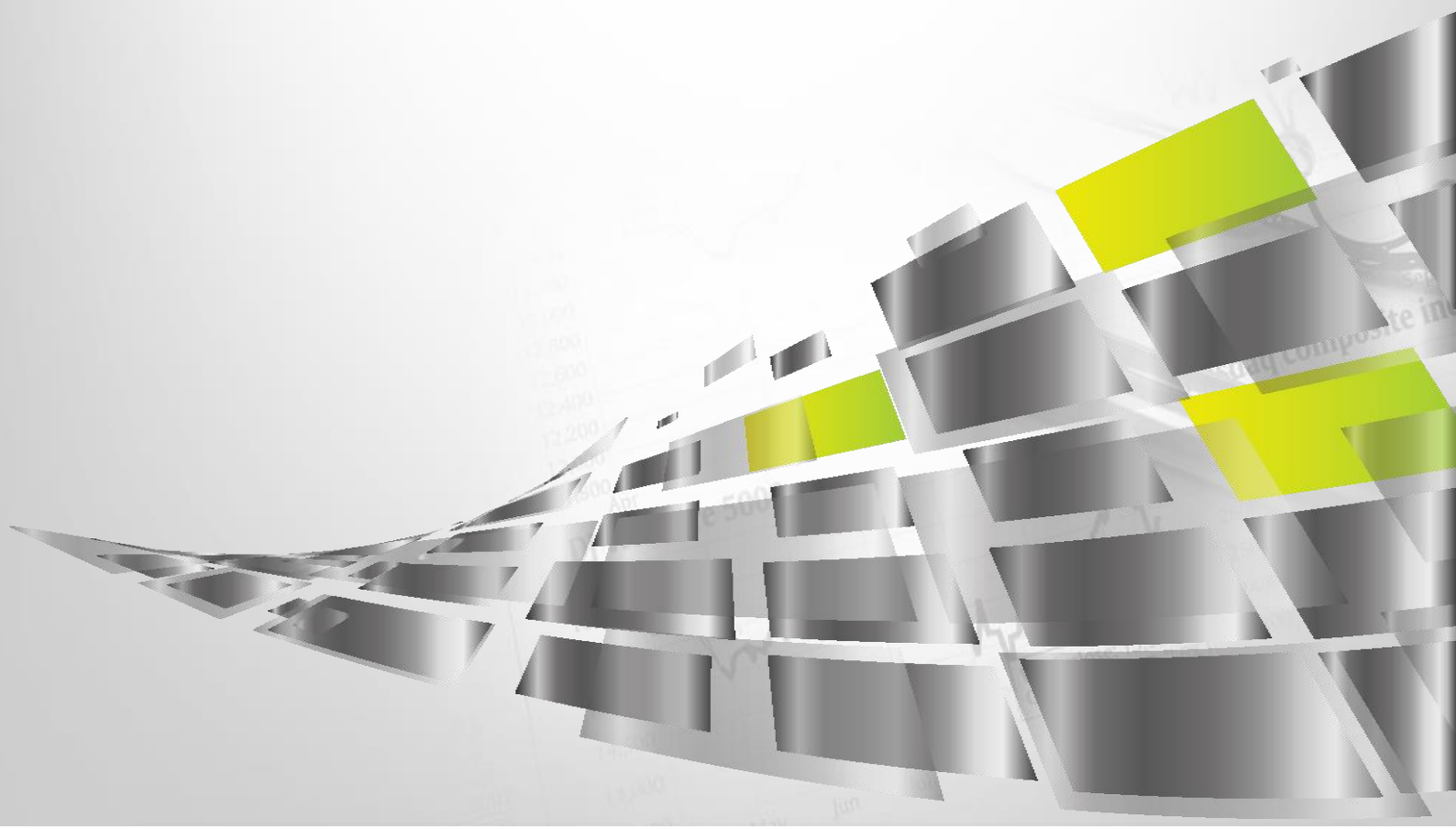




WATER REGULATORY AUTHORITY

# TARIFF SETTING METHODOLOGY







# Tariff Setting Methodology

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## **METHODOLOGY ON SETTING THE TARIFFS OF WATER SUPPLY AND WASTEWATER TREATMENT AND DISPOSAL SERVICE**

The methodology of calculating the tariffs of drinking water and wastewater collection, disposal and treatment services is a document, which aims to facilitate the tariff setting for services in this sector. This document is improved for as much as it is considered necessary by the regulatory authority and the changes made are notified to the companies.

