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AUTORITETI RREGULLATOR PËR SHËRBIMET E UJIT  
REGULATORNI AUTORITET ZA USLUGE VODE  
WATER SERVICES REGULATORY AUTHORITY



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# ANNUAL PERFORMANCE REPORT FOR WATER SERVICE PROVIDERS IN KOSOVO, IN 2016

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Performance report of water supply licensed companies, wastewater service and untreated bulk water supply

August, 2017



## **Water Services Regulatory Authority**

### **Vision**

“Quality, safe and efficient water services for all consumers in Kosovo”

### **Mission**

“Regulation of water services in an effective and transparent manner in accordance with good European practices, which ensures that water services providers deliver qualitative, sustainable services with affordable prices throughout Kosovo, having into consideration protection of environment and public health.”

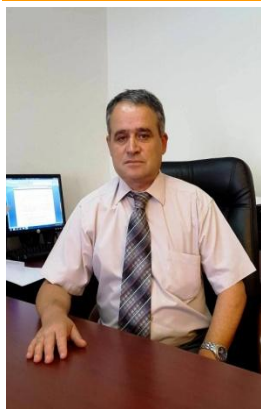
# ANNUAL PERFORMANCE REPORT FOR WATER SERVICE PROVIDERS IN KOSOVO, IN 2016 CONTENTS

FOREWORD .....	5
ROLE AND RESPONSIBILITIES OF WSRA .....	7
1 INTRODUCTION .....	8
2 SECTOR DEVELOPMENTS .....	9
PART A	
3. INDIVIDUAL PERFORMANCE OF RWC .....	13
3.1 Water supply .....	13
3.2 Wastewater services .....	30
3.2.2 Commercial Performance .....	31
3.3 RWC Financial performance .....	37
3.4 Overall performance of RWC .....	40
PART B	
4. SECTOR PERFORMANCE .....	42
4.1 Water production, sales and NRW .....	42
4.2 Coverage with water and wastewater services .....	43
4.3 Planned revenues, turnover and collected cash .....	44
4.4 Capital investments in water supply and wastewater services .....	45
PART C	
5. PERFORMANCE OF HPE 'Ibër Lepenci' .....	47
PART D	
6. CCC ACTIVITIES .....	49
7. FUTURE CHALLENGES .....	50
ANNEX 1. Quality and detailed performance data .....	52
ANNEX 2. Definitions and rational .....	70
ANNEX 3. Financial statements by Regulatory accounting .....	76
ANNEX 4. Tariff statements (2015-2017) .....	80
ANNEX 5. Summary of performance indicators -2016 .....	81
ANNEX 6. Statistical data - 2016 .....	82
ANNEX 7. Contact details .....	84
ANNEX 8. RWC Service zones .....	85

## Acronyms and abbreviations

WSRA	Water Services Regulatory Authority
KAS	Kosovo Agency of Statistics
EU	European Union
RBP	Regulatory Business Plans
WB	World Bank
RAB	Regulatory Asset Base
BD	Bords of Directors
ICGWQ	Inter-institutional Coordination Group on Water Quality
KNIPH	Kosovo National Institute of Public Health
CPIK	Consumer Price Indeks in Kosovo
IAWD	International Association of Water Supply Companies in the Danube River Catchment Area
IMCW	Inter-Ministerial Council on Waters
KfW	German Development Bank
RWC	Regional Water Company
CCC	Consumer Counselling Commissions
MESP	Ministry of Environment and Spatial Planning
MED	Ministry of Economic Development
SAA	Stabilisation and Association Agreement
ERP	Economic Reform Program
AMP	Annual Monitoring Plan
PMU-PE	Policy and Monitoring Unit of Public Enterprises
DWP	Danube Water Program
DCM-P	Data Collection and Management Platform
ERRU	Water Regulatory Authority in Albania
EWRC	Energy and Water Regulatory Commission in Bulgaria
OSP	Office of Strategic Planning in the Oficce of the Prime Minister
WC	Water Centre
NRW	Non-Revenue Water
AI	Administrative Instruction
RAG	Regulatory Accounting Guidelines
SCO	Swiss Cooperation Office in Kosovo
NDS	National Development Strategy
WWAK	Water and Wastewater Association in Kosovo
WAREG	European Water Regulators

## FOREWORD



It is my pleasure to present the 11<sup>th</sup> annual performance report for the licensed water service providers in Kosovo for 2016, prepared by WSRA in accordance with its legal mandate.

Through the mechanisms stipulated by Law No. 05/L-042 for Regulation of Water Services, WSRA manages and regulates the water sector in accordance with the UN General Assembly Resolution 2010, accepted by local institutions, which guarantees to citizens the right to sufficient quantities of safe, physically accessible and affordable drinking water and sanitation.<sup>1</sup>

The Water Sector in Kosovo is a public service sector and given that market service providers have a monopoly in this sector, WSRA through monitoring and comparative assessment aims to stimulate the effects of competition as a way to improve delivery of services by measuring the performance of service providers in comparison with one another, in relation to established standards and tariff obligations.

The year 2016 is characterized by several important developments in the water services sector in Kosovo.

One of the challenges that has continuously characterized the water services sector has been the lack of uninterrupted supply of drinking water. Through commitment of all stakeholders (Government of Kosovo, municipalities, donors and service providers) in building the production capacities, this challenge has almost been overcome. With additional production capacity of 2000 l/s at country level, in addition to existing capacities, uninterrupted and sustainable supply of drinking water is already possible.

Water losses continue to be a major challenge in this sector for all service providers without exception. Although there is a gradual improvement year after year of some service providers, water losses at country level continue to be at a very high level. To make improvements in this regard, service providers responsible for reducing losses should address this problem more seriously through the management and development of loss reduction strategies. WSRA will always support service providers by all means available to achieve this goal.

Based on the conducted analyses, reflected in the NIPH report, it results that the quality of water provided by the service providers is good. The overall level of past tests shows a high level of water quality compliance with established standards. This is first and foremost a direct result of the commitment of service providers to provide quality water but also the reflection of an increasingly efficient monitoring system and drinking water quality management in accordance with the standards set by the NIPHK, namely the Water Center.

Among the primary activities of WSRA for 2016 was the licensing of service providers, whereby licenses for service providers were extended for a period of three years. The municipalities of Shterpce, Novobardo, Partesh, Klllokot, Ranillug and Hani i Elezit are included within the licenses of the respective companies and are planned to be integrated into the respective RWCs after the rehabilitation of their infrastructure. Rehabilitation is planned to be implemented through the investments of phase V of the SDC project (joint investment of the Swiss Government and the Government of Kosovo). Arrangements with the respective municipalities have been signed and the integration will take place after technical acceptance of the works.

The year 2016 has marked the second year of the regular tariff period of three (3) years 2015-2017. As in previous years, through review of tariffs, WSRA has tried to maintain the balance to ensure that consumers receive the best possible quality services at a reasonable price while always taking into account the financial

<sup>1</sup> Government Water Policy Paper final version – March 2015, Republic of Kosovo

sustainability of service providers. It is worth noting that tariffs approved by WSRA in 2016 have remained the same for the current year (2017). In order to facilitate and stimulate consumer access to water services, we have corrected some of the secondary tariffs, such as those for illegal connection and reconnection, which has been completely removed and is deducted at the symbolic level of the administrative fee for connection to services.

In order to obtain consumer feedback on the water services offered and their expectations for improvement, WSRA has conducted a survey at the country level. This survey shows that still a part of consumers are not satisfied with the provided services and consider that prices are high compared to the standard of living in Kosovo, while the expectations for improvement consist on better handling of complaints, improved regular water supply (reducing many network interruptions) and so on.

During 2016, WSRA has continued its cooperation with important international institutions such as DANUBIS, WAREG, ERRU-Albania, EWRC-Bulgaria, etc., with whom we have signed a cooperation agreement and have joined in order to increase professional capacity and exchange experiences.

I would like to thank all the WSRA staff, especially those who contributed to the preparation of this report, as well as the management and all officials of RWCs for ongoing cooperation with WSRA.

Respectfully,

Raif Preteni, Director of WSRA



## ROLE AND RESPONSIBILITIES OF WSRA

The Water Services Regulatory Authority (WSRA) is an independent institution established in 2004, accountable to the Assembly of Kosovo, with the responsibility to manage an effective regulatory framework, ensuring that water services providers offer quality, sustainable and affordable services for consumers.

The specific responsibilities of WSRA are:

**Licensing of service providers**, ensuring that they perform their activities and legal functions appropriately. Service provider licenses determine the conditions of the operations of providers within their operational zone, including:

- Possession of professional capacity and adequate managerial, operational and technical resources for operating and maintenance to provide services up to acceptable service standards,
- Acceptance of responsibility for the provision of services in the entire area of the service providers, as set out in government's policies and plans for consolidation of service providers.

**Setting service tariffs** to promote consumer interests by setting prices for water and waste water services that are in accordance with their objectives, with a generally reasonable lower cost and by:

- promoting effective competition,
- ensuring that water service providers appropriately perform/finance their statutory functions.

**Setting minimum service standards** and overseeing the implementation of these standards by the service providers regarding:

- treatment of consumer appeals and requests,
- water testing and quality control to ensure quality is in conformity with national drinking water standards,
- ensuring that they pay the water service regularly,
- improvement of credibility through minimization and management of outages.

**Monitoring and reporting the performance** of service providers is another responsibility aimed at motivation of service providers to improve performance and to:

- ensure the efficient functioning of service providers and the sector in general,
- establish the extent to which service providers implement the objectives through the tariff process, legal framework and internationally acceptable standards.

**Establishing and supporting Consumer Counselling Commissions** in the seven Kosovo regions in order to:

- consult consumers and provide recommendations to the Authority on important issues related to provision of services, and
- address consumer complaints not handled properly by service providers.

**Inspection** of service standards and overseeing the implementation of the legal acts of the Authority, by service providers.

WSRA is also guided by principles of best regulatory practices, including: transparency, accountability, proportionality, non-discrimination, consistence and goals in conformity with strategic policies issued by the Government of Kosovo in development and environmental aspect.

# 1 INTRODUCTION

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The annual performance report for water service providers in Kosovo for 2016 is one of the key activities of WSRA, which aims to publicly and independently report on the performance of companies that provide water and waste water services. It is the eleventh report in a series of national reports produced by WSRA and based on WSRA's direct contribution to the regulatory reporting requirements.

This report compares the performance of 7 regional water companies that provide their services (water supply and waste water services) to about 1.52 million people (water supply), respectively 1.16 million people (waste water) to 34 Kosovo municipalities and a company that supplies untreated water to two RWCs (Prishtina and Mitrovica).

'Drinking water supply' refers to the supply of water to all domestic, commercial-industrial and institutional consumers, while 'waste water service' includes collection and treatment of wastewater, although their treatment level in Kosovo currently is very low.

Annual performance report for water services providers provides detailed information on current trends of WSRA's individual work and of the sector in general including: the level of implementation of service standards as well as financial, operational and consumer service aspects. Moreover, the report aims to:

- provide a sustainable approach at national level to ensure a healthy competition between services providers,
- inform consumers and responsible institutions involved in decision-making processes (the government, the regulatory body, etc.) about service level.

The report is structured as follows:

**Part A – Performance of regional water companies** provides comments and analyses of the level of work indicators showing the individual performance of RWC. Performance assessment is based on a number of main performance indicators, including aspects related to service standards, technical and financial performance, and consumer services, separately for the two services (water system supply and waste water).

**Part B – Performance of the water – waste water sector** comments on the performance of the sector in general, providing important information on indicators, including: water production, sale and loss, service coverage, the sector level turn-over, and total investment in both services (water supply and waste water treatment) for the 5-year period (2012-2016).

**Part C – Performance of bulk water suppliers** provides statistics and information on performance indicators on the only bulk water supplier, HPE Iber-Lepenci, which supplies some of the RWCs with untreated bulk water

**Part D – Activities of the CCC** provides information on the activities of Consumer Counselling Commissions (CCC) in 7 regions of Kosovo related to handling consumer complaints and other matters in the interest of consumers.

**Annexes:** provide statistics data, tables with detailed performance data, summarizing regulatory and tariff statements, definitions of data and indicators, contact information and other relevant information.



## 2 SECTOR DEVELOPMENTS

**Drinking water production capacity building.** One of the challenges that have characterized in continuity the water services sector, the lack of constant supply with drinking water, will be overcome, as over the recent years there has been concrete commitment of all stakeholders (Government of Kosovo, municipalities, donors) including consumers in building the production capacities. Two modern drinking water treatment plants have been constructed in the service area of RWC Mitrovica (Balinca and Shipol), while two water treatment plants are being built in the service area of RWC Prishtina (Badovc and Shkabaj). In RWC Radoniqi an annex facility is being built in the water factory, which will double the production capacity of this company. In general, the added production capacity is currently approximately 2000l/s. which guarantees that 24-hour drinking water supply is possible in Kosovo.

**Wastewater treatment projects.** In general in Kosovo there is no wastewater treatment. It is usually discharged directly into rivers, consisting one of the main polluters of surface water. The only wastewater treatment plant is in Skenderaj managed by RWC Mitrovica. In recent years there has been greater commitment to improving environmental conditions, where wastewater treatment plays a key role.

With support mainly from foreign donors, feasibility studies for water treatment have been carried out for the largest centres of Kosovo. Currently, they are in the phase of implementation for wastewater treatment plants in Prizren and Gjakova, then in Peja and Prishtina.

The Project Financing Agreement between the German Development Bank (KfW), the Government of the Republic of Kosovo and the Municipality of Prizren has been signed for the wastewater treatment project in Prizren region. This project includes several components: construction of the wastewater plant, construction of the new collector and rehabilitation of the other existing collector, and investments in the rehabilitation of the wastewater network at the main points in the city of Prizren.

The Government of the Republic of Kosovo, together with the German Federal Government through KfW, the Government of the Swiss Confederation through SECO, the Municipality of Peja, and the Regional Water Company 'Hidrodrini' in Peja, signed an agreement on the elimination of wastewater in the southwest Kosovo-Phase IV, namely for the Municipality of Peja.

The project "Elimination of Waste Water in South-West Kosovo, Phase III and V" is being implemented in Gjakova. The project is supported with funds from the Swiss and German governments.

Concrete steps have been taken to implement the project for wastewater treatment in Prishtina region (Prishtina, F. Kosovo and Obiliq), which will be supported by the Government of Kosovo in cooperation with the Government of France and the respective municipalities.

It is estimated that the total cost for wastewater treatment is very high, expectations are that this will be supported from development agencies and governments of Kosovo's friendly countries. They suggest to avoid receiving credits for wastewater projects as much as possible, as they consider that the sector (in particular regional water companies and consumers) is not yet ready to bear the costs of such loans.

Along with the growing commitment to build WWTP, there is an increased interest from all stakeholders including service providers and consumers to establish fair tariff policies that will be affordable and create financial sustainability for services providers, always taking into account the recognized *polluter pays* principle for protecting our environment.

With the WSRA's request, a feasibility study supported by the Swiss Cooperation and Development Office - SDC, RWSSP V has been conducted for reviewing the existing policy on a uniform fee for wastewater services, which is currently being implemented by WSRA.

The feasibility report has concluded that there is a general agreement and the existing uniform tariff approach, in line with the Kosovo Water Policy and the Tariff Policy for Water and Wastewater Services of the Water and Wastewater Regulatory Office, enjoys widespread support from stakeholders as a more appropriate approach to tariff policy for wastewater services. The report has provided some valuable recommendations to be followed in the future by WSRA and other stakeholders in the sector in relation to this service.

**National Development Strategy (NDS)** was approved by the Kosovo Government in January 2016. This strategic development document aims to address key obstacles to Kosovo's development. The NDS has integrated multiple sectoral strategies and existing policies by creating a common orientation axis and selecting the "top priorities of the country". Creating such a list of priorities, in the form of an umbrella strategy, it aims at creating synergies between different initiatives, preventing dual institutional processes, higher work efficiency, support orientation by development partners, and deployment of a powerful orientation axis for Kosovo's institutions and accountability to citizens. Co-participants of this document are: state institutions, private sector, civil society, development partners, etc. The measures envisaged in this document require the contribution of each of them to be effective, either as an enforcer or a supervisor.

The NDS is in full harmony with other strategic processes, with the EU integration process through the implementation of the Stabilization and Association Agreement (SAA) or the Economic Reform Program (ERP) and is mainly synchronized with the priorities of the necessary economic and institutional reforms for the integration of Kosovo into the European Union. The document was prepared by the Kosovo institutions, with the lead and coordinating role of the Office for Strategic Planning (OSP), mandated by the Prime Minister of the Government of the Republic of Kosovo, as well as technical support from the European Commission Office in Kosovo.

