Global Quality Management in Adjusting Prices

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Abstract: The following paper describes the basic principles of global quality management (T and the way that these influence pricing in a domain where due to the nature of the provided service, the provider who administers the network has a monopoly over the field.

Keywords: global quality, public utilities, water and sewage, price.

JEL Classification: L2

1. Introduction

Any organization that interacts with its environment, as in the case of a living organism, allocates a great deal of energy for preventing change but in the same time it also allocates the same amount of energy for change [Jur1]. The main purpose is balancing these two tendencies by planning ahead in a way that leads to the obtaining of quality as the human response or in our case the response of an organization to any unplanned change is very costly[Sin6]. When introducing or trying to introduce change the previously described phenomenon should be avoided by planning ahead.

A model for implementing planned change is offered by the concept of global quality. According to Schneider implementing global quality implies changing multiple facets of how an organization operates [Sch5]. Quality is represented by the collection of properties and characteristics of an entity which gives it the ability of satisfying its expressed and implicit needs. It is a global managerial philosophy which pursues the improvement of quality of all processes, products, services of an organization [Pop3]. The main factors that lead to competitiveness are emphasized by a capacity to adapt to the requirements of the market, to the needs of clients, by satisfying the requirements of consumers through structure and precise specifications of products that have to compete on a free market.

The competitiveness of an organization is assured by the quality of a product and by planning quality this leading to the development of products and processes that satisfy the requirements of clients, and control quality throughout the manufacturing process.

Improving the quality of a product is influenced by economic factors which have a decisive influence on the way the product performs. From the point of view of costs and benefits that come with the implementation of the concept as Luminiţa Gabriela Popescu, mentions, that even if cost are high in the beginning they will dramatically decrease as mistakes caused by the different aspects of production and administration are eliminated and turned into profit[Pop4]. The economic factors in a macroeconomic context can be considered as anchor points by implementing such policies through:

- Human resource policies;
- Capital management policies;
- Economic goods management.

A private or even an organization, where the majority of shares are held by some form of government can be considered competitive only if produces, and sells
and makes a profit as the result of a sale, avoiding a series of factors that disturb or obstruct the process, like market conditions, the nature of the product, its image created through marketing etc. The quality of the product is a major factor which plays a role in all of the above. The managers of organizations have to face a challenging environment, where their product has to be produced at the lowest possible cost, comply with quality requirements, and still be profitable. From these factors the most important one in the long run is quality/

A product manufactured according to the concept of global quality has to respect a series of factors. These according to Nistorean are the following:

- Technical factors: the characteristics of the product;
- Financial factors: price and market conditions;
- Support factors: post sale assistance, warranty conditions;
- Sales factors: delivery deadlines, distribution[Nis2];

In the present paper from the above factors we will examine the financial factors and the way these are regulated in the water and sewage utilities in Odorhei Secuiesc.

2. Methodology for setting adjusting or modifying prices and tariffs for water and sewage

The methodology for setting adjusting or modifying prices and tariffs for water and sewage services is regulated by the Order nr.65/28.02.2007 emitted by the president of the ANRSC referring to Public Utilities and is corroborated with the provisions of art.21 par. 2 letter a) of the Public utilities law nr. 51/2006, art 16, par. 1 and 2 letter e) and that of art. 34 par.4 of the water and sewage service law nr. 241/2006.

This methodology sets the method for price and tariff calculation for water and sewage services that have to assure the economic viability of the providers, the interest of consumers, including the costs regarding the supportability of these; and also the protection of the environment and conservation of water resources.

Operators that provide these services have to go through an accreditation process supervised by the A.N.R.S.C. The institution also approves prices and tariffs for, suppliers/providers of water and sewage services and approves prices and tariffs for economic operators which are not under the subordination of local authorities but who provide this type of services.

Local authorities can approve prices and tariffs previously authorized by ANRSC with the condition of assuring financial autonomy for the water and sewage provider.