The WRA is engaged to apply correctly and fairly the methodology and contribute to the training of companies on how to use this methodology. Its spirit is that of applying a tariff policy on the water supply and wastewater treatment and disposal services, approved by the NRC decision.

## CHAPTER I. METHODOLOGY ON TARIFF SETTING FOR PROVIDING THE WATER SUPPLY AND WASTEWATER TREATMENT AND DISPOSAL SERVICE

### Article 1: Definitions

**“Water Regulatory Authority (WRA)”** is the independent institution that regulates the water supply and wastewater treatment and disposal sector in accordance with law no. 8102 (as amended).

**“Commission”** is the National Regulatory Commission, which leads the Water Regulatory Authority, operating based on law no. 8102 (as amended).

**“Jurisdiction area”** is the area where the licensed company is responsible for providing the sewerage and water supply service.

**“Water supply system”** consists of the entire elements like the intake, the pumping system, disinfection units, reservoirs, transmission lines and the distribution network.

**“Sewerage system”** is the system consisting of the overall wastewater collection/discharge lines, wastewater pumping stations and/or disposal lines, facilities of discharging them to the receiving water bodies and the wastewater treatment plants (if any in the system).

**“WSS services”** is the entirety of services provided by the companies to the consumers through the water supply systems and wastewater collection, disposal and/or treatment systems.

**“Consumers”** are all private, public and household categories, using the sewerage and/or water supply services.

**“Household consumers”** mean consumers benefitting the services provided by the company in their houses for the living needs (cooking, sanitary services etc.).

**“Public consumer”** implies any person/legal entity categorized as a government authority, local authority, international organization (embassy, diplomatic residences and consulates), political party headquarters and their branches as well as any institution, which exercises its activity in public or common interest, not registered as a profitable organization.

**“Private entities”** implies any person/legal entity or profitable organization exercising its industrial or commercial activity of any kind, including the state commercial companies (KESH sh.a, student treatment companies and other similar ones).

**“Operator”** is the company licensed by the WRA exercising the services of water supply and wastewater treatment and disposal, and it provides one or several of these services according to the categories defined in the license.

**“Tariff system”** means the parameters, requirements and the standards used in setting the tariffs for the sewerage and water supply service for different consumer categories and different consumption levels.

**“Tariff structure factors”** refer to the relative weight of the given tariff for the water consumption volume unit between different groups of consumers and different consumption levels.

**“Water tariff”** is the price that consumers shall pay for the water supply service provided by the companies through the distribution network. The same term usually applies to the sewerage tariff (collection, disposal and treatment of wastewater). The sewerage and water supply tariff are in place to cover the cost of production, treatment of water, depositing and its distribution to consumers, the collection, disposal and treatment of wastewater and also the billing and collection of income from these services.

**“Two-tier tariff”** is made up of the volumetric component and the fixed component. The volumetric component is defined as price/m<sup>3</sup>. The fixed tariff component is a fixed price per year or per month. The two-tier tariff can be applied only in cases when the meters are installed and can be read. Otherwise, a “flat rate tariff” is applied.

**“Tariff for other services”** is the term used for all other services provided by the companies, which are not part of the sewerage and water supply service billing, but which shall be paid by the consumer.

**“Bulk water sale”** is the situation in which the water is sold to a buyer from one or several distribution points with the purpose reselling it to individual consumers within the service area of bulk buyers.