"Measure 32, Rational Use and Increase of Water Resources Capacities" from Pillar 4 of NDS is a plan for infrastructure including water resources and services and has foreseen support in seven (7) activities. MESP is designated as the responsible institution, while MED, WSRA, etc., support this measure for the water services sector. This sector has many challenges that need to be addressed but the main problems remain: losses in the network, RWC's ability to collect revenue from sales and consequently their financial inability to invest in network upgrading or expansion.

The concrete activities under measure 32 for the water services sector are:

- Reduction of technical and commercial losses of regional water companies,
- Installation of water meters in all zones with water supply,
- Renovation and expansion of the drinking water supply network in the service areas of some RWCs.

Companies have defined and submitted annual plans and projections for each year (2017-2021) within sub-activities foreseen during the implementation of NDS, namely:

- Investments in the existing water network,
- Installation of individual water meters in consumers,
- Renovation and expansion of the drinking water supply network, and
- Expected objectives over this projected period in each activity.

The implementation of this measure will increase the efficiency of water use, in particular it will enable revenue growth for water companies, reduction of the level of losses, increase of the network connection rate, and increase of the irrigation network coverage. Improvement of the water supply will support business development and increase the well-being of citizens.

**Cooperation with relevant international institutions** has continued, such as: cooperation with IAWD (the International Water Supply Company in the Danube River Catchment Area) and the current project, respectively

the Danube Water Program (DWP), which is supporting the association, now at the present stage II (2015-2018) as well as WAREG (European Water Regulators).

Kosovo is a member of IAWD, along with 12 countries of the Danube region (Austria, Albania, Ukraine, Romania, Moldova, Bulgaria, Macedonia, Serbia, Croatia, Kosovo, Bosnia and Herzegovina and Montenegro). The IAWD, through the support of DWP, aims to help member states build strong and sustainable water and wastewater services. WSRA, in addition to other water services stakeholders from Kosovo, has been an active part of all events organized by it (conferences, steering group meetings, trainings) with the participation of responsible officials from sectoral institutions. The DANUBIS Platform has also been developed under the auspices of the program, as a joint web site of all Danube region countries. Each member country has its own portal. WSRA has managed and updated Kosovo's data and information portal as a valuable tool in the overall service aspect, and in particular for regional co-operation in the field of benchmarking.

The program has also developed an online reporting database called Data Collection and Management platform (DCM). In this context, WSRA, as the managing institution for collecting data and managing the platform on the performance of water companies (DCM platform), and IAWD have signed a Memorandum of Understanding for its implementation.

WAREG - is a group of economic regulators who have come together to learn from each other's experience and to support the economic development of the water sector in Europe.

WAREG was established on 23 April 2014 in Milan (Italy) with the primary purpose of harmonizing the practices and principles of the water sector in Europe, protecting water sources, etc. Given that water regulators in Europe play a key role in the conservation and efficiency of this sector, regardless of the changes in the legal framework for regulators in different countries, water regulators have found it necessary to set up an instrument of cooperation in the EUROPEAN water sector.

To move from a group of regulators to a legal body, WAREG has drafted its internal regulation and statute for the purpose of registering WAREG as a non-profit association which is expected to be registered in Italy soon. WSRA participated in the drafting of these documents as well as in the reporting required by the WAREG working groups. WSRA has been part of this group in the role of observer.

Looking at the positive developments of this group such as: steps in drafting the status to become regulators' association in order to influence EU policies regarding harmonization of EU laws and directives, giving opinions to direct capital investment of EU funds, as well as interest in exchanging experiences and easier cooperation opportunities with European regulators, WSRA has submitted a request to be admitted as a permanent member of this group.

At the last meeting of the WAREG Assembly on 20 June 2017, WSRA was accepted as a permanent member of this group. Today WAREG has 27 members (24 members with full rights and 3 members with observer status).

# **PART A**

## **PERFORMANCE OF REGIONAL WATER AND WASTEWATER COMPANIES**

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### 3. INDIVIDUAL PERFORMANCE OF RWC

The performance monitoring and assessment process based on an important and consistent set of performance indicators is a useful tool to help the regulation. This allows the Authority to better manage the development of the water and wastewater sector by assisting service providers to provide more quality services and by addressing priority challenges.

The RWC's performance is measured in 3 separate categories: technical, commercial and the financial performance during the year, with more detailed information on development trends, with more data and indicators, in particular for the two services (water supply and wastewater services).

#### 3.1 Water supply

Performance of water supply is evaluated in terms of technical performance (standards of service, NRW, serviceability of pipes), commercial performance (service coverage, measurement of water, the sales quantity of water, complaints) as well as financial performance and costs (supply sales value, costs per unit and capital expenditures).

##### 3.1.1 Technical performance

###### Water quality

Water quality refers to microbiological and physicochemical characteristics in relation to a number of standards against which compliance can be assessed. The quality of drinking water is an important indicator for the well-being and health of the population. Kosovo has an adequate legislation which is presented in Administrative Instruction No. 16/2012, and which is in compliance with the EU Drinking Water Directive. While the RWCs are responsible for supplying quality water to their consumers, they also have an obligation to conduct water quality monitoring/testing. On the other hand, NIPHK Water Centre is an institution with legal responsibility for conducting external control and monitoring, which ensures that the water distributed by the RWCs is in compliance with the parametric values of the local water quality standards. In this report, the quality assessment was done based on the data reported by WC at WSRA.

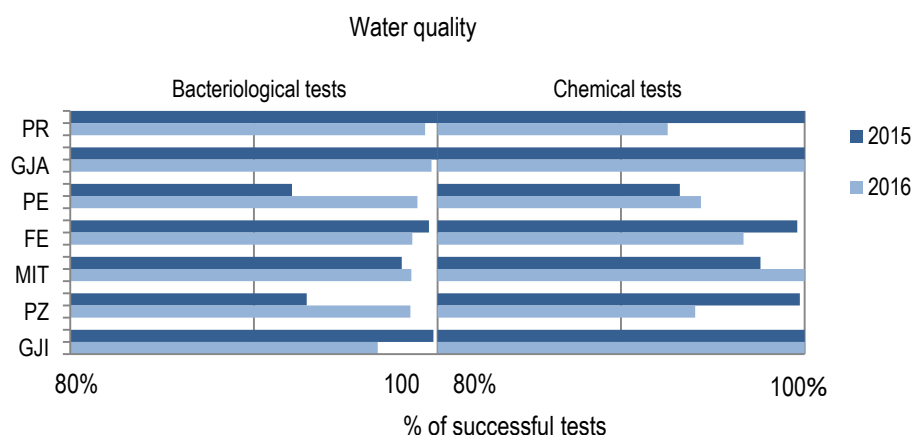


Fig.1: Water quality - 2016

Figure 1 shows an overview of the tap water quality at the drinking water distribution points for 2016, as well as the trend compared to 2015.

There were about 7612 samples taken and tested by testing laboratories at the NIPHK in 2016, of which, 5534 samples were tested microbiologically, while 2078 in the physicochemical aspect. From this control in drinking water made at the distribution points, it is revealed that in 2016, at the overall level, 98.0% of the tests have been carried out in accordance with the local water quality standards. In bacteriological aspect, 98.8% of tests were carried out in accordance with parametric microbiological values, while 95.9% of them were carried out in accordance with parametric physical-chemical values. Compared to 2015, water quality has improved in overall (1%) and in microbiology aspect (2.5% - there is improvement in coliform bacteria and E-coli). The water quality compliance in the physical and chemical aspect is poorer by 1.4% compared to 2015. Lack of chlorine within the allowed values has mainly influenced the physicochemical performance of water quality.

Table 1: Rate (%) of bacteriological and physicochemical tests in accordance with water quality standards by RWC

Companies	RWC Prishtina	RWC Hidroregjioni Jugor	RWC Hidrodrini	RWC Mitrovica	RWC Radoniqi	RWC Bifurkacioni	RWC Hidromorava	Averages at the sector level
Years	2016	2016	2016	2016	2016	2016	2016	
Microbiological	99.3%	98.5%	98.9%	98.6%	99.7%	98.6%	96.7%	98.8%
Physicochemical	92.5%	94.0%	94.3%	100%	100%	96.7%	100%	95.9%
Average for RWCs	97.8%	97.2%	97.6%	98.9%	99.8%	98.1%	97.7%	98.0%

RWC 'Radoniqi', with 99.8% compliance rate, has the best quality of water both in microbiological and physicochemical terms. The lowest quality is at RWC 'Hidromorava', at 96.7%.

In the physicochemical aspect, the lowest results were recorded in RWC 'Prishtina' with 92.5%, RWC 'Hidrodrini' with 94.0%, and RWC 'Hidroregjioni Jugor' with 94.3%. The problems have mainly been encountered on the efficiency of residual chlorine treatment that has affected the degree of compliance with the chemical parameters.

In general, the quality of water supplied by the RWCs is good and within the allowed norms of international organizations (EU-WHO).

### Water pressure

Pressure is the force that drives water into the water distribution network and is one of the standards that, among other things, also affects consumer satisfaction with the service offered. It is the responsibility of the service provider to ensure adequate pressure for his consumers. Official standards for water pressure are defined by the legal framework<sup>2</sup> for water supply services. Fig. 2 shows the average rate of properties served during the reporting period, as these properties are located in areas that regularly (chronically) face a pressure lower than the minimum pressure level and does not include inevitable short-term periods (lack of pressure on mornings or early evenings) where water consumption is higher, or in dry periods (summer season) when people use water for garden watering.

<sup>2</sup> Under ordinary conditions of use of water, the hydraulic pressure at the Customer's ground level Service Connection shall be not less than one and a half (1.5) bar and not more than seven (7) bar. - [http://www.arru-rks.org/Legislation/Rregullorja\\_02\\_2016\\_Shq.pdf](http://www.arru-rks.org/Legislation/Rregullorja_02_2016_Shq.pdf), Rule for minimum service standards for water service providers in Kosovo.

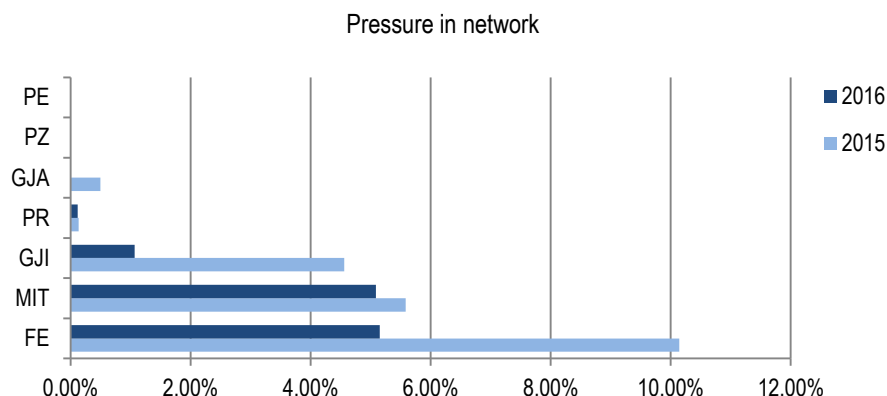


Fig. 2: % of properties with low pressure

Based on the reports, it appears that RWCs do not have much trouble with providing adequate water pressure. On average for 2016, a total of 128 properties were reported from the seven RWCs to have been affected by low pressure, which represents a much lower number than in 2015, where about 4430 properties were reported for not being provided with minimum pressure on the water supply pipe.

Besides RWC 'Prishtina' with 118 and RWC 'Hidromorava' with 10 properties reporting as having low water pressure, other companies did not report any properties affected by low pressure in 2016.

In most cases, the problem of lack of pressure is of a technical nature, including inadequate pumping facilities, or smaller dimensions in the pipes of the water supply network.

The RWCs do not manage with any adequate program for measuring and testing the pressures in the network. Feedback from companies is ad-hoc when responding to any consumer request or complaint, or even, in some cases, to measurements placed in pilot water management zones.

This indicator should neither this year be taken for granted, as there are difficulties in updating the data from the RWCs. The Regulatory has defined relatively low reliability since the information is not stored in any integrated network management system and is not based on a stable pressure testing system.

In this regard, it is important that the RWCs develop a pressure management system (program) as a more effective way and with reasonable cost since this helps to create a 'quiet' system with lower bursting rates and prolongation and to make the assets more durable in some cases, providing a consistent service standard for consumers during the day. Only in this way will companies be able to deal effectively with low pressure, serving as a basis for maintaining and replacing the infrastructure adequately.



### Continuity of water supply

It is a standard performance (service quality) indicator and reflects the rate of consumers who have been subject to water reductions. This indicator relates to planned water outages (lack of supply capacities), meaning that in this case are excluded the extraordinary cases or ad-hoc outages for short periods due to technical or planned reasons.

The importance of this indicator lies in measuring system performance and its ability to meet the designed requirements and can be also used as a basis for designing the system and the network requirements.

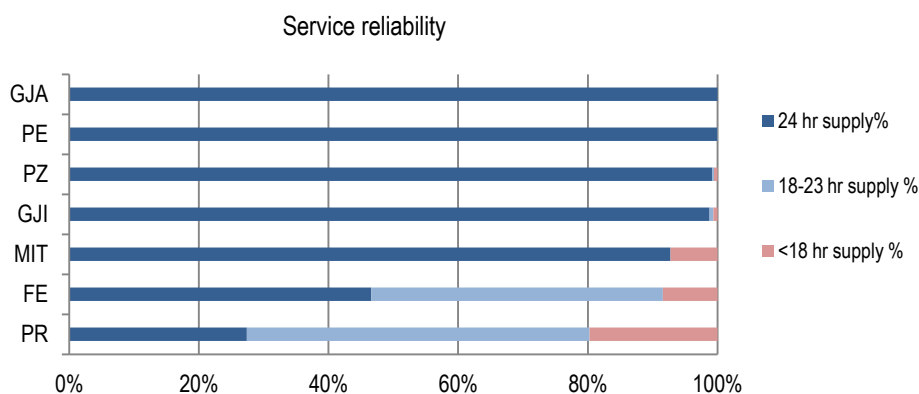


Fig. 3: % of consumers supplied with drinking water

Fig. 3 reflects the rate of consumers served during the reporting period, divided into three categories, consumers (properties) having continuous water supply for 24 hours a day with service, those with 18-23 hours a day with service and those with less than 18 hours a day with service.

Continuity of supply at sector level has improved while the rate of consumers subject to water reductions in 2016 has decreased to 28% of the total of consumers served.

Average hours of water supply services per day from RWCs at sector level have increased from 22.00 hours per day in 2015 to 23.00 hours per day in 2016.

The water supply below the sector average remains at RWC 'Prishtina', though there has been a considerable improvement in terms of the existing capacities. The number of consumers with regular supply (24h) from this company has tripled in 2016/2015. However, there are still significant problems in the municipalities of Prishtina and Fushë Kosova supplied by this company.

The RWCs that reported to supply their consumers 24 hours of drinking water are RWC 'Radoniqi' and RWC 'Hidrodrini', but also RWC 'Hidroregjioni Jugor' and RWC 'Mitrovica' (there are still a few reported problems in the municipality of Vushtrri) are close to providing regular water supply to their consumers.

Generally, the lack of sufficient production capacities (at RWC Prishtina), as well as the high water loss rate, were the two key factors that made the continuity of supply be incomplete.

Over the past two years, there have been considerable investments in building production capacities for drinking water, significant investments by local responsible institutions and service providers, supported by international donors. In the service area of RWC 'Mitrovica', two modern water plants were built and put into operation, one in Mitrovica (Shipol) and the other in the Municipality of Vushtrria (Balinca). Two water treatment plants were also



built at the RWC 'Prishtina' service area (Badovc and Shkabaj). An additional annex to the water plant is being built at RWC 'Radoniqi', whereby the production capacity in this company will be doubled.

Generally, additional production capacities make currently around 2000l/s, which altogether with the existing ones will guarantee a regular and sustainable supply in the near future.

### Pipe bursts

This indicator reports the total number of bursts and leaks across the distribution system of the water supply system and also provides valuable information about the network's condition and the physical leakage of water losses.