The prices and tariffs of water and sewerage services are generated by adhering to the computation methodology set forth by the regulating authority, based upon the production and exploitation costs, maintenance cost, and return of immobilized capital related investments in fixed and unfixed assets, environmental protection costs, financial cost associated with contracted credits, cost derived from management outsourcing, and include a quota for creating funds necessary for development and modernization of the public utility system, and a profit margin.

When setting prices and tariffs, the providers can include a quota for compensating eventual losses in the network, justified by the technical conditions of the system. For the economic entities that only provide transport and distribution, the quota for compensating losses will be calculated accordingly. The level of the quota is calculated on an annual basis by local authorities under the supervision of the ANRSC.

In case of water losses inherit to the system are not approved on an annual basis, ANRSC will take into consideration the quotas set forth in previous years.
Local authorities will decide if a development quota can be included by the provider. This quota approved by local authorities will be determined based upon a series of technical and economic studies, which have to demonstrate the opportunity, costs and the time required for the return of the investment, and the obtained increase in quality of the provided services.

This quota will be included in the practiced prices and tariffs only after its approval by local authorities. The collected sums, which represent the development quota, are transferred into a separate account, and the resulted fund will only be used with the approval of local authorities, and only for the purpose for which it was created.

The operator and the local authority which creates projects targeting financial grants from the European Union, have the obligation in accordance with the Emergency Ordinance of the Government nr.198/2005, to create and maintain the maintenance and development fund as a backup fund, named IID Fund throughout the duration of the investment.

In determining the IID fund included in prices and tariffs for the provided of water and sewage services local authorities also have to take into consideration the payment capacity of the local consumers.

The prices and tariffs for the provided services are set adjusted and modified based upon the request of the economic entity, to which the service was outsourced, with the approval of the president of the A.N.R.S.C.

The entity who provides these services, and who petitioned the modification of prices and tariffs has to submit to the ANRSC the following:

- Request for setting adjusting or modifying prices, that has to contain, practiced prices in case of adjustment or modification, the requested prices and the justification for the proposal, for setting adjusting or modifying. The proposed prices and tariffs for consumers forwarded to the ANRSC will be determined, will include VAT, and approved according to existing legislation;
- Motivating files for setting, adjusting or modifying prices;
- Technical and economic statement for setting, adjusting or modifying prices;
- Other data required for motivating the setting, adjusting or modifying of prices.

In the case of operators that are part of international programs that target the rehabilitation and development of utilities for which the Government, for predetermined periods, creates norms and adjusting formulas other than the ones from the present methodology, the concrete levels of prices and tariffs will be set by the ANRSC according to those norms.

Regional operators that are part of development programs with international or external financial aid will unify prices/tariffs on the whole area of operation, according to the clauses of the outsourcing contract service management and or international financing agreements.

In case of outsourced management of water and sewage services, local authorities, with the agreement of creditors, or operators, have set forth, adjusted or modified rules or formulas; A.N.R.S.C. will apply these according to existing legislation.

In case of outsourced management the setting adjusting and modifying of prices and tariffs can be done based upon rules or formulas approved by the A.N.R.S.C., agreed upon by the operator and local authorities through contract. In this case A.N.R.S.C. will use these rules or formulas for emitting the authorization.

The economic entity has the right to propose tariffs, calculated according to the approved methodology, that include a fixed asset proportional to spending required for maintaining operational and safety parameters of the system, and a mobile one, according to water consumption, and the evacuated sewage water registered at consumers.
Monitoring and controlling practiced prices and tariffs will be executed according the procedures elaborated by A.N.R.S.C.

3. Setting prices and tariffs for provided water and sewage services

Prices and tariffs for public water and sewerage services are established for new economic entities and also for operators that sign contracts that outsource the management of these services.

Prices are established based upon used raw materials, materials and energy, calculated based upon existing prices, labor, and other elements described in annexes 1a) and 1b).

Explaining files and tariffs is done based upon normal consumption and prices of raw materials and energy, labor costs and other elements detailed in annexes 1a) and 1b).