**“Average tariff”** is the average, resulting from the total of income, according to the invoiced volume with combined tariffs (volumetric tariff + fixed tariff/flat tariff), over the total of the invoiced volume, for a term (month/three months or a year).

**“Income”** implies any monetary value collected by the companies for the services provided in the current year. When the WRA analyzes whether the costs are covered by the income, this always implies that the extra income and the subsidies were taken into consideration.

**“Total cost coverage”** means that the company costs for the sewerage and water supply services are fully covered from the invoicing/collection of the clients’ services.

## **Article 2: General Issues**

1. The tariff adjustment proposal is completed and submitted by the companies, meeting the requirements and time limits provided for by law 8102 (as amended) and the normative acts approved by the NRC decision.
2. The tariff adjustment proposal is submitted by the companies after the end of the annual financial balance sheet. In addition, the tariff adjustment proposal requires information for all subsidies to be granted for the period in progress.
3. The tariff adjustment applications for the following year are submitted to the WRA within the first six months of the existing year. Every proposal submitted after the deadline shall be resubmitted in the next year with updated data.
4. If the documentation of application is not completed according to the requirements of Decision No.40 dated 09.12.2015 'On the approval of the supporting documentation for the approval of tariffs on water supply and wastewater treatment and disposal service' or when the company does not manage to transfer the regulatory payment to the WRA's account according to the term stipulated in the previous contract, the tariff adjustment application is resubmitted the following year with updated data.
5. The same procedure is also followed when the WRA defines a deadline for clarifications or completion of the information and the company does not meet it.

## **Article 3: Regulatory Payment**

1. The regulatory payment is an annual obligation to be paid by the companies. Upon the approval of tariffs, the WRA defines for every company the regulatory payment, notifies the company and enters into a contract with it within 30 days from the notification date. The companies shall have paid the regulatory payment, stipulated in the contract, before applying for a new level of tariffs for the services provided.
2. The regulatory payment is calculated based on the annual income from the activity (based on the volumes foreseen in the application with tariffs approved by the WRA) and it will be different:
  - For companies covering up to 50% of the total costs.
  - For companies covering more than 50% of the total costs.
3. Komisioni Kombëtar Rregullator, çdo vit në muajin shtator do të vendosë dhe do të publikojë përqindjen e pagesës rregullatore që do të aplikohet për vitin në vazhdim.



## **CHAPTER 2: THE WSS SERVICE TARIFF SYSTEM AND TARIFFS FOR OTHER SERVICES**

### **Article 4: Tariff setting methodology**

1. The tariff setting methodology on the water supply and wastewater treatment and disposal service is based on four objectives of the tariff policy:
  - a. Coverage of costs: at first the coverage of the operation and maintenance costs step by step up to the total cost coverage of the company related to the performance of its activity in providing the relevant services.
  - b. Management efficiency
  - c. Affordability by the consumers in need, and
  - d. Environmental efficiency
2. The water supply and the wastewater treatment and disposal service tariff are set according to the consumer categories, as provided by article 3 of the tariff policy document:
  - a. Household
  - b. Public
  - c. Private
  - d. Bulk water sale
3. The tariff structure follows the logic of metering and not the consumption, as it is provided by article 5, in the tariff policy document.

### **Article 5: Calculation of Costs**

1. The assessment of the service tariff rate starts with the calculation of costs for the provision of the relevant services. For midterm periods, the companies shall calculate their costs based on the data of the historical costs for every element of service received from the Accrual Cost System<sup>1</sup> and the Activity-Based Costing<sup>2</sup>.
2. The fixed costs for reading meters, invoicing, collection and administrative expenses to be calculated on the basis of the current costs of each component. The overall costs for offices, administration, legal services and staff will be included in the fixed costs.

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<sup>1</sup> Service costs for a certain period but to be liquidated later.