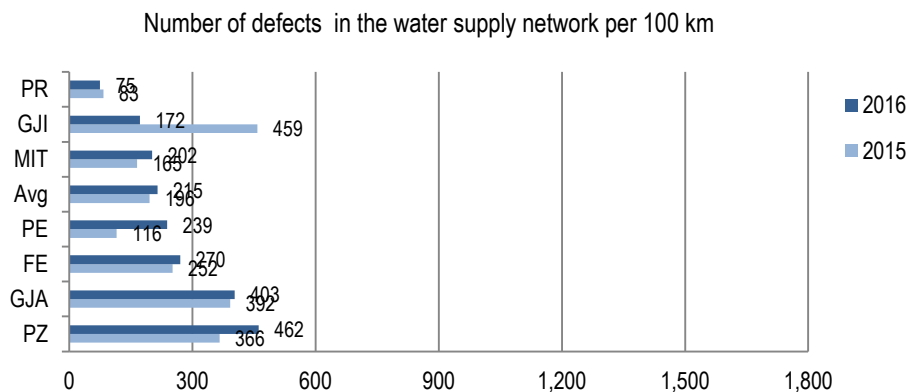


Fig. 4: Bursts of pipes in the water supply network

The main findings on the defects in the main pipes reported for 100 km of water supply network within the annual reporting period are shown in Fig. 4. There is a large difference between the RWCs regarding the frequency of pipe bursts. While RWC 'Hidromorava' has reported on average 462 bursts per 100 km of pipes, RWC 'Prishtina' has reported 75 bursts per 100 km of pipes. The national average is 215 bursts per 100 km of pipes and the situation has deteriorated by 19 bursts per 100 km of pipes compared to 2015.

Five of the companies reported increased number of bursts in the main water supply pipes for 100 km of the main water supply pipe in 2016/2015.

A declining trend in pipe bursts per 100 km was reported by RWC 'Hidromorava' (172) and RWC 'Prishtina' (75).

The higher water production (pressure) for this year was the cause which has influenced the increase in the number of defects, nevertheless, other factors such as pipe ageing and pipe material (composition) have their impact. This unacceptably high rate of bursts has had an effect on the increase in the level of physical losses, and impeded regular supply as well as the water quality.

The size of the water supply network rehabilitation is low in most RWCs due to financial constraints. They should find and orient investments in the maintenance and renewal of the water supply network, respectively in improving the performance of the water supply pipe network.

### Non-revenue water

It represents the overall difference between the water produced and the water that could have been billed to consumers. In this section, NRW is assessed in three aspects, as a percentage of water produced in relation to sales (billing), litre per consumer per day and as a quantitative value. NRW assessment in these aspects gives a

clear picture to direct commitment towards reducing water losses. The results of the calculation of the indicators are presented in Figures 5, 6, 7 and Table 2.

#### NRW as a percentage of water production

The level of non-revenue water during 2016 at the sector level in relation to water produced and distributed to consumers, expressed in percentage, is 57%, and this is aggravated by 1% compared to 2015.

RWC 'Radoniqi', RWC 'Hidroregjioni Jugor' and RWC 'Hidrodrini' have achieved improvement in the reduction of NRW, while the most significant improvement was seen at RWC 'Hidromorava'.

The RWC 'Prishtina' (2%), RWC 'Mitrovica' (2%) and RWC 'Bifurkacioni' experienced deterioration in NRW in 2016/2015. This decline is attributed to the increase in water production and the lack of billing efficiency.

An internationally accepted standard for NRW as a percentage of water production is 25%, while all RWCs, without exception, are far from this standard.

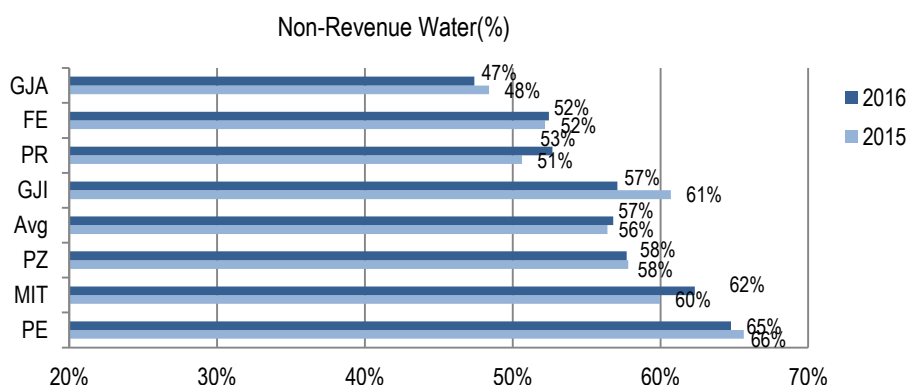


Fig.5: NRW - %

#### NRW as quantity value

WSRA has defined performance levels for each RWC, aiming to protect consumer interest, reduce operational costs, increase revenue, and save water resources. The overall objective of reducing NRW as a quantitative value for 2016 through the tariff process was to reduce NRW at 71.6 million m<sup>3</sup>. This objective has not been achieved since NRW is currently at about 81.7 million m<sup>3</sup>. With the exception of RWC 'Radoniqi' and RWC 'Hidroregjioni Jugor', none of the other RWCs have individually managed to meet the objectives of reducing NRW.

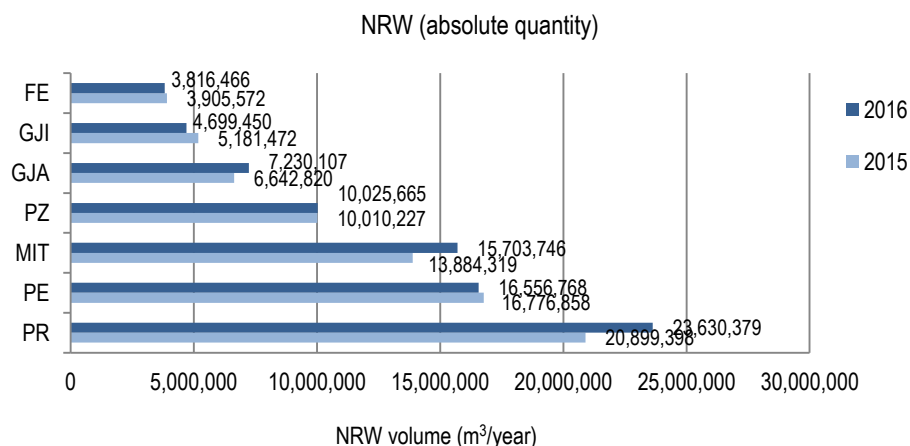


Fig. 6, NRW volume (m³/year)

NRW in litre per consumer per day estimates the water loss per day in relation to the number of consumers.

Fig.7 provides a graphical presentation of NRW (litre/consumer/day) for the two years of the reporting period 2015-2016 at the sector level and for each RWC.

In general, NRW in litre per consumer per day decreased from 830 (litres/consumers/day) reported in 2015 to 785 (litres/consumer/day) in 2016.

During 2016, the lowest amount of NRW (litre/consumer/day) among RWCs was marked by RWC 'Bifurkacioni' (464) and 'Hidromorava' (500). On the other hand, RWC 'Mitrovica' (1635) and 'Hidrodrini' (1026) marked the highest amount of NRW (litre/consumer/day).

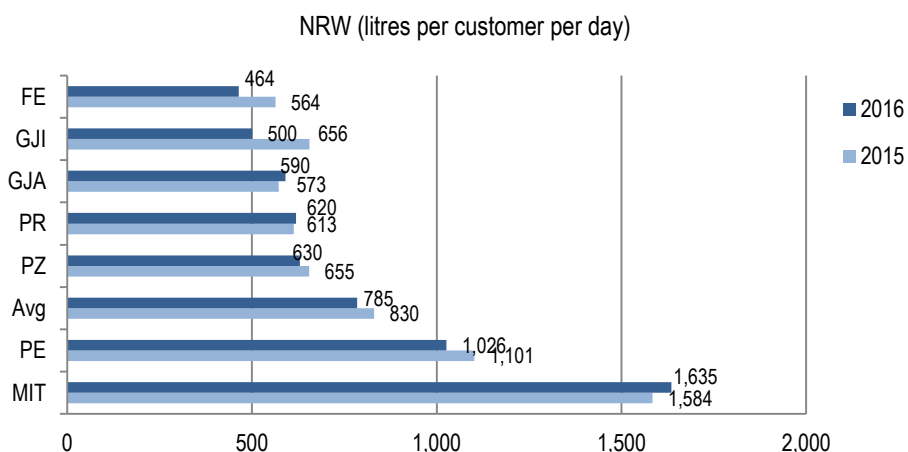


Fig. 7: NRW (litre/costumer/day)

Poor situation of the water supply network and lack of network and water meters maintenance, illegal connections, and a considerable amount of authorized consumption (public water springs, fire-fighters, cult facilities) result in the high level of NRW in RWCs but also at the country level in general.

Such an unacceptable NRW level in all RWCs has increased operational costs and capital costs with lower incomes for companies and has resulted in higher tariffs for consumers, so, it is detrimental to the financial sustainability of water companies, and it has a negative environmental impact. Non-revenue water should be

brought to a lower level by all service providers and the water losses within the network (physical losses) should be reduced.

Through the Rural Water and Sanitation Support Program Kosovo"RWSSP Phase V, the program funded by the Swiss Development Agency and the Government of Kosovo, 4 RWCs (Mitrovica, Hidromorava, Radoniqi and Bifurkacioni) have benefited during 2016 in management and reduction of NRW.

These issues need a special focus as any minor improvement can lead to significant positive effects on service delivery.

Companies should have a more proactive and strategic approach to Reducing Water Losses. The Kosovo Government (IMCW) has drafted a document: Strategic Framework for Reduction of Water Losses, a Guide which will serve the RWCs for strategic addressing of the water loss issues.

An important issue is the provision of all consumers with functional and maintained water meters. When there is no measurement of consumption, consumers pay a fixed tariff and there is no connection between the prices consumers pay for the water and the volume they consume. Without the full measurement of water produced and billed to consumers, attempts by enterprises to track NRW and minimize losses are compromised. We encourage RWCs to improve their metering and data management systems, since we have had and addressed obvious concerns in their credibility.

Table 2, NRW value

RWC	NRW(%)	NRW (litre/ consumer/day)	NRW (m3)
RWC Prishtina	53%	620 (l/consumer/d)	23.6mil.m3
RWC Hidroregjioni Jugor	58%	630 (l/consumer/d)	15.7mil.m3
RWC Hidrodrini	65%	1026 (l/consumer/d)	10.0mil.m3
RWC Radoniqi	47%	590 (l/consumer/d)	7.2mil.m3
RWC Mitrovica	62%	1635 (l/consumer/d)	16.5mil.m3
RWC Bifurkacioni	52%	464 (l/consumer/d)	3.8mil.m3
RWC Hidromorava	57%	500 (l/consumer/d)	4.7mil.m3

### 3.1.2 Commercial performance

#### Water supply coverage

Coverage with water supply services is defined as the percentage of the population within the service area with access to safe and reliable water supply services through public supply connections. The assessment of service coverage has been based on data from the Kosovo Agency of Statistics dating from the 2011 census, for regulated households for an annual growth rate in relation to the actual number of bills reported by RWC, for the household consumers' category.

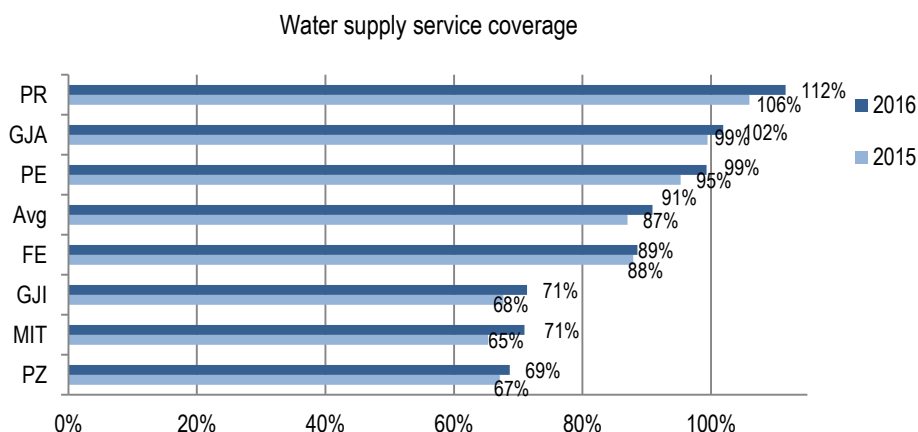


Fig. 8. % of the population in the water supply service area

As shown in Fig. 8, coverage of water supply services on average for seven RWCs in 2016 is 91%. This is 4% higher than in the previous year.

Without exception, in all RWC's service areas, there is an increase in population access to water supply services.

While in the service area of RWC 'Mitrovica', 'Hidroregjioni Jugor' and RWC 'Hidromorava' there is a lower number of water connections and significantly below the sector average, RWC 'Prishtina', 'Radoniqi' and 'Hidrodrini' have a high water supply coverage rate.

RWC 'Prishtina' has the highest coverage with water supply services which also provides services to a number of citizens who receive services from this company but are residents of other municipalities outside its service area.

RWC 'Mitrovica', 'Hidroregjioni Jugor', 'Hidromorava' and RWC 'Bifurkacioni' continue to have the lowest water supply services coverage rate, significantly below the sector average.

Based on the projections foreseen by the companies, the regulator has approved a total increase in the number of consumers of 14,240 from all companies for 2016. This target has been met both at the general level and in most companies. Currently, the total number of connections is over 327,286 and represents an increase in consumer base for 21,431 compared to 2015.

#### Water measurement

Measuring consumed water is an essential element of efficiency and system management. Water measurement is a requirement for accurate billing of water consumption by consumers as well as a necessary means of

controlling water losses. Moreover, it is also a legal requirement. The ratio of consumers with water meter presents the rate of consumers who are supplied with water meters to total consumers served ratio.

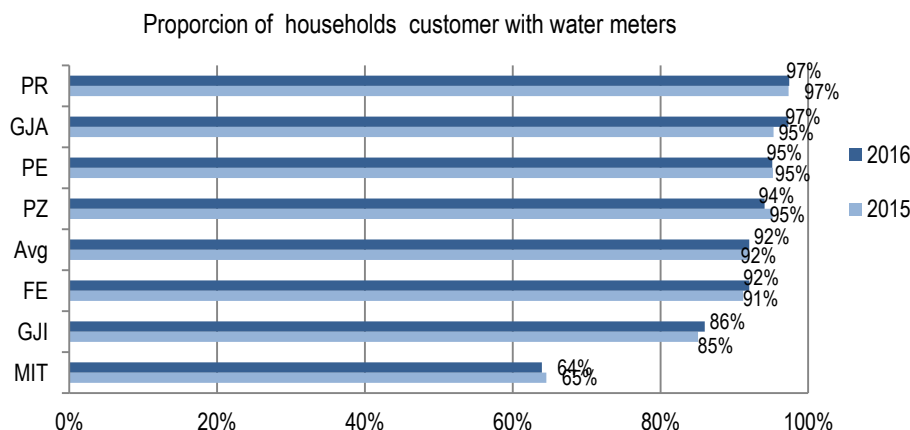


Fig. 9, % of household consumers with water meters

The average households with water meters ratio remains at the same level in the last two years, with 92%.

The average commercial-industrial water consumers' ratio in 2016 is at 96%, while water used by institutions is measured at 98%.

RWC 'Mitrovica' has still a low level of water measurement with only 64%, and the measurement ratio has deteriorated by 1% since 2015 (from 65% to 64%). The year-to-year improvement in this company is very gradual. The company needs to boost activities for installing water meters for their consumers since it has lagged behind other companies. Four of the RWCs, 'Prishtina' with 97%, 'Radoniqi' with 97%, 'Hidrodrini' 95% and 'Hidroregjioni Jugor' 94%, have a high level of water measurement even though there is still work to a full water measurement.

The measurement ratio is closely related to the management of water losses, as well as the efficiency of billing and collection. Without a 100% measurement of the water consumed, the NRW figures cannot be accurate and often tends to be underestimated. Water consumption measurement also affects the rationalization of water use as well as provides a fair billing for consumers.

While water meter coverage is gradually improving, a significant part of the installed water meters are not maintained, are not functional and provide inaccurate reading. This is more evident in RWCs which have water supply cut-offs. A supply facing water outages affects the good functioning of water meters. Currently the RWCs have little capacity for testing and calibration of water meters, and only one limited capacity laboratory within the RWC 'Hidroregjioni Jugor', is licensed by the Kosovo Metrology Agency (KMA) to conduct water meter testing. Another modern laboratory is also installed at RWC 'Prishtina'.

In order to ensure that consumed water is accurately calculated, water meters should be selected, installed and maintained using generally accepted industry standards. They should be regularly tested and calibrated in accordance with the manufacturer's recommendations and guidelines established by (KMA).

### Complaints

Consumer complaint figures are important and show the level of consumer satisfaction with regard to the service received from their service provider. According to the WSRA regulation and the internal regulation, RWCs

should keep a register of consumer complaints and resolve them according to the procedures and within a defined deadline (service standards).