Prices are established according to the following formula:

$$P = \frac{V}{Q}$$

Where $P$=price  
$V$=the expected value of the activity at the level of the current year;  
$Q$=the expected quantity at the level of the current year;

When setting prices the following criteria’s are considered:

- Gross water, electric energy and materials determined by the acquisition costs for the targeted year;
- Specific energy and material consumption will be calculated at levels that reflect real exploitation and operating situations;
- Labor costs are set in accordance with existing legislation, correlated with the principle of economic efficiency;
- The return of the investment is calculated adhering to existent legislation;
- Shipping costs will also include possible water losses inherit to the system;
- The quantity of shipped water and sewage will be programmed at a yearly level;
- The prices will include a profit quota and IID fund according to existing legislation.

The authorization emitted by the A.N.R.S.C. will contain the time interval previous to the set date, to which the level of adjustment will be determined.

4. Adjusting prices and tariffs for water and sewerage services

Prices and services for water and sewage services can be adjusted at a minimum interval or three month with the authorization of the A.N.R.S.C., based upon the adjustment requests received from the operators or economic entities, based upon the increase of the price index compared to the one which existed at the moment of the previous adjustment.

The price levels are determined based upon the economic and financial analysis of the operator, also taking into consideration the fluctuations in prices and tariffs in the overall economy.

The authorization emitted by the A.N.R.S.C. besides the prices and tariffs perceived, adjustment and the level of the existent parameter, the period of time that past from the last adjustment will also be mentioned
Prices and tariffs for the provided services are made according to the following formula:

\[ P_1 = P_0 + \Delta P, \]

where:
\( P_1 \) = adjusted price or tariff;
\( P_0 \) = price of the present price or tariff;
\( \Delta P \) = the increase in price or tariff determined by changes in the market conditions.

\[
\Delta P = \frac{(\Delta_{ct} + \Delta_{ct} \times r\% + \Delta_{ct} \times d\% + \text{Fondul IID})}{Q}
\]

Where
\( \Delta_{ct} \) = the increase of total expenses
\( r\% \) = profit margin;
\( d\% \) = development quota;
\( Q \) = the expected quantity at the level of the year in which the proposal is made which does not differ from the quantity of the price or tariff taken into calculation when the determination of the present price was made.

IID fund- Maintenance and development fund that is included when calculating a price or tariff according to the Emergency Ordinance of the Government nr 198/2005 approved by law nr 108/2006.

Adjusting prices and tariffs has to take into consideration the following criteria:
- For gross water, electric energy and material expenses with considerable influence on price, the modification will take into consideration changes in supply prices by determined by market prices;
- Specific energy and material consumption will be calculated in the limits of the ones taken into calculation at previous modifications;
- Labor costs are set in accordance with existing legislation, correlated with the principle of economic efficiency;
- The return of the investment is calculated adhering to existent legislation;
- The price of the shipped water will include eventual system losses, previously approved by local authorities;
- The quantity of shipped water and processed sewerage will take into consideration the levels previously approved;
- The profit margin will be held at the level previously approved, and the IID fund will be determined according to existing legislation.

In case the operator does not have a development quota, or its quantity is modified compared to the ones stated in present prices and tariffs, the formula is adjusted accordingly.

In case the operator creates or modifies the IID fund, the formula will be adjusted accordingly.

5. Modifying the prices and tariffs for the services provided by the water and sewer utility operator

The prices perceived for the provided services can be modified in the following cases:
- If the cost suffer major modifications, caused by the implementation of new equipment for the qualitative improvement of the provided services, but only after these are rendered operational;
• In case there is a structural modification of costs or quantities produced, shipped, or distributed, or if the production, shipment or distribution conditions change that cause a modification of costs more than 5%, over a period of three consecutive months.