<sup>2</sup> Costs calculated for each activity (production, distribution, collection, disposal and treatment of wastewater).

3. The operation and maintenance costs (O&M) related to the production volume and the water distribution and the wastewater treatment and disposal are calculated based on the current costs: electric power, chemicals, inventories, staff expenses, transport etc. to provide these services to consumers according to acceptable standards.
4. The costs for bulk water purchase are included in the tariffs per unit paid by the company.
5. The depreciation will be calculated every year.
6. The debt servicing interest, if the investments are made through a loan, is part of the cost to be included in the analysis during the tariff assessment.
7. When the company provides both the water supply service and the sewerage service, the income and the costs of the sewerage service shall be calculated separately from the water supply costs and income. The same procedure shall be followed in cases when the company provides the wastewater treatment service. When the company provides the services of water supply, the sewerage and the wastewater treatment, the administrative and the general costs are divided between these services proportionally, so that the general amount may not change.

#### **Article 6: Increase of Block Tariffs for Consumers with Water Meters**

1. In cases when the consumers are installed meters, a two-tier tariff is applied. The fixed component in a two-tier tariff generally covers the fixed costs. Whereas the variable component (volumetric) shall generally cover the variable costs. The tariff volumetric component shall increase in parallel with the increase of consumption.
2. The WRA encourages the companies to propose an increasing block tariff for consumers with water meters, where higher tariffs are applied for consumers using water beyond the minimum limit volume (for example 4.5 m<sup>3</sup>/month). According to the “increasing of the block tariff”, the consumed water unit tariff shall be lower for the first consumption block and higher for the second block, even for consecutive blocks, if any. In order to avoid unjust tariffs, the company shall divide the existing joint connections. The joint connections shall be replaced by individual metered connections.

3. If the companies have decided to apply the block tariff structure, they shall propose tariff structures for the consumption blocks for different consumer categories. The different consumption block tariffs in three different consumer categories should be within the acceptable limits of the tariff structure factors given below. These limits for the potential tariffs are defined taking into consideration the very different structures of the companies.

**Tariff structure factors for different consumption blocks and consumer categories**

Consumer categories	Tariff structure blocks (cubic meters/month)			
	←4.5	4.5 to 20	20 to 30	→ 30
Household	1.0*	1.0 to 3.0	1.5 to 4.0	2.5 to 6.0
Public	1.0 to 2.0	1.0 to 3.0	1.5 to 5.0	2.5 to 10.0
Private	1.0 to 2.0	1.5 to 4.0	2.0 to 6.0	3.0 to 12.0

\*factor = times

Example: For household consumers' category, the tariff/m<sup>3</sup> consumed water, for the highest levels of consumption, could be up to six times higher than the tariff in the lowest levels of consumption. Also, the industrial/private consumers may have a higher tariff than the household consumers.

The increase of the block tariff is especially suitable for areas where no subsidy scheme for the water supply consumption and sewerage service for families in need is applied. For consumption up to 4.5 m<sup>3</sup> per household/month, a smaller percentage of the average tariff will be invoiced.

4. If a block tariff is chosen to be applied, the company must be careful not to apply high tariffs for a certain group of consumers, forcing them to find additional supply sources or cancel the contract. In this case, the unified two-tier tariff may be taken into consideration.
5. For consumers without meters, a flat rate tariff is applied. This tariff will be fixed at such a rate as to stimulate consumers to ask for a meter.

## **Article 7: Bulk Water Sale Tariff**

1. Bulk water sale tariff covers the cost of this service and a possible profit (maximum 5%).
2. Every company, applying for a bulk sale tariff approval, shall submit to the WRA their request accompanied by the following documents:
  - An explanatory report (justification of the request for bulk water sale)
  - The approval of the tariff requested from the management bodies
  - The calculation of the bulk water sale tariff
  - The agreement between the parties
3. The company (seller) shall submit to the WRA the agreement with the buyer. If changes are needed, the WRA informs the company and the buyer about them. If the WRA does not reply within 30 days, the above parties may consider this failure to reply as a formal approval. In any case, the WRA shall approve the bulk water sale tariffs.