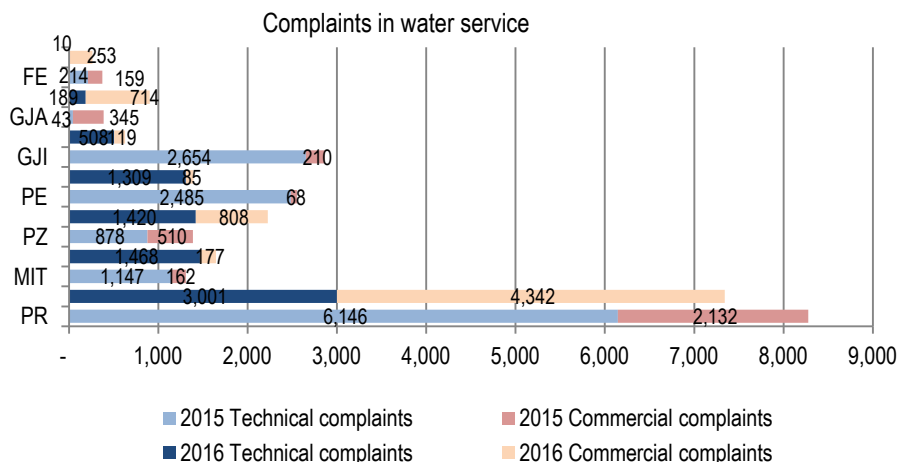


Fig. 10, Number of water supply services complaints

The total number of complaints received by RWC in the water supply service during 2016 was 14,403, which shows a decrease of about 16% compared to 17,153 complaints addressed in 2015.

RWC 'Prishtina' as a company with the largest number of complaints in 2016/2015 has reported a significant decrease in the number of technical complaints (51%), while the number of complaints of commercial nature has increased (104%). This trend is almost the same in all RWCs regarding commercial complaints, while the law enforcement activity on debt forgiveness has led to a larger addressing of financial-commercial complaints.

In 2016 a larger number of complaints were addressed by consumers served by RWC 'Prishtina', 'Hidroregjioni Jugor' and RWC 'Mitrovica'.

Unlike last year, the rate of complaints per 1000 consumers at sector level has dropped from 56 to 44 complaints per 1000 consumers. RWC 'Prishtina', 'Mitrovica' and RWC 'Hidroregjioni Jugor' have the highest rate of complaints in proportion to the number of consumers.

Overall, during 2016/2015, most of the complaints were of a commercial nature regarding financial issues: billing and debt forgiveness, as well as a considerable part of the complaints were related to the technical aspects of water supply services related mainly to service standards (supply outages, meter reading and water shortages and pressures).

Water supply service providers should improve the communication channels with consumers, and should see their complaints in a positive context as a means of listening to their voice in terms of improving the quality of service.

### Volume of water sold

The volume of water sold represents the level of fulfilment of the quantitative water sales targets compared to the planned values as defined by the RWC tariff applications.

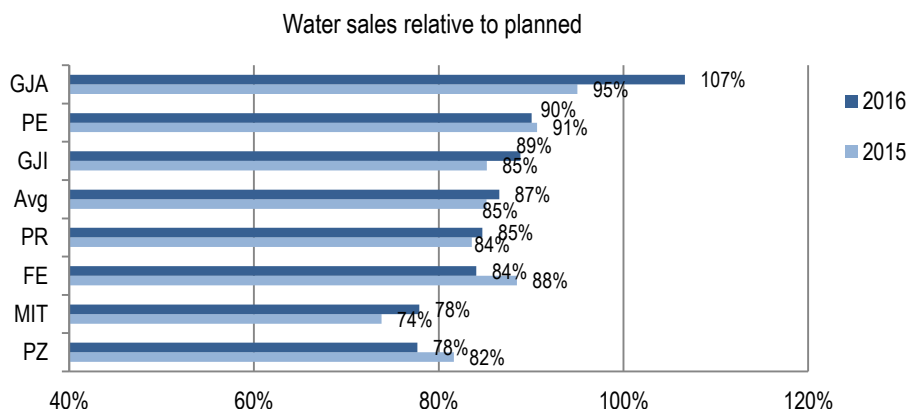


Fig. 11, Volume of water sold as percentage of planned sales volume

The trend of non-realization of sales at the projected level has continued this year, although the targets have not been very challenging by WSRA, always taking into account the opportunities of companies to make more radical short-term improvements, albeit very indispensable.

At the sector average, target fulfilment was 87%, which is 2% higher, compared to 2015, when the level of fulfilment of water sales was 85%. Overall target of quantitative value for 2016 was about 66.6 million m<sup>3</sup> while the realization was about 57.6 million m<sup>3</sup>. This was for 8.9 million m<sup>3</sup> less.

Even in the individual aspect, excluding RWC 'Radoniqi', no RWC has achieved the planned sales targets. RWC 'Radoniqi' has exceeded the target by 7% in 2016. As a result, the NRW has decreased, and the planned revenues increased by 2%.

The impact of non-accomplishment of quantitative sales targets by the RWC for most companies has resulted in insufficient financial revenue and increase of NRW.



### 3.1.3 Financial Performance<sup>3</sup>

In this subsection of the report are assessed the financial indicators through which the financial sustainability of the RWC is reflected in: billing, operational and capital costs, for the water supply service.

#### Sales amount (EUR)

Total water sales amount is an important indicator of financial performance that covers operational and capital maintenance costs, and creates by itself a financial sustainability.

The figure below shows the performance of water sales compared to the planned estimates, as set out in the RWC tariff applications for the tariff review process of 2015-2017.

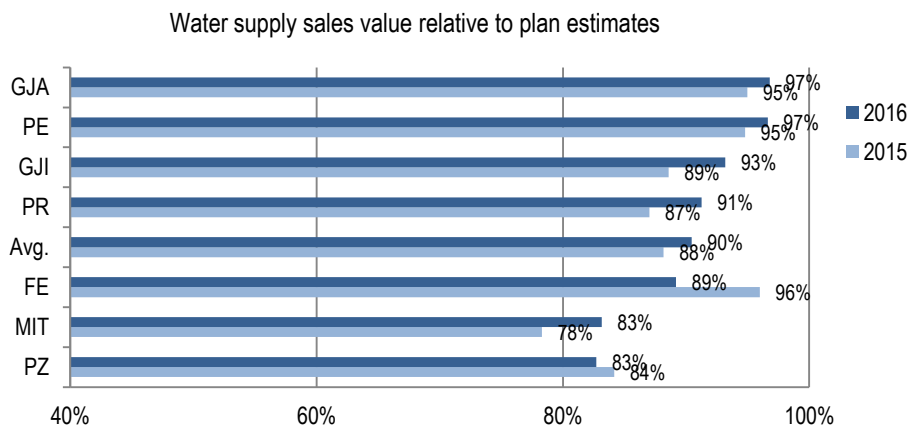


Fig.12, Water supply service sales amount to planned sales ratio as defined in tariff review 2015-2017

Even this year, as in previous years, the amount of sales in the majority of RWCs was lower than the planned sales amount (see Figure 12), mainly due to poor sales amount estimations, as shown in the previous indicator.

The sales amount accomplished in 2016 at the water supply sector level amounted to 28 million Euros, while the planned was around 31 million Euros, which means that 90 percent of sales were accomplished from the planned, and is higher by 2% compared to 2015 when it was 88%.

Regarding the performance of sales at company level, this year RWC 'Radoniqi' leads with highest target rate of 97%, exceeding the previous year 2015 by 2%, while RWC 'Hidroregjioni Jugor' accomplished only 83% of target at the same time with 1% decrease from 2015, the result of which was almost the same billing level in Euros, without any change from the last year, while the planned billing increased by 3 % in 2016 compared to 2015.

<sup>3</sup>All financial value denominated in euro, are arranged according to the base price for 2016, to ensure appropriate comparisons from 2014 to other years. 2014 is the baseline year of the tariff process (2015-2017)

### Billing 2016 to billing 2015 ratio

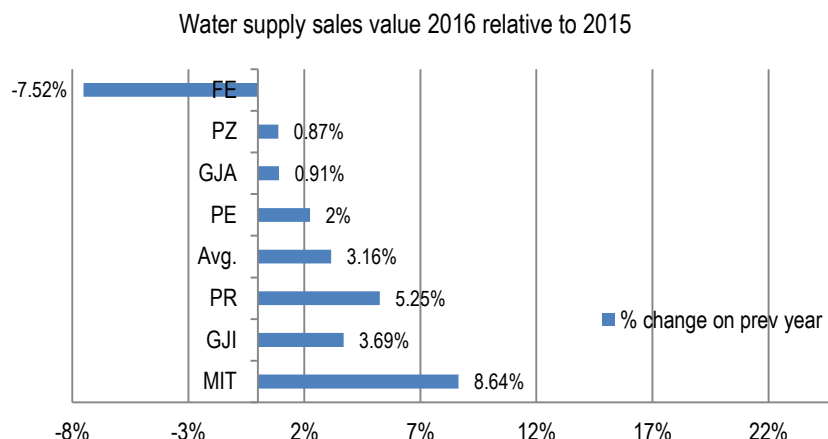


Fig.13, Water supply service amount of sales 2016 to 2015 ratio

The figure above shows the sales value trend accomplished during the reporting period 2016 compared to 2015, which shows that almost all companies have marked progress in this indicator during 2016 compared to 2015, with exception of RWC "Bifurkacioni".

RWC "Mitrovica" is the company that achieved the highest rate of sales in 2016 with 8.64%, compared to 2015, the result of which was the increase of volumetric sales by 11%.

In absolute terms, sales at sector level in 2016 are higher by 3.16%, as a result of volumetric sales increase of 5%.

### Costs per unit<sup>4</sup>

#### Cost of produced water per unit

The cost of produced water per unit is a significant financial indicator based on which we understand the costs per m<sup>3</sup> of produced water.

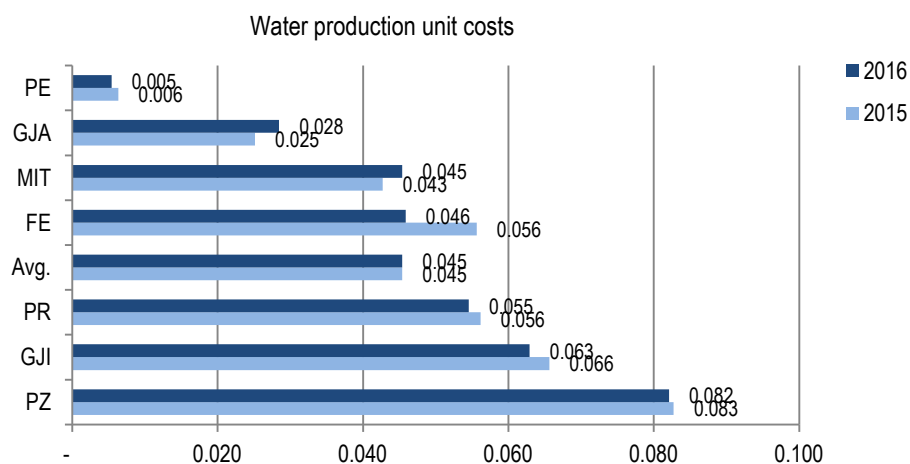


Fig.14, Water produced cost per unit during 2016 to 2015 ratio

<sup>4</sup>Cost of unit for the previous year 2015 are regulated by inflation rate

At sector level, the average cost of a water unit produced in 2016 has not changed compared to 2015, it remained the same as 0.045 €/m<sup>3</sup>.

Water production costs range from 0.005 €/m<sup>3</sup> to RWC 'Hidrodrini' at 0.082 €/m<sup>3</sup> of RWC "Hidroregjioni Jugor".

The high cost of water produced by RWC "Hidroregjioni Jugor" this year was also influenced by high costs of water treatment, in particular from energy and fuel consumption for operation of the pumps (about 56% of total water production costs are from energy and fuel costs).

### Total water supply cost per unit

It represents the total expenditures including water supply operational and capital maintenance cost to sold water volume ratio for the same reporting period.

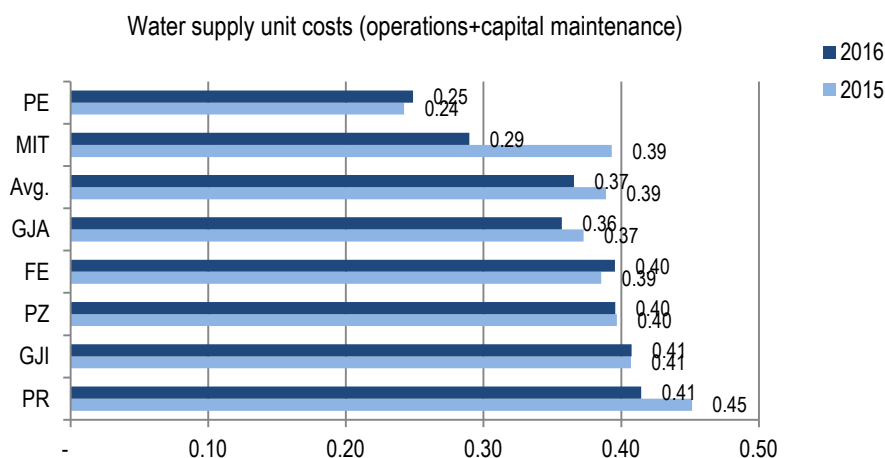


Fig.15, Water supply cost per unit (excluding return into capital and bad debts)

The water supply cost per unit at sector level in 2016 compared to 2015 was lower for 0.02 €/m<sup>3</sup>.

As can be seen from the figure above, there is a wide amplitude in terms of the total water supply cost per unit, starting from 'Hidrodrini' which has a significantly lower level of cost than all other water companies with 0.25 €/m<sup>3</sup>, to the highest for RWC 'Prishtina' with 0.41 €/m<sup>3</sup> of water supplied.

If we compare the costs of 2016 with that of the previous year 2015, RWC 'Mitrovica', 'Prishtina' and RWC 'Radoniqi' showed positive trends in this indicator, with a decrease of 0.01 € (Radoniqi), 0.03 (Prishtina) and 0.10 Mitrovica), as a result of which decrease is the reduction of operational costs for water utilities 3.5% of RWC 'Prishtina', receiving subsidy of 134% higher compared to 2015 of RWC 'Mitrovica' and reduction of costs for capital maintenance of 16% of RWC 'Radoniqi' (reduction of operational costs would be more acceptable).

### Total water supply cost per unit accomplished to planned ratio

Total water supply cost per unit is a financial indicator which is ranked in the group of key indicators based on which the water supply performance is measured.

The below graphically presented indicator shows the ratio between the cost per unit of water supply accomplished (operational costs including capital maintenance/billing in m<sup>3</sup>) and the cost per unit of planned water supply (operational costs including capital maintenance/billing in m<sup>3</sup>).

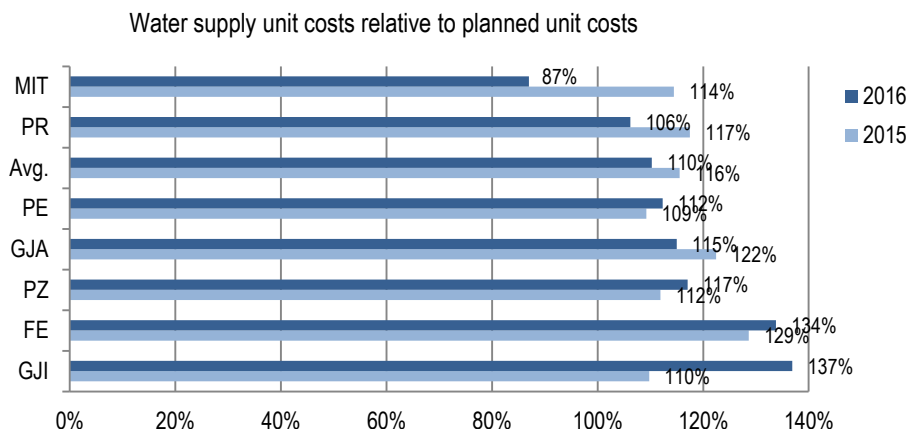


Fig.16, Water supply cost per unit to planned cost per unit ratio

At the sector level, fulfilling the objectives of water supply cost per unit in 2016 further deviated from the planned targets of 90%, but compared with the previous year has improved by 6% from 116% to 110%.

The best performance in this indicator has been marked by RWC 'Mitrovica', with accomplished cost per unit at 87% level, that is desired by all companies and which was achieved thanks to the subsidy that this company received, covering water supply operational costs with 36%.