Prices are established based upon used raw materials, materials and energy, calculated based upon existing prices, labor, and other elements described in annexes 2a) and 2b)

The modification of the prices and tariffs perceived is done according to the following formula:

\[ P_1 = P_0 + \Delta P \]

where:
\[ P_1 = \text{the modified price or tariff}; \]
\[ P_0 = \text{the current price or tariff}; \]
\[ \Delta P = \text{increase in price} \]

\[ \Delta P = \frac{[(\Delta C_v + \Delta C_f) + (\Delta C_v + \Delta C_f) \times r\% + (\Delta C_v + \Delta C_f) \times d\%]}{Q}; \]

Where:
\[ \Delta C_v = \text{increase in variable costs as a result of influences received in costs}; \]
\[ \Delta C_f = \text{increase in fixed costs as a result of influences received in costs}; \]
\[ r\% = \text{profit margin of the}; \]
\[ d\% = \text{development costs}; \]

The modification of prices and tariffs has to take into consideration the following criteria:

• For gross water, electric energy and material expenses with considerable influence on price,; the modification will take into consideration changes in supply prices by determined by market prices since the previous modification;
• Specific energy and material consumption will be taken into consideration in the proportion they were set forth in at the previous authorization process;
• Labor costs are set in accordance with existing legislation, correlated with the principle of economic efficiency;
• The return of the investment is calculated adhering to existent legislation;
• The price of the shipped water will include eventual system losses, previously approved by local authorities;
• The quantity of shipped water and processed sewerage will take into consideration the levels previously approved;
• The profit margin will be held at the quantity previously approved, and the IID fund will be determined according to existent legislation.

In case if the operator does not have a development quota, or its quantity is modified compared to the ones stated in present prices and tariffs, the formula is adjusted accordingly.

In case the operator creates or modifies the IID fund, the formula will be adjusted accordingly.
6. Setting, adjusting, or modifying composite prices and tariffs for the services provided by the water and sewer utility operator

Composite prices and tariffs for the provided services can be produced by economic entities for the purpose of pricing, adjustment or modification can be done by respecting the following conditions:

- The metering of end users;
- The analysis and agreement of the local authority involved, for putting into practice the desired prices and tariffs.

The composite prices and tariffs of the provided services have two components:

- A fixed component, proportional to the required expenditure necessary for maintaining system efficiently;
- A variable component according to the quantity of used water and processed sewerage.

The composite prices for the provided services can be set at the initiative of the provider or that of the local authorities after conducting a study that demonstrates the necessity of these measures.

The composite prices and tariffs are calculated according to the following formula:

\[ P = a + b, \]

where,

- \( a \) represents the fixed part of the price/tariff calculated according to the following formula:

\[ a = \frac{(C_f + r\% + C_f \times d\%) \times Q_{\text{medie/cs}}}{Q} \]

where:

- \( C_f \) = fixed expenditure;
- \( r\% \) = profit margin;
- \( d\% \) = development quota;
- \( Q \) = the quantity expected for the year the proposal refers to;
- \( Q_{\text{medie/cs}} \) = average quantity/capita;
- \( Q_{\text{medie/cs casnici}} \) is determined as a rapport between the average monthly delivered quantity for household consumer and the average number of consumers;
- \( Q_{\text{medie/cs rest utilizatori}} \) will be determined in multiple installments, according to the contracted quantity;
- \( Q_{\text{medie/cs rest utilizatori}} \) will be determined to reflect as exactly as possible the contracted water quantity per capita.

- \( b \) represents the variable part of the formula and is calculated using the following formula:

\[ b = \frac{(C_v + C_v \times r\% + C_v \times d\%) \times Q_{\text{medie/cs}}}{Q} \]

where:

- \( C_v \) = variable expenditure;
- \( r\% \) = profit margin;
- \( d\% \) = development quota;
- \( Q \) = the programmed quantity for the year the calculation refers to.

In case the operator creates or modifies the IID fund, the formula will be adjusted accordingly.
In case if the operator does not have a development quota, or its quantity is modified compared to the ones stated in present prices and tariffs, the formula is adjusted accordingly.

7. Conclusions

From the data presented in this paper we can conclude that the setting of the real price and the way that this is done is an important step for both the consumer and the provider, which in the case of water and sewerage is the Local Council and Mayors Office. The main function of the A.N.R.S.C is oversight for the sole propose of eliminating any possible mistakes.