## **Article 8: The Service Tariff for Collection, Disposal and Treatment of Wastewater**

1. The costs for the service of disposal and treatment of wastewater are divided amongst the different consumer groups based on the consumed water volume. The tariffs will be progressive depending on the discharged volume. The fixed component generally covers the fixed costs.
2. When the company provides the service of collection, disposal and treatment of wastewater, the income of the wastewater collection and disposal service shall be calculated apart from the costs and the income of the wastewater treatment service.
3. When the company provides the water supply service and sewerage service (collection, disposal and treatment of wastewater), the general and the administrative costs are divided amongst these services proportionally, so that the general amount does not change.

4. The wastewater treatment, disposal and collection are related to the amount of wastewater discharged from each consumer. The wastewater amount will be considered the 100% of the consumed water amount.
5. If the consumer is supplied with water from a well or other sources and the company offers the sewerage service, a fixed tariff may be applied for the sewerage.
6. For consumers, causing problematic (serious) pollution, the company may decide on special tariffs (e.g. special tariffs for the hygiene in the field). They should cover the real costs.

### **Article 9: Tariffs for other services**

1. Companies provide other services as well, which have their costs to be covered by the consumers, as, for example, the connection tariff, the reconnection tariff, the meter installation tariff, etc.
2. All the above tariffs shall be included in the tariff adjustment proposal. The WRA shall analyze whether the tariffs for the other services are reasonable compared to the company costs. If it is found that the tariffs are not reasonable, the WRA shall make recommendations for improvements to the management bodies and the company.

## **CHAPTER 3: VALIDATION OF THE TARIFFS ADJUSTMENT PROPOSAL**

### **Article 10: The Tariffs Approval Process**

1. The tariff application and approval process, as it is provided by the tariff policy document, starts mainly from the company needs to cover the new level of costs for the services it provides. More specifically, this process is presented in a special document approved by the WRA by an NRC decision No. 41, dated 09.12.2015, "On the approval of the tariff approval process for the water supply and wastewater treatment and disposal service".

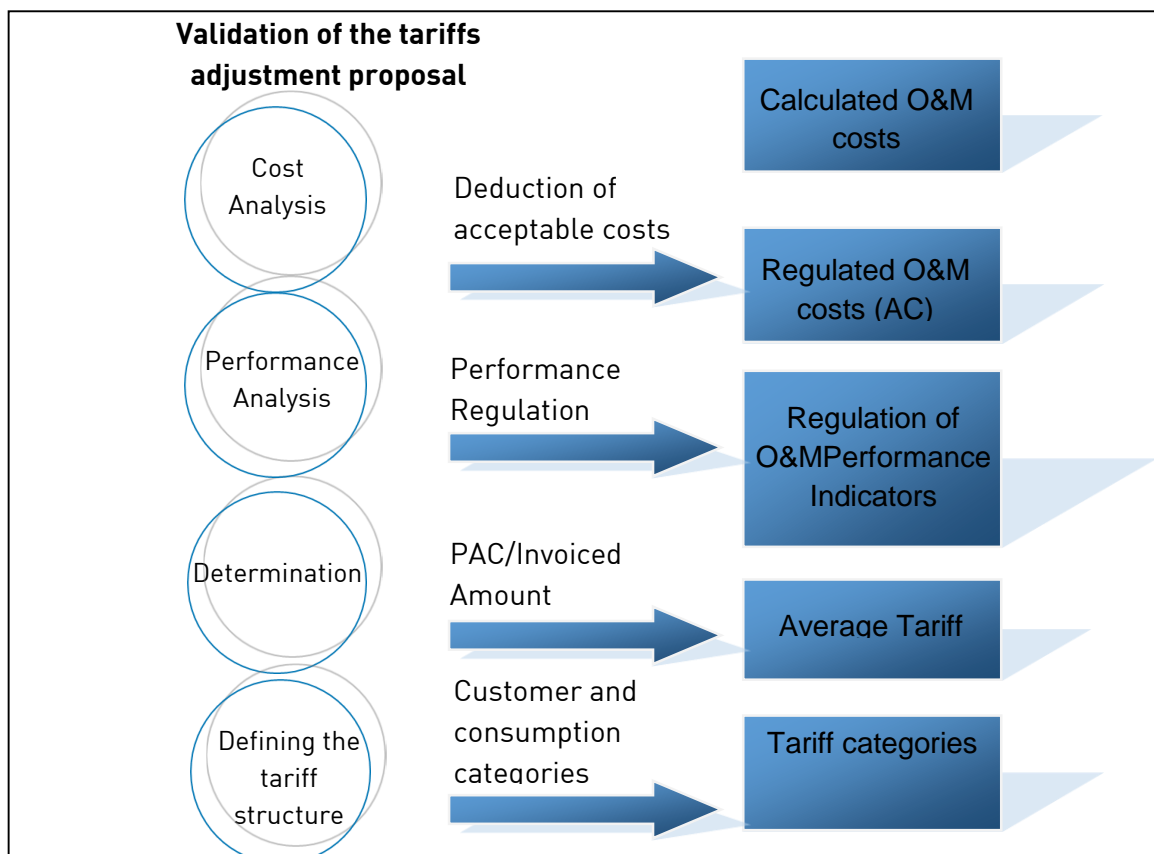
## **Article 11: Application Documents**

