suggest clarifying the IRT components analysis periods, considering the following analysis periods:

t = previous tariff period referring to July/2007 and June/2008

t+1 = last tariff period ended, referring to July/2008 and June/2009