The optimal rapport between price and quality in case of water and sewerage means the continuous satisfaction of the client at minimal cost in such a way that this will not lead to a decrease in quality. This balance has to be implemented according to the needs and values of the environment. In the evolution of contemporary societies when funds are usually distributed trough competitions, one has to take into considerations that these possibilities appear usually conditioned and in most cases for a limited time period. Because of this in the case of a planned development one has to make a thorough selection and prioritization taking into consideration imposed conditions by those who provide these funds.

In the case of public services global quality has to be assured in spite the fact that consumers are in a different situation compared to those situations when we can speak of real market conditions.

Even in these conditions, in which there is a monopoly over the provided services the provider has to assure quality services and has to act as if he would be a player in real market conditions. Marketing as a way of approaching the relation between market and consumers has to be implemented in the same way when we are speaking about public services. What intervenes as a bonus at those who work in this field is a system of well defined values.

References

Annexes

**ANNEX Nr. 1\(^a\):** Explanatory file for setting water prices

<table>
<thead>
<tr>
<th>Specifications</th>
<th>U.M.</th>
<th>Annually programmed - lei -</th>
<th>Proposed price - lei/U.M. -</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Acquired gross water quantity</td>
<td>thousand m(^3)</td>
<td></td>
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</tr>
<tr>
<td>B. Delivered water quantity:</td>
<td>thousand m(^3)</td>
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<tr>
<td>- population</td>
<td>thousand m(^3)</td>
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<tr>
<td>- remaining consumers, including own consumption</td>
<td>thousand m(^3)</td>
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<tr>
<td>- water losses inherent to the system</td>
<td>% / thousand m(^3)</td>
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<tr>
<td>C. Consumed energy</td>
<td>total MWh</td>
<td></td>
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<tr>
<td>D. Number of employees</td>
<td>nr. personal</td>
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<tr>
<td>E. Average income</td>
<td>Lei</td>
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</tbody>
</table>

1. Expenses associated to materials:

- gross water; quantity with current price
- Water losses during shipment and distribution
- electric energy; quantity with practiced price
- water treatment
- technologic materials
- environmental protection expenses
- annual return of cost
- annual rent
- administration reparation
- third party repairs
- research and development
- other services performed by third parties:
  * collaborations
  * commissions
  * protocol, advertising
  * postage and telecommunication
- other expenses

2. Labor expenses

- salary
- Mandatory health insurance
- unemployment fund
- FNAS
- work related accident an illness fund
- CCIASS
**ANNEX Nr. 1**<sup>b)</sup>: Explanatory file for setting sewerage prices

<table>
<thead>
<tr>
<th>Specifications</th>
<th>U.M.</th>
<th>Annually programmed - lei -</th>
<th>Proposed price - lei/U.M. -</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Delivered water:</td>
<td>thousand m&lt;sup&gt;3&lt;/sup&gt;</td>
<td></td>
<td></td>
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<tr>
<td>- population</td>
<td>thousand m&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>- remaining consumers, including own consumption</td>
<td>thousand m&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>B. Processed waste and meteoric water:</td>
<td>thousand m&lt;sup&gt;3&lt;/sup&gt;</td>
<td></td>
<td></td>
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<tr>
<td>- population</td>
<td>thousand m&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>- remaining consumers, including own consumption</td>
<td>thousand m&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>C. Consumed energy</td>
<td>total MWh</td>
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<tr>
<td>D. employee number</td>
<td>nr. of personnel</td>
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<tr>
<td>E. Average income</td>
<td>Lei</td>
<td></td>
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</tbody>
</table>