1. The company is obliged to submit to the WRA at the moment of applying all the necessary documentation, according to the NRC decision No. 40, dated 09.12.2015, “On the approval of the supporting documents for the approval of tariffs of water supply and wastewater treatment and disposal service”, which provides an opportunity to the regulator to create a fair judgment regarding the new tariff rates.

## **Article 12: The Validation of the Tariffs Adjustment Proposal**

### **General Overview**

1. The tariff proposal analysis is made based on the following scheme. This analysis starts with the consideration of the “Foreseen Operational and Maintenance Costs” and the performance indicators presented by the company. The unacceptable costs are deducted and the performance indicators are corrected based on their analysis. The result is the “O&M Adjusted Performance Costs”, and the “adjusted performance indicators”, which the WRA recognizes to determine the average tariff. The different tariff categories are derived from the average tariff, taking into account the volume/billing method. The following scheme gives only a general idea, where the details are explained by the succeeding articles.



### Article 13: The Validation of the Tariffs Adjustment Proposal – Cost Analysis

1. The WRA makes a proposal about the “reasonable and necessary” O&M expenses for the provision of efficient services. The WRA analyses special company costs. This is done to make sure that consumers pay only justified costs.
2. The WRA not only analyzes the company costs, but it also compares them with the costs of other similar companies. The reasons for reduction shall be explained clearly. If the explanations given by the company do not justify the increase of expenses, the WRA proposes a reduction of the foreseen costs.
3. In certain cases, the WRA can “accelerate” the tariffs application process. “Acceleration” means that the WRA shall simplify this process and exerts less control on specific lines of expenses. The companies that have the right to be subject to fast examination could be those companies with small service schemes and those companies achieving or surpassing the performance objectives. “Acceleration” is the WRA’s competence.