Poor performance is shown by RWC 'Hidromorava' and 'Bifurkacioni'. The reason for poor performance lies in high operational costs, and non-execution of capital investments and water sales at planned amounts during the 2015-2017 tariff process (year 2016).

### Capital investments

This indicator reflects current capital expenditures in the water supply service undertaken by RWC in relation to the capital investments planned in the tariff process (2015-2017) for 2016.

#### Water supply capital investments

They represent total capital investments for maintenance and capital increase for water services to capital investments, approved in the business plan for 2016, ratio.

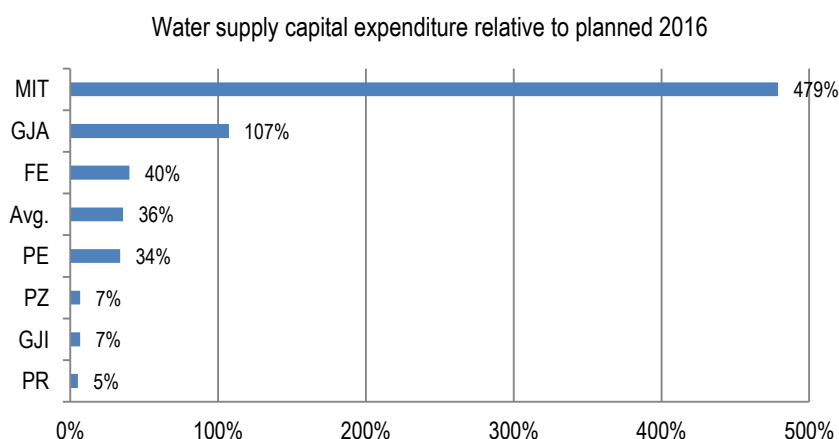


Fig.17, Water supply capital expenditures to planned expenditures ratio

Companies in 2016 as in previous years have foreseen significant maintenance and capital expenditures increase of about 35 million €. These assets are foreseen to be ensured both by own funds and donations. Current expenditures were lower than the expected level for € 12.5m or 36% of what was planned but in reality the expenditures accomplished according to business plan for 2016 were at the level of 2% i.e. the rest of 34% are out of their planning.

It is noticed that most of the investments carried and declared by the companies have continued to be mainly from Grants (development donations) excluding RWC 'Hidrodrini' which in 2016 did not receive any donation.

The value of investment from grants for 2016 was around 11.1 million €, while the rest from own resources.

At sector level for 2016, companies from their own resources have planned to spend about 4 million € which are also covered by approved tariffs, but companies for 2016, according to the plan, have accomplished only 9% of what was planned.

Table 3, Amount of investments in water service

Investments in water services from own source revenues and grants for 2016				
RWC	Inv. in production	Inv. in distribution	Inv. in business activities	Total
RWC Prishtina	81,787	428,731	92,903	603,421
RWC Hidroregjioni Jugor	193,539	953,300	18,729	1,165,568
RWC Hidrodrini	7,115	124,816	19,426	151,357
RWC Mitrovica	8,145,970	104,739	3,827	8,254,536
RWC Radoniqi	1,434,996	147,619	424,864	2,007,480
RWC Bifurkacioni	67,547	61,585	19,882	149,014
RWC Hidromorava	55,331	32,262	27,397	114,990
<b>Total</b>	<b>9,986,285</b>	<b>1,853,052</b>	<b>607,028</b>	<b>12,446,366</b>

This year, unlike previous years, RWC 'Mitrovica' leads with execution of capital expenditures of 8.3 million €, 100% from grants. With these expenditures it is intended to improve the continuity of the water supply (mainly with construction of the water plant in Vushtri, the project planned in 2014, for installation of pumps and water meters).

RWC 'Hidroregjioni Jugor', and 'Radoniqi' have made expenditures mainly for expansion of infrastructure and non-infrastructure, production and distribution and expansion of the water plant, expansion of pipelines, renewal and construction of the water supply network, construction of pump stations, tank construction, water meter installation, water filtering equipment, etc.

RWC 'Prishtina' from the total investment amounted to 603 thousand € mainly received from grants, mostly spend in expanding the distribution non-infrastructure: submersible pumps, digital data readers, leaks detection instruments, etc., while the capital expenditures planned for 2016 have been more oriented to projects related to the expansion of production capacities: building a water plant, renewing the water supply network, rehabilitating water pumps, which would greatly affect the continuity of water supply, and which projects are expected to be implemented in the future, as they are also presented as the next investments.

The company with lowest investments in water services was RWC 'Hidromorava', about 115 thousand Euros or 6.72% of the planned.

## 3.2 Wastewater services

### 3.2.1 Technical performance

#### Frequency of sewerage clogging

This indicator was introduced to measure sewage blockage per 100 km of sewage network and indicates the blockage density, respectively the sewage net performance. In this case a high blockage rate could reflect a weak state of the sewage network.

RWCs have the responsibility<sup>5</sup> of construction and maintenance of sewage net according to minimum standards requirements in Kosovo and internal procedures which are based on the instruction, standards and the applicable technical regulations.

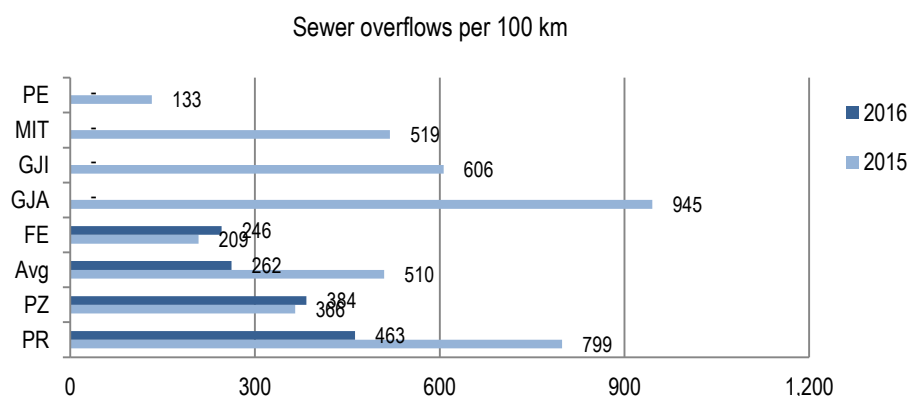


Fig. 18, Number of sewerage clogging per 100km

At the average level, the number of clogging per 100 km/network in 2016 was 262 and this is about 50% lower than in 2015. This drop in number of clogging per 100 km can be attributed to non-reporting of information by some RWCs Hidrodrini, Mitrovica, Radoniqi, and Hidromorava).

The sewerage network in the country is very loaded, there are about total of 2,300 km of sewerage network to serve about 257 thousand connections, e.g. it has a density of about 11 thousand connections/100 km.

Given that the sewerage system in most of the areas served by the RWCs is not very developed and in most cases it is not separated from the sewerage system of atmospheric waters, the clogging problems are enormous.

Clogging may also indicate bad usage practices (such as dumping solid waste into manholes) and also network overload. However, as a key factor is undoubtedly the negligence and inadequate maintenance of the sewerage system. Whatever the conclusions drawn from the analysis of this indicator are, they should be refrained, since ARRÚ considers the data on reported clogging figures as unreliable.

<sup>5</sup>[www.arru-rks.org/Legislation/Rregulloria\\_02\\_2016\\_Shq.pdf](http://www.arru-rks.org/Legislation/Rregulloria_02_2016_Shq.pdf), The regulation on minimum water service standards in Kosovo requires from RWC

- Develop and implement a program to clean sewerage pipes, at least once in five (5) years, as well
- Develop and implement a program to inspect, at least once in two (2) years to repair them if necessary

### 3.2.2 Commercial Performance

#### Coverage with wastewater services (sewerage)

Wastewater services coverage is defined as the percentage of population within the service zone that has access to wastewater services.

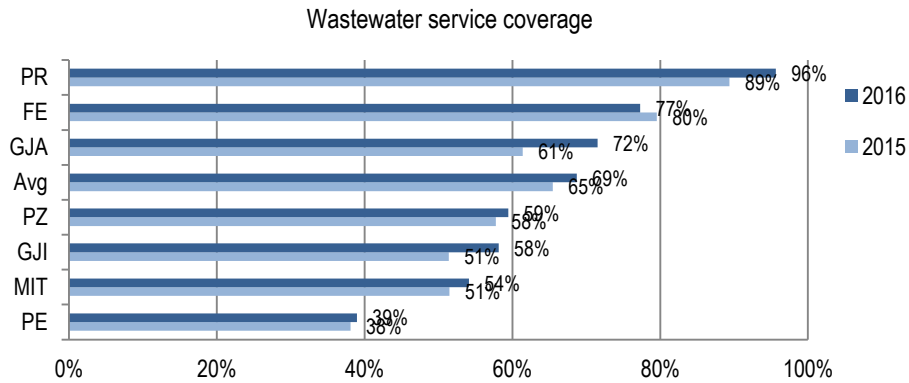


Fig. 19, Wastewater service coverage

As indicated in figure 19, there was an increase of 4% in average population coverage with wastewater services. The current sector rate is at level of 69%.

Progress in accessibility of the population to the wastewater services has been achieved almost by all RWCs, although a more significant improvement was marked in the service area of RWC 'Radoniqi' (11%) as well as two other companies, 'Prishtina ' and ' Hidromorava 'by 7%.

RWCs (Hidrodrini, Mitrovica, Hidromorava, and Hidroregjioni Jugor) have coverage of their respective area with sewerage system significantly below the sector average, although the situation in RWC 'Hidrodrini' remains concerning with only 39% of the population coverage with this service.

## Complaints

The indicator below shows the number of complaints of consumers addressed to their companies with regards to wastewater services (sewerage).

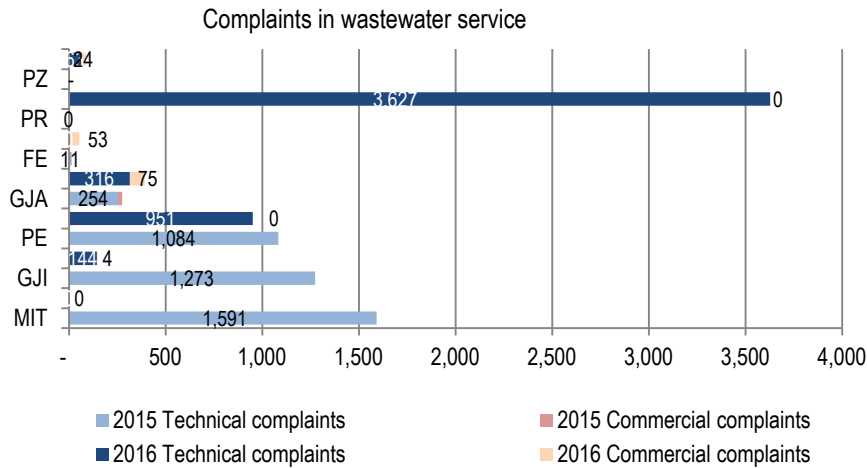


Fig. 20, Complaints against wastewater services

The number of consumer complaints against wastewater service in 2016 was 5257 in both contexts (technical and commercial complaints), of which only about 4% are commercial complaints.

From the figure, 20 one can see a disproportion or even non-reporting of complaints from the wastewater service during this period (2015-2016). This is due to the fact that most of the RWCs have failed to register and report complaints by services.

While RWC 'Prishtina', commercial complaints are not reported separately but together with the water supply complaints, at RWC 'Bifurkacioni', technical complaints from the technical service are not reported and as such are recorded in the information system of the Company.

In RWC 'Mitrovica' complaints regarding wastewater service for 2016 have not been updated and reported by this company.

RWCs should address consumer complaints in the wastewater service, and as such should report them according to WSRA requirements and specifications.



### 3.2.3 Financial Performance<sup>6</sup>

This sub-section of the report assesses financial indicators in order to reflect financial sustainability of the RWCs, such as: sales, operational and capital costs for wastewater services.

#### Wastewater services sales amount (EUR)

The below figure indicates sales performance of wastewater services in comparison to planned estimations as set through tariff applications of RWC to the tariff review process 2015-2017.

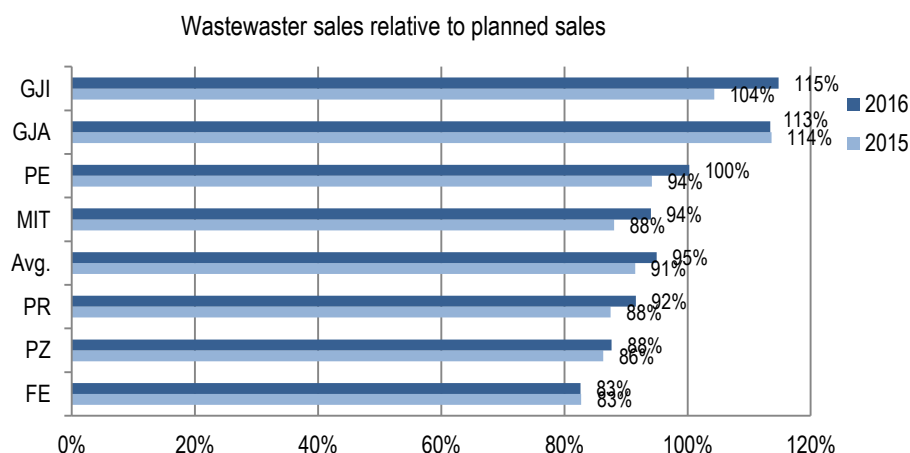


Fig.21. Wastewater service sales to planned sales ratio

Due to considerable under-performance of current water sales compared to planned sales at the sector level, this affected the current sales in wastewater services to be under the level of planned value since this data is directly linked to water sale volumes.

Most RWCs have failed to achieve wastewater sales target for 2016, with exception of RWCs 'Hidromorava' and 'Radonqi', which even exceeded them by 15% (Hidromorava), and 13% (Radonqi).

Achieved target for 2016 at the sector level is 95%, and is higher by 4% compared to 2015.

This year, RWC 'Hidromorava' achieved the highest percentage of planned sales compared to other companies by 15%. This company also managed to have the highest improvement compared to 2015, by 11%.

<sup>6</sup> As for the performance reporting on water supply all values denominated in euro, they are regulated by the basic price for 2016. Year 2014 is the base year of the tariff process (2015-2017)

### Relative value of wastewater service sales

Proportion of sales of wastewater services during 2016 in relation to 2015

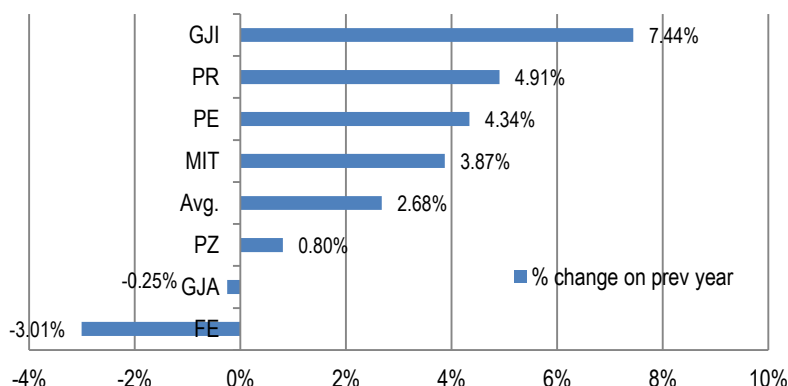


Fig.22, Wastewater service sales amount in 2016 compared to 2015

The figure above shows the sales amount trend during the reporting period 2016 compared to 2015, which indicates that five out of seven RWCs have made progress in this indicator during 2016 compared to 2015, with exception of RWC "Bifurkacioni" and RWC "Radoniqi".

RWC 'Hidromorava' is the company that has achieved the highest amount of sales in 2016 with 7.44% compared to 2015, and as result there is an increase of wastewater service consumer number for 22%, affecting also the increase of volumetric sales by 5%.

In general, sector-level sales in 2016 are 2.68% higher than in 2015.

### Total wastewater services costs per unit

Means total operational costs for wastewaters, including capital maintenance of wastewaters compared to domestic consumer equivalents per year<sup>7</sup>.