1. Material expenses:
   - electric energy; quantity with price
   - technologic materials
   - water quality protection costs
   - environmental protection costs
   - annual return of investment
   - annual rent
   - administration repairs
   - outsourced repairs
   - research and development
   - other services outsourced to third parties:
   * collaborations
   * commissions

\[ P = \frac{V}{Q} \]
* protocol, marketing
- postage and telecommunication
- other material expenses
2. labor costs:
- salaries
- Mandatory health insurance
- Unemployment fund
- FNAS
- work related accident an illness fund
- CCIASS
- Fond garantare creație salariale
- other labor costs
F. exploitation costs (1+2)
G. financial expenses
I. Total expenses (F+G)
II. Profit
III. Development quota
IV. IID fund
V. Income obtained from sewerage services (I+II+ III+IV) lei
VI. Total processed quantity including internal consumption thousand m$^3$
VII. unitary tariff (V:VI) lei/m$^3$

ANNEX Nr. 2$^{a)}$: EXPLENATORY FILE for setting adjusting or modifying water prices

<table>
<thead>
<tr>
<th></th>
<th>U.M.</th>
<th>Accomplished in the previous period</th>
<th>Previous price</th>
<th>Proposed</th>
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<tbody>
<tr>
<td></td>
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<td>Total - lei - Unitary - lei/m$^3$ -</td>
<td>Total - lei -</td>
<td>Total increase - lei - Unitary - lei/m$^3$ -</td>
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<tr>
<td>A. purchased gross water quantity</td>
<td>thousand m$^3$</td>
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<td>B. Delivered water:</td>
<td>thousand m$^3$</td>
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<td>- population</td>
<td>thousand m$^3$</td>
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<td>- remaining consumers, including own consumption</td>
<td>thousand m$^3$</td>
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<td>- water losses in the system</td>
<td>thousand m$^3$</td>
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<tr>
<td>C. Consumed energy</td>
<td>total MWh</td>
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<td>D. Number of employees</td>
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<td>E. average income/employee</td>
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<td>1. variable expenses:</td>
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<td>- gross water; quantity and price</td>
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<td>- water losses during transport and distribution</td>
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<td>- water treatment</td>
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<td>- materials used in the technologic process</td>
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<td>- other specific material costs</td>
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<td>2. Fixed expenses, from which:</td>
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<td>a) material expenses:</td>
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<td>- environmental protection expenses</td>
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<td>- annual return of investment</td>
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<td>* commissions and honoraries</td>
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<td>- Fond garantare creanțe salariatie</td>
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<td>I. total costs (1 +2)</td>
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<td>II. Profit</td>
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</table>
III. Development quota

IV. IID Fund

V. Income obtained from transport and distribution (I + II + III + IV)  
\[ \text{lei} \]

VI. delivered quantity, own consumption included  
\[ \text{mii m}^3 \]

VII. unitary price (V:VI)  
\[ \text{lei/m}^3 \]

\[ P_0 = \frac{\text{Valoare a creşterii cantităţii}}{\Delta P} \]

\[ P_1 = \frac{P_0 \times \Delta P}{\gamma \Delta P} \]

*) In case of sewerage tariff adjustment.
**) In case of sewerage tariff modification.
***) In case of sewerage tariff modification or adjustment.

At let. A, the volume of gross water will be determined on individual basis according to supply sources.

For column „accomplished in previous period” the supplier will fill out the file for the whole year broken up for the last three month previous to the proposal.

Together with the Explanatory file for modifying adjusting sewerage tariffs, the supplier will present the technical and economic motivating document.

In case of manufacturing sipping and distribution activities, different explanatory files will be filled if the provider portfolio contains these activities.

Water losses inside the system will be calculated only in those cases that occurred during transport and distribution of water.

Water losses inside the system will be represented by the rapport between delivered and brought water.

Water losses inside the system will be determined taking into consideration the price of brought water and the quantity lost.

In case the supplier has in its portfolio other activates, indirect expenditures derived from these together with expenditure quota derived from these, will be distributed to each element proportionally to its importance in the grand total. These expenditures will be included on separate axes. For these expenditures the way in which these operations were don will be explained for each separate activity.

For repair expenditures which surpass 10% of material costs, the explanation file will be presented.

Labor costs will be detailed in an explanation file, detailing the levels and tariffs proposed which will include a grand total of labor costs: direct, indirect, bonus etc. salaries, detailed after category personnel in accordance with the approved duty roster.