## **Article 14: The Validation of the Tariffs Adjustment Proposal – Performance Analysis**

1. The performance analysis focuses on certain indicators to determine whether there are deviations from the performance for which it was agreed. These indicators are:
  - 1/) Non-revenue water (losses), which is divided into two subgroups:
    - a. Administrative losses
    - b. Technical losses
  - 2/) The metering ratio, which is divided into two subgroups:
    - a. The metering ratio for household customers
    - b. The metering ratio for non-household customers (budgetary institutions & private entities)
  - 3/) Water quality, divided into two subgroups:
    - a. The level of chlorine residue
    - b. The coli form level
  - 4/) Water supply hours (service hours)
  - 5/) Efficient energy use, divided into three groups based on the service provided
  - 6/) Staff efficiency (staff/1,000 connections)
  - 7/) Water supply coverage
  - 8/) Sewerage coverage
  - 9/) Regulatory perception<sup>3</sup>
  - 10/) Special efforts and measures to improve efficiency, service and performance
  - 11/) Collection rate<sup>4</sup>
2. For indicators 1) - 9) and 11), companies determine different comparison indicators. The indicator No.10) is a qualitative indicator, by means of which the company can be “rewarded” for the special initiatives showing the commitment for a better performance.
3. The table below shows how the performance assessment is calculated:

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<sup>3</sup> The performance objective of the Regulatory Perception shall be validated transparently, which will include elements like the time of reaction and the response of the companies to WRA requests, liquidation in time of the regulatory payments, etc.

<sup>4</sup> Objective 11 (Collection Rate) will be used in Article 19.



Points according to objectives	Min	Max
1) Non revenue water (losses) a. Administrative losses b. Technical losses	-15 - 5	+7 +3
2) Metering ratio a. Metering ratio for household customers b. Metering ratio for non-household customers (budgetary institutions & private entities)	-5 -15	+3 +7
3) Water quality	-15	+7.5
4) Water supply hours (service hours)	-15	+7.5
5) ) Energy use efficiency	-20	+10
6) Staff efficiency (staff/1,000 connections)	-20	+10
7) Water supply coverage	-15	+7.5
8) Sewerage coverage	-15	+7.5
9) Regulatory perception	-10	+5
<b>Total of points</b>	<b>-150</b>	<b>+75</b>
<b>Bonus</b>		
10) Special measures and attempts to improve efficiency, service or performance	0	+75
<b>General total of points</b>	<b>-150</b>	<b>+150</b>

4. Failure of achievement by one company of the defined indicators and standards (indicators 1) - 9) has a negative influence and will lead to a reduction of performance assessment if the company achieves the objectives for these indicators, it will have neither any reduction nor any bonuses but 0 points.
5. If the company surpasses the objectives for the indicators 1) - 9), a bonus of points will be given. The bonus points will be given according to the scale of surpassing the objectives (up to the maximum shown in the table).
6. The WRA will take into consideration granting an additional bonus for extraordinary attempts and initiatives to improve the efficiency, the service or the water supply (Indicator 10). The justification of giving a special bonus through 1-75 points will be defined by the commission decision (preliminary and final).
7. The general result is afterwards converted into monetary data like the percentage of the changed costs (see article 18). The maximum reward/penalization goes up to +/- 5% of the changed costs for the Type I companies (O&M costs are not covered yet) and +/- 10% of the changed costs for the Type II companies (→ than 100% O&M cost coverage).

The table below shows the exact amounts according to the performance:

General result*	Performance Change Type I	Performance Change Type II
150	5%	10%
140	4,67%	9,33%
130	4,33%	8,67%
120	4,00%	8,00%
110	3,67%	7,33%
100	3,33%	6,67%
90	3,00%	6,00%
80	2,67%	5,33%
70	2,33%	4,67%
60	2,00%	4,00%
50	1,67%	3,33%
40	1,33%	2,67%
30	1,00%	2,00%
20	0,67%	1,33%
10	0,33%	0,67%
0	0,00%	0,00%
-10	-0,33%	-0,67%
-20	-0,67%	-1,33%
-30	-1,00%	-2,00%
-40	-1,33%	-2,67%
-50	-1,67%	-3,33%
-60	-2,00%	-4,00%
-70	-2,33%	-4,67%
-80	-2,67%	-5,33%
-90	-3,00%	-6,00%
-100	-3,33%	-6,67%
-110	-3,67%	-7,33%
-120	-4,00%	-8,00%

-130	-4,33%	-8,67%
-140	-4,67%	-9,33%
-150	-5,00%	-10,00%

\*the general result will be rounded in the above or below the decimal.