Wastewater services unit costs (operations & capital maintenance)

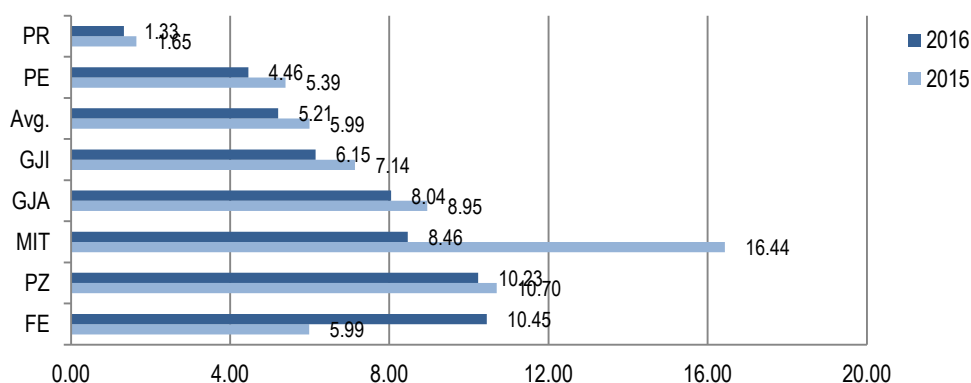


Fig.23, Wastewater services cost per unit

<sup>7</sup> Domestic consumers served are defined as a current number of domestic consumers plus number of non-domestic consumers converted to equivalent of domestic consumers based on proportional allocation of water consumed.

Wastewater services cost per unit at the sector level in 2016 compared to 2015 was lower for 0.71<sup>8</sup>€/m<sup>3</sup> or 13%.

All companies in 2016, with the exception of RWC "Bifurkacioni", marked positive trends in the wastewaters cost per unit indicator. Reduction of wastewater services cost per unit is attributed to the significant reduction in wastewater services operation and capital maintenance expenditures.

Lowest cost in this indicator is marked by RWC 'Prishtina', 1.33 €/consumers, with improvement of 0.32 €/cons compared to the previous year.

The highest improvement in 2016 compared to 2015 marked the RWC "Mitrovica", with a decrease of 7.97, which resulted with reduction of wastewater service operational expenditures from 45%, despite the increase in the number of consumers.

The wastewater services costs per unit still remains much lower compared to the water supply costs, as wastewater treatment plants are not yet in use.

#### The total cost per unit of wastewater services accomplished to planned ratio

The total wastewater services cost per unit is also an important financial indicator, which is ranked in the group of key indicators based on which the performance of wastewater services is measured.

The indicator graphically presented below presents the ratio between the cost per unit of wastewater services accomplished (operational and capital maintenance costs/with household consumer equivalents<sup>9</sup>) and the cost per unit of planned wastewater services (operational and capital maintenance costs/with household consumer equivalents).

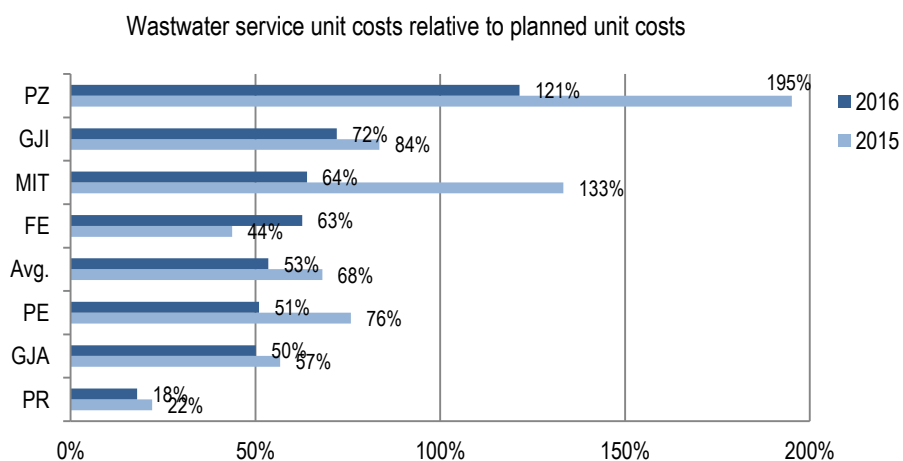


Fig. 24, Wastewater services cost per unit to planned costs per unit ratio (€)

<sup>8</sup> Cost per Unit in 2015 is regulated based on inflation rate

<sup>9</sup> Served household consumers are defined as the current number of household consumers plus the number of non-household consumers converted to household consumers equivalent based on the proportional share of consumed water.

The costs per unit accomplished to planned ratio derived from the tariff review 2015-2017 (adjusted by price levels in 2014), nearly all to RWCs were low, and this shows greater efficiency than it was planned due to the fact that the costs accomplished per unit were the lower than the desired level of 90%.

RWC 'Hidroregjioni Jugor' compared to other companies has reached the highest accomplishment to planned target ratio and this does not show good performance, because it has exceeded operating costs by 196%, not accomplishing neither 2% of capital maintenance expenditures.

At sector level, the compliance of costs per unit of wastewater services in 2016 is at the level of 53%.

### Capital expenditures for wastewater services

These are total wastewater service capital maintenance expenditures and capital increase in comparison to capital expenditures ratio approved by business plan 2016.

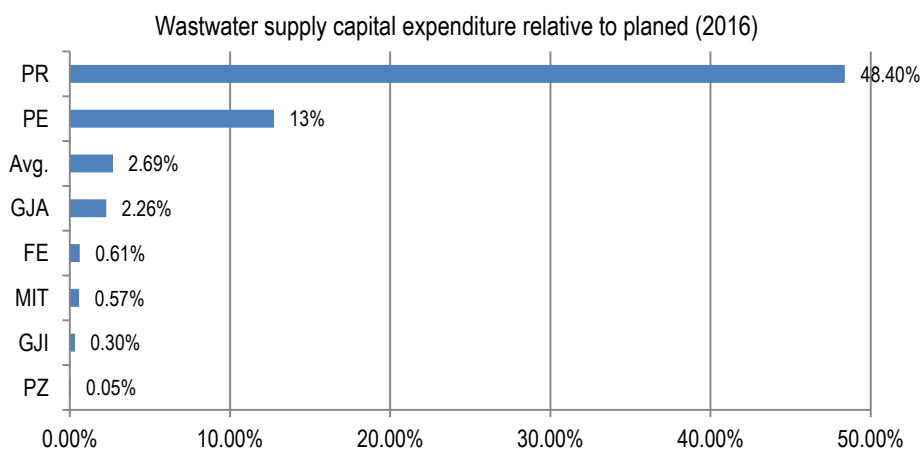


Fig. 25, Wastewater services capital expenditures to planned ratio (%)

Also with wastewater service, same as with the water supply system, the companies for 2016 have foreseen considerable provisions of about 9 million Euros per capital growth and capital maintenance, intended to be provided from own resources as well as from donations, but in reality the current costs were much lower than the expected level of 338 thousand Euros or 4% of what was planned. In reality, expenditures accomplished according to business plan for 2016 were at the level of 1%.

Unlike water supply services to wastewaters, most of the investments are from own resources and that about 252 thousand Euros or 75%, while the rest are grants, about 87 thousand Euros.

For 2016 companies from own resources have planned to spend about 1.1 million Euros, which are covered by approved tariffs, but companies for 2016 according to the plan have executed only 9% of what was planned.

Table 4, Investment's value in wastewater service

Execution of investments in wastewater services from own source revenues and grants in 2016					
RWC	Inv. in collection	Inv. in treatment	inv. in disposal	inv. in business activities	Total
Prishtina	133,636	0	0	2,873	136,509
Hidroregjioni Jugor	0	0	0	2,749	2,749
Hidrodrini	87,349	0	0	1,580	88,929
Mitrovica	0	0	0	426	426
Radoniqi	100,068	0	0	2,094	102,162
Bifurkacioni	150	0	0	4,970	5,120
Hidromorava	0	0	0	2,062	2,062
<b>Total</b>	<b>321,203</b>	<b>0</b>	<b>0</b>	<b>16,754</b>	<b>337,957</b>

As regards to investments in wastewater services RWC 'Prishtina' leads with 40% execution of investments from total planned investment amount (337,957), a percentage executed mainly in expansion of none-infrastructure wastewater collection.

RWC 'Hidroregjioni Jugor' is one of the companies that planned significant capital expenditures in the wastewater service, both in network extension and rehabilitation as well as in the construction of wastewater treatment plants, of which executed 0.05 % (0.043%) of them and all in business activities only.

### 3.3 RWC Financial performance

#### Collection of revenues

The following shows the performance of companies in the indicator - collection rate 2016 compared to 2015, presented as cash collection to invoicing ratio for the offered services of water and wastewater (invoicing for fixed tariff, water supply volume and wastewaters).

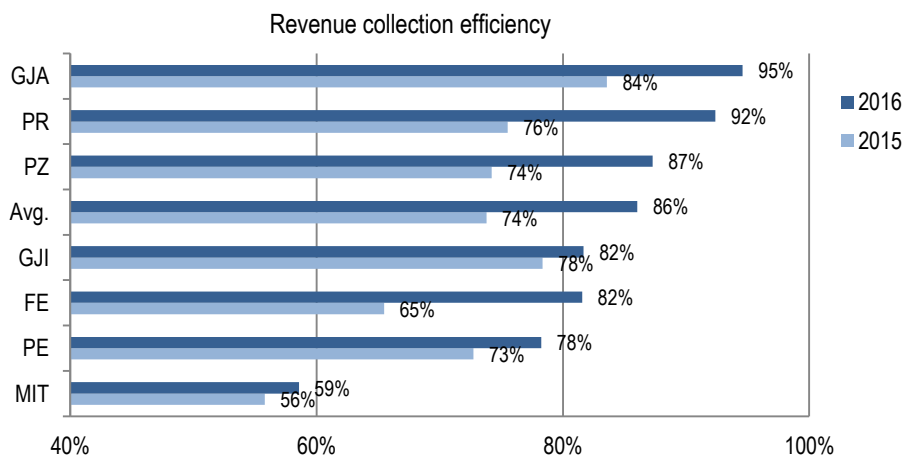


Fig. 26, Revenue collection billing (excluding other operating revenue)

As seen in figure 26, in 2016 all companies have improved the collection rate for the water and wastewater service bills, which then have influenced to have a high improvement also in the sector level compared with the previous year, respectively for 12% more, or from 74% in 2015 to 86% in 2016.

RWC 'Radoniqi' leads with highest percentage of collection rate compared to other companies, while the highest progress in the collection rate was marked by RWC 'Prishtina' with a 17% increase compared to the previous year, the result of which was the undertaking of some activities by the company such as: application of interruption of service connections, forgiveness of debts based on the Law on Debt Forgiveness (consumers may enjoy this right until 1 September 2017), reprogramming of debts, continuous work with enforcement agents, etc.

RWC "Mitrovica" again this year leads in poor performance or 59%, although compared to the previous year there has been an increase of 3%, the result of which is the increase of revenues collected despite the increase of billing for services of water supply and wastewater.

Regulatory objectives agreed with water service providers during the 2016 regular tariff process at the collection rate, both at the sector level and in all individual categories, have been achieved in relation to those planned, with the exception of the RWC "Mitrovica".

Collection efficiency in the category of household consumers continues to be weak in nearly all companies, with the exception of RWC 'Radoniqi', which for many years leading in this category by 93%, followed by RWC 'Hidroregjioni Jugor' with 88%.

Table 5, Current and planned revenue collection performance for 2016

Category of Consumers	RWC Prishtina		RWC Hidroregjioni Jugor		RWC-Hidrodrini		RWC Mitrovica		RWC Radoniqi		RWC Bifurkacioni		RWC Hidromorava		Sector level	
	Real.	Plan.	Real.	Plan.	Real.	Plan.	Real.	Plan.	Real.	Plan.	Real.	Plan.	Real.	Plan.	Real.	Plan.
Household	87%	74%	88%	74%	77%	70%	50%	57%	93%	74%	79%	68%	78%	74%	71%	82%
Commercial-Industrial	103%	90%	64%	91%	82%	90%	117%	97%	92%	92%	92%	92%	89%	95%	81%	94%
Institutions	99%	96%	119%	97%	79%	98%	69%	100%	115%	97%	89%	95%	98%	96%	97%	97%
Total	92%	80%	87%	80%	78%	77%	59%	67%	95%	78%	82%	73%	82%	79%	86%	78%

### Return on Capital

It is defined as the return to the regulatory asset base, presented as annual income and capital growth from investments expressed as a percentage of the original investment.

Return on capital is needed to ensure investors trust in the sectors if companies want to attract funding to improve assets in order to meet the necessary level of service improvement.

The Regulatory Asset Base (RAB) on which the return on capital has been set in 2008 since the tariff process (2009-2011), started on 1 January 2009 with the Regulatory Asset Base (BRA) for each of the water companies, using the set asset value of 200 € for consumers of the water supply service and 100 € for the wastewater consumers.

The real rate of return on capital is based on the good practices of Western European countries, and to us for the tariff process (2015-2017), we have expected that this is 4% as the amount calculated before the inflation rate.

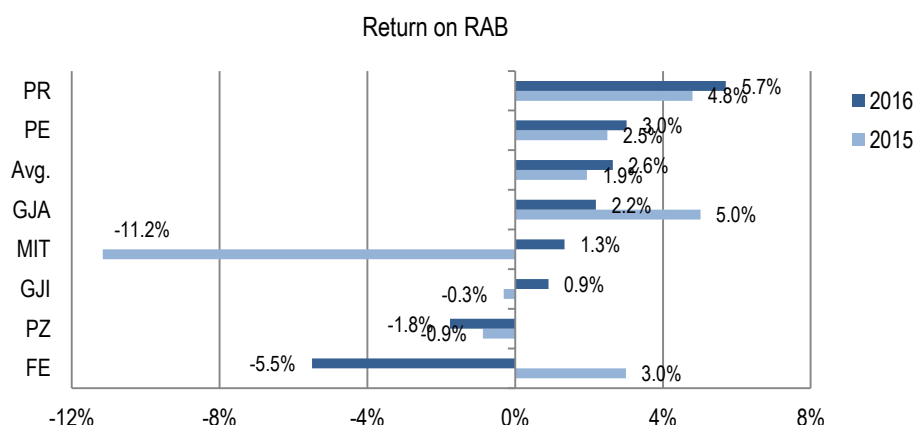


Fig.27, Return on Regulatory Asset Base (RAB)

Return on capital at sector level has improved in 2016 compared with 2015 for 0.7%.

Only two RWC (Bifurkacioni and Hidroregjioni Jugor) marked negative return since they have not managed to cover high operating cost by their own source revenues, including commissioning of bad debts and capital maintenance.

The highest improvement in 2016 at the return rate was achieved by RWC 'Mitrovica' by 13%, from -11% in 2015 to 1.3% in 2016. This high difference, despite the reduction of expenditures that this company compared to the previous year, can be mainly attributed to increasing of revenues from regular billing, including the subsidy that this company has received.

### 3.4 Overall performance of RWC

This year WSRA has decided to make some changes to the performance assessment scheme, while to the current scheme of 11 (eleven) key performance indicators are added two indicators (non revenue water and regulatory reporting). In line with these changes, the weight of the indicators as a whole has been revised and the evaluation criteria for these two indicators are set. Given that the challenge of reducing non revenue water and the necessity for continuous improvement of the quality (reliability) of the data reported by the RWC, issues that have been sought and are increasingly addressed by all stakeholders; and RWC. WSRA considers that these changes in the performance measurement scheme will be an additional driver for RWC to make them more proactive in terms of reducing NRW, improving data reliability and overall performance.

Based on the analyzes made, these changes have a significant impact on the overall outcome and the final ranking of the RWC, because the weight of the two indicators (water quality and availability) has decreased, which currently have a high level of achievement of the objectives and we have set two indicators related to water loss and data reliability, not well performing indicators, especially the URW indicator is at a very low level and far from the acceptable objective.

**Since performance assessment under the new structure shall be applied starting from 2017, and considering a breakdown from the old scheme assessment, WSRA has decided not to assess the RWC's overall performance this year.**

**Table 6, Performance measurement scheme – 2017, the key performance indicators and their weight<sup>10</sup>**

Group	Performance measurement unit	Sub-group coefficient		Group Coefficient	
Water	Drinking water quality	25%	100%	45%	100%
	Pressure	5%			
	Availability	20%			
	Service coverage	20%			
	Cost efficiency	10%			
	Non revenue water	20%			
Wastewaters	Quality of disposal	20%	100%	35%	
	Reliability	20%			
	Service coverage	50%			
	Cost efficiency	10%			
Regulatory reporting	Score (credibility) determined by Audit	5%		5%	
Financial / commercial	Profitability	5%		15%	
	Commercial efficiency	10%			

<sup>10</sup>Criteria, definitions, coefficients and performance measurement calculations, including indicators, non revenue water and Regulatory reporting are given in Annex 2, definitions and rational.