Obtained income is not represented by collected income: this is determined by multiplying the billed quantities with the practiced prices.

For suppliers who don’t pay VAT; when the explanatory document is drawn up, calculated supply prices will include VAT.
ANNEX Nr. 2\textsuperscript{b)}: FIȘA DE FUNDAMENTARE setting adjusting or modifying water prices

<table>
<thead>
<tr>
<th>Specification</th>
<th>U.M.</th>
<th>Accomplished in the previous period - lei</th>
<th>Previous price</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total - lei</td>
<td>Unitary - lei/m\textsuperscript{3}</td>
<td>Total - lei</td>
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<tr>
<td>A. Delivered water:</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>- population</td>
<td>thousand m\textsuperscript{3}</td>
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<tr>
<td>- remaining consumers, including own consumption</td>
<td>thousand m\textsuperscript{3}</td>
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<tr>
<td>B. Processed and meteoric water:</td>
<td>thousand m\textsuperscript{3}</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- population</td>
<td>thousand m\textsuperscript{3}</td>
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<tr>
<td>- remaining consumers, including own consumption</td>
<td>thousand m\textsuperscript{3}</td>
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<tr>
<td>C. Consumed energy</td>
<td></td>
<td>total MWh</td>
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<tr>
<td>D. Number of employees</td>
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<td>Nr of personal.</td>
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<tr>
<td>E. Average income/employees</td>
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<td>Lei</td>
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</tbody>
</table>

1. Variable expenses: \(\Delta C_v\)

- electric energy technology; quantity and price
- technologic materials
- water quality and protection expenses
- other specific material expenses

2. Fixed expenses of which, :

a) Material costs: \(\Delta C_f\)

- materials
- electric energy; quantity with acquisition prices
- environmental protection expenses
- annual return of investment
- annual rent
- administrational repairs
- repairs executed by third party
- research and development
- other services executed by third party:
  * collaborations
  * commissions /honoraries
  * business, advertising
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<td><strong>postage and telecommunication</strong></td>
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<td><strong>b) labor costs, from which:</strong></td>
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<td><strong>- salaries</strong></td>
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<td><strong>- Mandatory health insurance</strong></td>
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<td><strong>- Unemployment fund</strong></td>
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<tr>
<td><strong>V. Income obtained from sewage services (I+II+III+IV)</strong></td>
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<tr>
<td><strong>VI. Processed quantity including own consumption</strong></td>
<td>thousand m$^3$</td>
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<tr>
<td><strong>VII. Tarif unitar (V:VI)</strong></td>
<td>lei/m$^3$</td>
<td>$P_0$</td>
<td>$\gamma \Delta P$</td>
<td>$P_0 + \gamma \Delta P$</td>
</tr>
</tbody>
</table>

*) In case of sewerage tariff adjustment.
**) In case of sewerage tariff modification.
***) In case of sewerage tariff modification or adjustment.

In case there are different systems for meteoric and domestic waste water management the supplier will keep separate files.

For column „accomplished in previous period” the supplier will fill out the file for the whole year broken up for the last three month previous the proposal.

Water quality protection expenses will be set according to the provisions of the Government’s Ordinance nr.352/2005 referring to the modification and completion of Government Ordinance nr.188/2002 for approving norms referring to conditions of unloading waste water into the environment.

Together with the Grounding file for modifying adjusting sewerage tariffs, the supplier will present the technical and economic motivating document.

In case the supplier has in its portfolio other activates, indirect expenditures derived from these together with expenditure quota derived from these, will be distributed to each element proportionally to its importance in the grand total. These expenditures will be included on separate axes. For these expenditures the way in which these operations were done will be explained for each separate activity.

For repair expenditures which surpass 10% of material costs, the explanation file will be presented.
Labor costs will be detailed in an explanation file, detailing the levels and tariffs proposed which will include a grand total of labor costs: direct, indirect, bonus etc. salaries, detailed after category personnel in accordance with the approved duty roster.

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For suppliers who don't pay VAT; when the explanatory document is drawn up, calculated supply prices will include VAT.