The changed performance costs contain penalties/rewards and the changes for the unjustified costs. The changed performance costs for operation and maintenance are the costs that the WRA allows the companies to take into consideration. If the company does not work well, it will have a deficit. Otherwise, it will have a benefit.

### **Article 15: Validation of the Tariffs Adjustment Proposal – the Average Tariff**

1. The “collection rate” efficiency requirement is taken into consideration (11) in calculating the average tariff. By applying the parameters agreed for every requirement in calculation, as given below, the companies are automatically penalized if they do not achieve the defined objectives and they are rewarded if they surpass them.
2. The following calculations show how the average tariff is calculated (including the collection rate):

Changed Performance Costs
/ Amount calculated for billing (in m <sup>3</sup> )
= Calculated Average Cost (in m <sup>3</sup> )

$\text{Calculated Average Cost (per m}^3\text{)} = \text{Calculated Average Tariff (per m}^3\text{)}$
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3. The collection rate and the setting of the average tariff. While the equation “Calculated Average Cost (per m<sup>3</sup>) = Calculated Average Tariff (per m<sup>3</sup>)” is generally mandatory, it means that the collection rate is 100%. However, it is accepted that the majority of the companies will not be able to collect 100% of the amount billed. Stimulations will be foreseen to further increase the collection rate. As a result, the following comparison indicator will be defined taking into account the current levels of each individual company. Later on, this indicator will be used to calculate the changed average tariff, including the collection rate as well.

Example: If the calculated average tariff (excluding the collection rate) is 100 ALL and the collection rate, according to the benchmarking is 85%, the average tariff will be:

$$100 / (85/100) = 100 / 0,85 = 117,65 \text{ ALL.}$$

## **Article 16: Validation of the Tariff Adjustment Proposal – Transitory Period**

1. The tariffs will be uniform in the company's service area. Under the conditions when a new area becomes part of the company's service area and the tariffs applied in this area are lower/higher than the current company tariffs, the tariffs unification can be done gradually within a certain period (not more than 3 years), depending on meeting the service standards.
2. On the first proposal for the tariff adjustment, within the transitory period, in cases when a new area is added to the company's service area, based on this methodology, only the cost analysis will be made. Further on, the WRA will define a basic group of performance indicators for every company, which will be analyzed during the adjustment of tariffs in the periods to come.

## **ARTICLE 4: APPLICATION AND MONITORING OF TARIFFS**

### **Article 17: Application of Tariffs**

1. Based on all the supporting documentation and if it is deemed necessary by the inspections at the applying company, the WRA approves the new service tariff rates, for which all validation requirements have been met.
2. The WRA notifies the company, its management bodies and the owner regarding its decision, accompanied by a detailed document explaining the authority's position.
3. If the decision of the Authority is the approval of a new tariff rate, the WRA enters into a new tariff contract with the company, specifying correctly the new tariff rates to be applied by the company in question.

4. The company notifies the new customers one month in advance for the increase of tariffs. The company notifies the consumers through local press or media, including a note on the consumer's water bill. The company, within the working hours, makes available to the consumers the documents on the current tariff. The company places announcements in different places with public access about the tariff adjustment decision, but not limited to the points or offices of consumer relations.

### **Article 18: The Monitoring of Tariff Application**

1. The WRA monitors the correct application of tariffs as described by this methodology. If the WRA finds that the company applies a tariff above the approved adjusted tariff, it will apply penalties provided for by article 32/1, item b, of law no. 8102 (as amended). If the company has fixed a higher tariff for the consumers, it will correct the tariff in the next billing cycle and will refund the amount overcharged approved by the WRA for every consumer affected by the incorrect application of the approved adjusted tariff.

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