## **PART B**

# **WATER SERVICE SECTOR PERFORMANCE**

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## 4. SECTOR PERFORMANCE

This part of the report provides technical and financial performance analysis at the general level of the sector, such as quantitative values of water production, sales, and NRW coverage of water and wastewater services. It also provides analysis on the trends of realization of planned revenues, turnover and cash received and of implementation of capital investments for the 5-year period (2012-2016).

### 4.1 Water production, sales and NRW

Fig. 28 shows the volume of water treated and distributed in network. Water production figures can also be seen in this figure in relation to the water billed, as well as water losses (NRW).

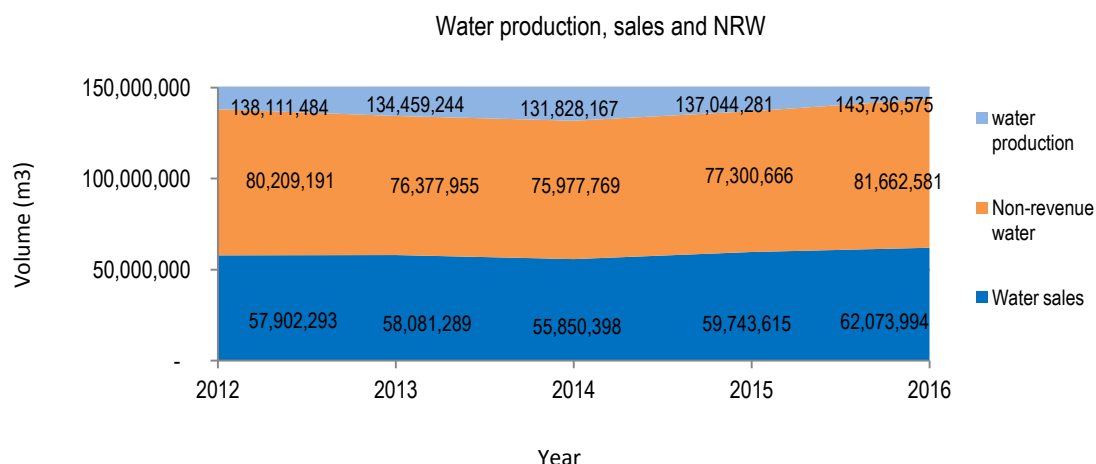


Figure 28: Quantitative values of water production, sales, and NRW

There has been a steady increase in water production, responding to the demands for sustainable water supply for the population. This trend was interrupted (end of year 2013 and first six months of 2014) due to the extreme drought present in Kosovo, where the population supplied by RWC 'Prishtina' and RWC 'Hidromorava' was affected the most. In 2016, from the 7 (seven) RWCs, a total of 143.7 million m<sup>3</sup> of drinking water was produced and distributed to their consumers. That is equal to 256 litres per person/day.

The largest increase in water production occurred in RWC 'Mitrovica' and RWC 'Prishtina', considering that these are two companies that have had most water supply cut-offs. The demand for water has been great, now RWC 'Mitrovica' has significantly increased its production capacities by entering into function of two new water factories (in Shipol and Balinca), while RWC 'Prishtina' has used its existing production capacities in the most rationale manner.

RWC 'Prishtina' has completed and put into service the new Factory in Shkabaj (on March 2017) which, in its full capacity, will produce 700 litres of water per second.

With the increase of water production, the volume of non-revenue water has increased as well, whereas in 2016, this value is quite high. About 81.7 million m<sup>3</sup> (57%) is non-revenue water which does not generate income for companies, furthermore, it creates costs and deficits in regular water supply for the population. The growth trend of produced water was not followed by the same trend of billed water (consequently, the NRW quantitative values have increased or decreased in view of this). Only in 2016, the NRW has been increased for over 4.4 million m<sup>3</sup> or 1%.

Non-revenue water and the water lost because of leaks, illegal connections, damaged metering devices or unregistered consumption continues to be a concern for the sector and is causing large revenue losses, increased operating and capital expenditures as well as recessions in water supply.

Poor performance of infrastructure and the inadequate measurement of water used by consumers are two areas where RWCs are required to increase the number of capital investments in order to return proper performance in the distribution network.

With good operational efficiency and reduction of NRW, the increase in water production from now on should only be necessary with an increase in consumer base and improved water supply in some of the RWCs which may still have limited capacities of production or even of water resources.

## 4.2 Coverage with water and wastewater services

This section represents the percentage of local population with safe and reliable access to water supply and sewage services provided by RWCs.

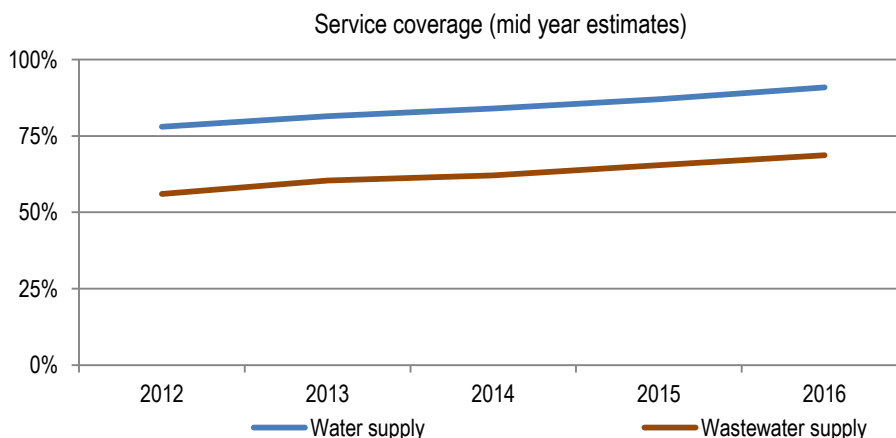


Figure 29: Coverage with water and wastewater services

Figure 29 shows the trends of progress in coverage with water and wastewater services over the past four years (2012-2016).

It is estimated that in the areas covered by RWCs services live a population of 1.7 million people, of which, about 1.5 million or 91% receive safe water supply services. The rest of the local population is estimated to be mainly in rural areas that have separate water supply systems or individual systems not managed by the RWCs. About 1.2 million people or 70% are covered with wastewater services.

The total number of consumers is 318,324, which means that in 2016 this number increased for 17,323 from the previous reporting period. Household consumers have increased by 15,970 while non-households consumers (commercial-industrial and institutional) have increased by 1,353.

Clearly, service coverage still needs improvement. The RWCs should continue to make efforts in investing to further development of their infrastructure and systems in the water supply and wastewater services in order not only to guarantee their financial and operational sustainability, but also to have effective use of services, thus improving the quality of life of citizens and the overall public health.

### 4.3 Planned revenues, turnover and collected cash

Turnover in this case shall mean revenues from regular billing and other operative revenues for water and wastewater services.

Figure 30 indicates the average turnover and collection efficiency over 5 years, and provides a clearer picture of turnover and collection over the years, eliminating distortions that may occur during a financial year.

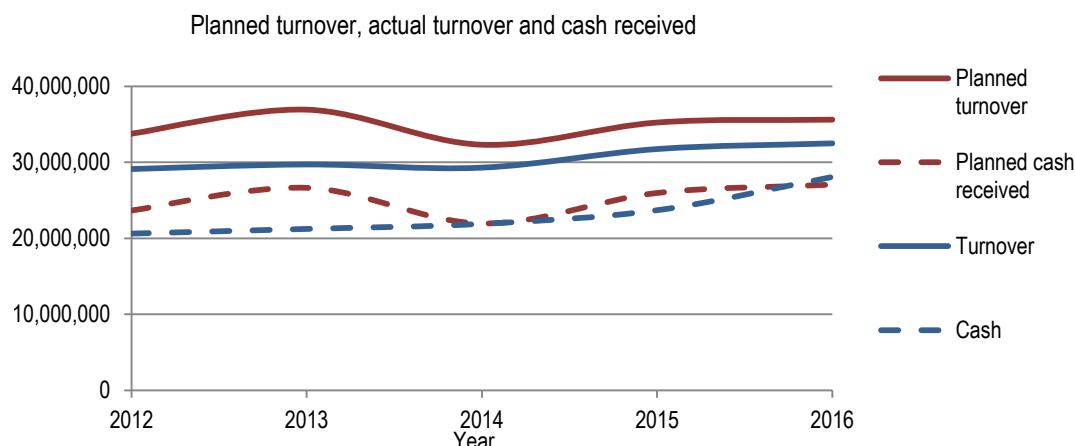


Figure 30: Monetary amount for the current billing and collection

The above figure represents the performance of revenues in monetary values at the sector level over the last five years (2012-2016). RWCs are generally improving billing efficiency. It is worth noting that although the improvement is gradual, it is of particular importance that it is sustainable.

Turnover efficiency<sup>11</sup> in monetary value at the sector level in 2016 has marked a slight improvement by € 747 thousand, or expressed in percentage by 2.4% compared to 2015. This slight improvement is attributed to expanding the consumer base year after year, and then to the increase of efficiency from billing.

Unlike turnover efficiency, the collection efficiency<sup>12</sup> in 2016 has marked a significant improvement compared to 2015 by € 4.4 million, or expressed in percentage, by 18%.

The collection rate compared to billing at the sector level in 2016 was 86% or 12% higher compared to 2015, while compared to 2012, the collection rate is higher by 16%.

Table 7: Turnover and collection by years

Years	Turnover	Collection/Cash	Cash/Turnover
2012	29,111,469.23	20,609,696.24	71%
2013	29,587,834.95	21,134,227.62	71%
2014	29,296,792.70	21,890,722.67	75%
2015	31,752,576.36	23,691,351.14	75%
2016	32,499,788.67	28,071,671.01	86%

<sup>11</sup> Turnover has included revenues from regular billing for water and wastewater as well as revenues from other operating activities,

<sup>12</sup> Cash (collection efficiency) has included the collection of regular billing for water and wastewater as well as revenues from other operating activities.

The 86% collection efficiency level is moderately satisfactory, since still 14% of consumer debts remain uncollected even though companies have been trying to apply water cuts and old debt write-offs, to address the collection of debts through private enforcement agents and by reprogramming of debts, yet they have not reached the satisfactory level.

#### 4.4 Capital investments in water supply and wastewater services

This section represents the analysis of the seven RWCs current and planned capital expenditure during the tariff process (2012-2014) which is completed and the current process (2015-2017) for 2015 and 2016.

It is clear that funding to the water and wastewater sector needs coordinated support and efforts from different stakeholders. Although there were some funds channelled towards investments in this sector, there is still a need to do much more, given the high demand for investment.

All RWCs are expected to implement significant investments in the water supply and wastewater service and from the total amount planned for the three-year tariff period (2015-2017) of approximately 137 million Euros, with an allocation of approximately two-thirds to water supply and one-third to wastewater service. Around 14 million Euros from the RWCs' own resources are planned to be invested in capital expenditures on both services (water supply and wastewater services).

Table 8: Capital investment 2012-2016

Total value of capital expenditures for water supply and wastewater services					
Company	2012	2013	2014	2015	2016
RWC 'Prishtina'	5,079,692.45	9,027,944.72	1,592,704.13	964,011	739,930
RWC 'Hidroregjioni Jugor'	3,388,492.59	1,552,776.75	909,195.35	1,154,620	1,168,317
RWC 'Hidrodrini'	4,742,892.56	901,564.07	802,008.43	2,034,939	240,286
RWC 'Mitrovica'	21,850.82	2,060,992.78	0.00	-	8,254,962
RWC 'Radoniqi'	397,359.49	1,348,647.11	1,166,757.54	1,310,426	2,109,642
RWC 'Bifurkacioni'	702,391.82	58,461.05	3,060,203.32	279,182	154,134
RWC 'Hidromorava'	1,367,079.59	32,350.48	1,971,970.76	204,840	117,052
<b>Total</b>	<b>15,699,759.32</b>	<b>14,982,736.97</b>	<b>9,502,839.53</b>	<b>5,948,018</b>	<b>12,784,324</b>

The value of investments over these five years amounted to around 59 million Euros, mostly funded by donors, and a small share by RWCs. In relation to the planned amount, investment implementation amount to 31%. Of the total amount during these five years, about 17.4 million Euros were executed by the RWC 'Prishtina', while less capital expenditure was executed at RWC "Hidromorava" (3.7 million Euros).

Lack of execution of planned investments according to the planned height and dynamics, be it from own funds or donor funds, will not bring the planned improvements, rather it will have an impact on the lack of proper maintenance and on the increase of assets which are preconditions for providing good and sustainable services.

## PART C

### PERFORMANCE OF BULK WATER SUPPLY (HPE IBËR-LEPENC)

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## 5. PERFORMANCE OF HPE 'Ibër Lepenci'

WSRA is responsible for regulating the business of HPE 'Ibër Lepenci' J.S.C. Prishtina, which deals with bulk water supply for RWC 'Mitrovica' dhe RWC 'Prishtina', respectively the O. U. 'Drenas'.

HPE 'Ibër Lepenci' performance with statistical data and main performance indicators in 2016 compared to 2015 is summarized in Table 9 and 10.

Table 9: Statistical data for HPE 'Ibër-Lepenci' J.S.C. Prishtina

Statistical data for 2016 / 2015	2015	2016
Volume of bulk water billed (m <sup>3</sup> )	23,589,360	24,240,235
Bulk water billing (€)	489,595	539,543
Bulk water collection(€)	93,268	239,014
Operational costs for bulk water supply (€)	450,698	665,709
Number of staff engaged in bulk water supply	33	39

Since the nature of bulk water services is different from the drinking water supply activities, the possibility of evaluating performance is limited to certain financial indicators.

Table 10 provides an overview of the financial indicators on the basis of which the HPE 'Ibër Lepenci' performance during 2016 can be estimated compared to 2015.

Table 10: Performance indicators of HPE 'Ibër-Lepenci'

Performance indicator	2015	2016
Collection rate	19%	44%
Work rate	1.09	0.81
Work coverage rate	0.21	0.36
Operational cost per unit (€/m <sup>3</sup> )	0.02	0.03

As noted in the table, two out of four financial indicators of this company have marked progress in 2016 compared to 2015.

The collection rate in 2016 has increased from 19% to 44%, and this has been the result of 100% collection rate realized by RWC 'Prishtina', while RWC 'Mitrovica' has not managed to collect even 33% of the amount billed.

Increase on the collection rate made work coverage rate be higher compared to 2015, from 0.21 to 0.36, which is still at the desired level to cover the costs incurred in this year.

Operational costs per unit in 2016 also showed poor performance as a result of increased operational costs by 48%, despite the increase in the volume of bulk water billed (m<sup>3</sup>) by 3%.

## PART D

### CCC ACTIVITIES

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## 6. CCC ACTIVITIES

There are seven Consumer Counselling Commissions (CCCs) established by WSRA for the purpose of handling the:

- Consumer complaints , respectively the ones claiming to not be satisfied with the response provided by their service provider,
- Advising the Authority on certain regulatory issues affecting consumers' interests (complaints, fees, service standards, etc.).

Based of the Law No. 05/L-042 for Regulation of Water Service, WSRA in cooperation with the respective municipalities has selected a total of 32, respectively 1 (one) representative of each at the CCC, responsible for their region.

Even during 2016, the CCC continued to work in many activities: 78 meetings were held in all regions each month, reviews were made and consumer complaints were resolved, consulted on different legal issues: drafting sub-legal acts of the Water Service Regulatory Authority, reviewed information and analysed procedures on consumer complaints review, Information regarding the conclusion of Service Contracts and water meters reading, Review of the situation concerning consumer water supply, tax charges for water supply and sewerage, performance report, etc. Moreover, the CCC members have also been involved in the consumer opinion Survey on water services in Kosovo<sup>13</sup>, conducted by WSRA.

During 2016, in total, there were 302 complaints, filed to 7 (seven) CCC regions by consumers of three categories. Household consumers complained the most (264), then commercial-industrial consumers (32) and only (5) cases were institutional consumers that complained and one (1) wrongly filed request.

Out of 302 complaints filled to CCC, their status is as follows; 260 resolved, 2 notifications to the party, 15 not-grounded, 23 as filed after time limit, and 2 cases forwarded to respective court. Consumers have mainly complained about financial issues such as presumptive billing, overcharging, billing without the provision of services, failure to treat separately in billing by service users etc.

Table 11, Number of complaints filed and resolved

REGION	2015		2016	
	Filed complaints	Resolved complaints	Filed complaints	Resolved complaints
CCC -Prishtinë	205	163	212	189
CCC -Mitrovicë	2	0	1	1
CCC- Pejë	0	0	0	0
CCC -Gjakovë	11	5	14	12
CCC- Prizren	6	6	6	6
CCC -Ferizaj	18	7	50	39
CCC -Gjilan	24	20	19	13
<b>Total</b>	<b>266</b>	<b>201</b>	<b>302</b>	<b>260</b>

The CCC of the Prishtina region (212), RWC 'Bifurkacioni' service region (50), most complaints were received from consumers. CCC in the Peja region continues to have no complaints filed with RWC 'Hidrodrini'.

<sup>13</sup> <http://www.arru-rks.org/Publications.Studimet.html>

## 7. FUTURE CHALLENGES

### a) REDUCTION OF OPERATIONAL COSTS

**Reduction of NRW (Water Losses)** remains a major challenge in this sector for all service providers. The 57% level at the country level is the direct responsibility of service providers and for a significant improvement in this regard, they should have a more proactive and strategic approach if willing to improve this indicator.

One of the investments that lead to cost reduction is water losses reduction in the distribution network by repairing and rehabilitating parts of this network. With this investment, money circulation increases rapidly. The reason is clear because these are not calculated amounts of water, consumed but unbilled water, or that the bulk of the network losses for technical reasons as a result of the poor state of the water distribution network. As a reference, in most developed countries it is considered acceptable if the amount of non-billed water is below 25%, however, the "good practices" threshold is even lower.

In our country, all RWCs have very high values of NRW, with RWC 'Radoniqi' leading with 47%, although some RWCs (Hidrodrini, Mitrovica) have even worse performance. Benefits of reducing water losses in the network for these companies will be: less energy, less work and additional costs associated with water extraction, cleaning and distribution, fewer chemicals to clean and treat water that will be used for drinking. The overall network situation will improve, so that the number of faulty pipeline nodes will be significantly reduced, reducing all costs associated with them. Costly investments to increase production capacities in RWCs that lack regular water supply, even seasonal, or due to problems with drinking water infrastructure, shall be avoided.

**Improving energy efficiency** is also one of the most pressing challenges faced by water services. More than 21% percent of the operating costs for drinking water systems in the RWC are for energy and they are growing steadily. Global energy management is also at the centre of efforts across the industry to ensure that water and wastewater systems are operated steadily. Integrating efficient energy practices into day-to-day management and long-term planning in the water sector will help reduce operational costs by enabling valuable financial resources to be invested in other priorities. It is estimated that including energy efficiency practices in their water plants or pumping stations, service providers can save 15 to 30% of energy. The ability to improve energy efficiency by water service providers falls into three main categories: water resources, treatment process, and administrative buildings;

- i. equipment improvements, with the focus on replacing equipment such as pumps and fans, with more efficient models, the use of efficient pumping systems (pumps, motors, frequent frequencies), storage and rationalization of water to avoid pumping at the time of maximum energy cost.
- ii. operational modifications, reducing the amount of energy required to perform specific functions such as drinking water or wastewater treatment. Operational modifications usually bring greater savings than equipment upgrades and do not require capital investment, undertaking auditing activities of energy expenditure or install SCADA software (monitoring equipment introduced to Supervisory control and data retention system) for learning where energy is being used and identifying opportunities to improve energy efficiency, installing efficient disinfection equipment,
- iii. modifications in administrative buildings, installation of efficient energy lighting, modification of windows and heating and cooling equipment will affect the reduction of the amount of energy consumed by the administrative facilities.

The benefits of improving energy efficiency in the water supply service and other RWC objectives are significant in environmental and economic terms.

A contribution to this regard has been provided by the DANUBE water program (DWP) through the "Energy Efficiency in Water Supply and Sewerage Utilities, Capacity Building Program"<sup>14</sup>

<sup>14</sup> DWP\_EE-brochure\_ALB.pdf

## **b) IMPROVING WATER SERVICES PERFORMANCE**

The reported findings through performance evaluation and benchmarking cannot be considered as an end to this process. Improvement of performance within each enterprise and across the sector is the ultimate goal.

Within enterprises, a more effective internal performance management system is needed, as much as in infrastructure development. Updating the Consumer Database, improving billing and collection, reducing NRW, measuring water consumption, will improve financial performance and will fund some improvements to service standards.

The basic performance agreement between MED and the Board of Directors, as well as between the Board of Directors and the Chief Executives of the Regional Water Companies is being seen as a possible way to improve the performance of the RWC. At the seventh meeting of the IMWC, concrete decisions were taken in this regard, whereby it is recommended to the Ministry of Economic Development to introduce Performance Agreements between the Policy and Monitoring Unit for Public Enterprises and the Boards of Directors for Regional Water Companies, based on performance indicators and business plans approved by the Water Service Regulatory Authority. Also, the IMWC has recommended that the Board of Directors are obliged to commit to reducing non-revenue water and increasing collection, and to put in place permanent performance-based contracts with the RWC management (Chief Executive Officer).

## **c) STRATEGIC PLANNING**

Water companies face many challenges. Solving these challenges requires a time span of more than one year. Strategic planning is a process whereby the enterprise defines its strategy or main course for a multi-year period and plans the key measures to be taken. These strategies contain specific goals that need to be met, such as: requirements for financial resources, human resources and timelines. As such, strategic planning provides the basic material for plans covering shorter time periods, particularly for annual Business Plans.

There are many factors that show that multi-year strategic plans are essential for water utilities: Many of the anticipated investments require three or four years, some of the organizational or tariff changes require a multi-year gradual implementation, national policies and alignment with EU regulations have a time span that extends over several years.

More or less all water enterprises in Western Europe compile their strategic plans. This practice should be applied to us, more so when this is also a specified requirement of the Law no. 05/L-042 for Regulation of Water Services. This law requires the RWCs to draft and the Authority should approve the following strategic documents: Multi-year Business Plans, Asset Management Plans, Long-term Investment Plans, Drought Management Plans, Water Supply Plans in Emergency Situations, Internal service providers' regulations and procedures in relation to specific aspects of their work. In some of them, with the request and the concrete assistance from WSRA and the Government of Kosovo and donors, have been completed or are in process.

## ANNEX 1. Quality and detailed performance data

### a) QUALITY OF REPORTED DATA

The current performance reporting framework requires accurate and reliable data. For this purpose WSRA on an annual basis, conducts the regulatory audit/verification of financial and non-financial data, according to a framework that has clearly defined the specific regulatory procedures and requirements.

Responsibility for reporting reliable, accurate and timely data is vested to companies, while WSRA is responsible for evaluating data provided by companies in the context of accuracy and reliability of data sources.

After verifying the data, WSRA has prepared a draft Report of Verified Data for each company, giving each and everyone the opportunity to review and comment on the results of draft reports before they are finalized and published.

Data audit for 2016 was carried out during April and May 2017 by a professional team from WSRA. In order for the audit to be comparable and serve for certain purposes, the regulatory audit is specifically focused on:

- Analyzing and verifying data to ensure that the information provided is complete, accurate and reliable,
- Analyzing information systems to assess to what extent they generate data in accordance with definitions and regulatory requirements,
- Verification, if companies have developed and are implementing the procedures as required by the regulatory rules,
- Interviewing the responsible staff of companies to confirm whether they understand or otherwise fail to fully understand the regulatory reporting obligations,
- The results of the Inspection of processed water measurement - which have helped the data verification team to evaluate the reliability and accuracy of data on water production.

Based on the audit/verification of the data reported for 2016, we can ascertain the following.

In the context of accuracy, the data were found to be largely accurate in relation to those reported during the reporting period, in some cases, it was found that the inaccuracy was due to technical errors, uncertainty for the data definition, or even subsequent updating even after completion of reporting. In general, the inaccuracy is more concerned with operational data, consumer service, but also some financial data due to subsequent accounting entries after reporting. The inaccuracy of the data was roughly the same in all RWCs, with an exception to the RWC 'Mitrovica', where the inaccuracy was higher for the fact that there were movements of responsible persons, during the reporting period but also during the audit process.

The concerns of the Regulator still remain, regarding the reliability of some operational data (water production, inadequate pressuring properties, properties with restricted supply), or even some consumer service data (consumer complaints, service contracts) which are not always trusted due to the lack of regular updates and the security provided by the data retention system in software format (Excel or Word document). The reliability and accuracy of the data was also influenced by the frequent switching of the staff, who was engaged in the reporting process to some RWCs.

For the purpose of verifying processed water measurement, as specified in the regulation on minimum standards of services, an inspection was carried out for seven (7) service providers. This activity involved:

- Inspection of all water processing points and verification of the measuring method
- Inspection/verification of records kept and reported for water processing,
- Information on how to calculate processed water in cases where meters have been missing or have been non-functional,

Based on this activity it has been proved that at country level, the water measurement produced for 2016 was at 65%.

After expiration of the deadline set by WSRA for the installation of processed water meters at points where the meters were missing, an inspection activity related to verification of compliance with WSRA's recommendations was conducted. Particular attention during the verification inspection was given to service providers who have resulted in a weaker level of processed water measurement (RWC 'Radoniqi', 'Hidrodrini' and RWC 'Prishtina').

As a result of the verification inspection it is proved that:

- RWC 'Radoniqi' - has installed meters for processed water at all processing points, whereby from 0% of the water measured in August 2016 it has reached 100% of the water measured in March 2017. After analyzing the data displayed in the meter (WSRA has obtained records upon the installation of meters), a comparison of the amount of processed water for the period of 3 months (March/April/May) was carried out between 2016 and 2017. According to this analysis it results that in the quarter (March/April/May) 2017 RWC 'Radoniqi' has produced 1.2% more water than in the same period of 2016.
- RWC 'Hidrodrini' has repaired and installed meters for processed water at almost all water processing points, in what case, 20% of the water measured in August 2016 has reached 92% of the measuring of processed water by April 2017.
- RWC 'Prishtina' - has installed a meter of the processed water in the WPF 'Badovc' where from 66% of the water measured in August 2016, it has reached 94% of the processed water measured by February 2017

Currently, following the meter installation at a country level, the processed water measurement of 65% that was in August 2016 reached 94% in 2017. Calculation and evaluation by different methods (capacity of pumps, pipes etc.) of the amount of processed water cannot be reliable and this fact directly affects the reliability of other indicators such as: water losses, production and consumption per capita, unit costs, etc.

Pressure data are not fully reliable for any of the RWC's, they do not have an installed pressure management system, excluding any area where the company conducts water loss management activities or even in response to any complaint, database (books, work reports) is unsteady.

Generally, operational data are kept in reporting documents, books. Data on the length of the water supply and sewerage network in the majority of RWCs are also kept at GIS, although they are constantly being updated. The financial and consumer service database is generally maintained in software modules (navision, pronet, piano, rikont, alpha), some of which do not have the option of disaggregation by cost or item, which is then manually transferred in Excel formats, while data on depreciation at current cost, data on the regulatory base for water and wastewater assets are kept in Excel format. In general, financial data have proven to be more reliable. In order to improve the accuracy and reliability of the data, the regulator has suggested that: The reported data should always be based on the records kept regularly by the Company and in accordance with the instructions given in the manuals and guides for reporting data, to avoid unintentional deviations between real and reported data.

- The operational data for the water produced must be based on the measuring system through water meter and reporting according to the instructions given in the 'GUIDE ON PROCESSED WATER MEASUREMENT' drafted and approved by WSRA,
- Other operational data (length of water supply and sewage network, network defects, pressures, water outages, etc.) are updated based on Geographic Information System (GIS),
- Measurement and reporting of water loss data: to be utilized: 'Module- Water Balance - WB-Easy-Calc; followed by WSRA and also recommended by the Kosovo government (IMWC),

- Continue with the division of supply areas with the management Water loss and pressure (DMA) areas, as well as the establishment of continuous monitoring of pressure and other parameters of the distribution network,
- Continue with the advancement of software systems applicable to financial data, consumer service, and further ensure their integration into the overall information management system within the company.

## **b) DETAILED PERFORMANCE DATA**

Now after 6 years since WSRA established the radical change in the model of monitoring and performance evaluation to establish a new performance monitoring concept that is in line with the specific regulatory requirements, we can conclude that the current reporting regime has kept the pace by adapting to the regulatory framework change, especially the introduction of the three-year tariff review process, the framework for planning of regulatory accounting and business.

The performance data and indicators meet all the requirements of good and effective performance measurement for the needs and purposes of regulatory processes, local institutions with decision-making responsibilities in this sector, valuable information for donors, consumers, service providers and the general public.

For the needs of the report, other data provided and published by responsible institutions such as the data reported by NIPHK (water quality) or Kosovo Agency of Statistics (inflation rate, population and household statistics) are also utilized.

Performance measurement focuses on: water supply performance, wastewater service performance, and business performance (as a whole). Compared to the targets set in the business plans according to which the tariffs, the level of meeting the local service standards and a comparative assessment year after year both in the individual aspect of the RWC and in relation to each other, are defined, overall performance evaluation is based on absolute performance measures through relatively simple indicators independent of each other. So it is an appropriate structure for measuring overall performance.

For the benefit of the Government of Kosovo and development agencies, performance evaluation is done for the sector as a whole and for a longer period of time to see the sector development trends more clearly.

During the compilation of the performance report for 2016, WSRA considered only the data found during the audit process.

We also recommend changes to management within the RWCs to create awareness that they, including any other official involved in the reporting process, are responsible for providing reliable, accurate and timely information.

Detailed performance statistics of the seven RWCs are shown in the following tables. The information thus presented is based on the regular submission of reports to WSRA.

- Data related to population statistics, number of consumers, length of pipes, etc. are not year-end data but estimated averages of the year.
- Financial data expressed in EUR are adjusted to the level prices of 2015 mid-year and in line with published inflation statistics to enable appropriate comparisons from year to year.
- Financial data have been reported in accordance with the Regulatory Accounting Guidelines (RAG), and in particular:
  - ✓ determination of the value of assets is made on the basis of the Regulatory Asset Base,
  - ✓ capital maintenance is defined as a combination of infrastructure renewals and depreciation at the current cost of non-infrastructure assets,

- ✓ commissioning of bad debts (repayment) is defined as the difference between billing and revenue collection from the previous year,
- Revenue collection performance is defined as the difference between billing for water and wastewater services (excluding connection fees and other revenues) and cash inflows for water and wastewater services (also excluding connection fees and other revenues).



## RWC Prishtina (Prishtina)

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
W - Water supply						
Non-financial (technical)						
Standards of service	Quality	Water quality (bacteriological)	W.1.A.01	% pass	100%	99.3%
		Water quality (physical and chemical)	W.1.A.02	% pass	100%	92.5%
	Pressure	Properties affected by low pressure	W.1.A.03	No	130	122
		Properties affected by low pressure	W.1.A.04	% properties	0.13%	0.12%
	Reliability	Properties with 24 hour supply	W.1.A.05	No	10.441	28.707
		Properties with 24 hour supply	W.1.A.06	% properties	11%	27%
		Properties with 18-24 hour supply	W.1.A.07	No	52.613	55.361
		Properties with 18-24 hour supply	W.1.A.08	% properties	54%	53%
		Properties with less than 18 hour supply	W.1.A.09	No	35.002	20.694
		Properties with less than 18 hour supply	W.1.A.10	% properties	36%	20%
Infrastructure serviceability	Non-revenue water	Non-revenue water (total)	W.1.B.01	m3 per year	20,899,398	23,630,379
		Non-revenue water (per connection)	W.1.B.02	liters per cons. per day	517	548
		Non-revenue water (per connection) – adjusted	W.1.B.03	liters per cons. per day	613	620
		Non-revenue water (relative to production)	W.1.B.04	% production	51%	53%
	Pipe bursts	Pipe network bursts frequency	W.1.B.05	bursts per month	118	112
		Pipe network burst per 100 km of pipe	W.1.B.06	Nr / 100 km	83	75
Non-financial (commercial)						
Service coverage	Households	Households served	W.2.A.01	No	98.056	104.762
		Coverage (households served relative to total)	W.2.A.02	% total households	106%	112%
	New connections	New connections (household)	W.2.A.03	No	5.617	7.796
		New connections (commercial and institutional)	W.2.A.04	No	777	760
Metering	Metering rate	Metered households relative to total households	W.2.B.01	% total households	97%	97%
		Metered com & inst relative to total com & inst.	W.2.B.02	% com & inst	100%	100%
	Meters installed	Meters installed (households)	W.2.B.03	No	457	430
		Meters installed (com & inst)	W.2.B.04	No	70	21
Complaints	Complaints	Complaints received (technical)	W.2.C.01	No	6.146	3.001
		Complaints received (commercial)	W.2.C.02	No	2.132	4.342
Financial						
Sales	Volumes	Volume of sales to households (metered)	W.3.A.01	m3	15,560,617	15,991,355
		Volume of sales to households (metered) relative to plan estimates	W.3.A.02	% of plan estimate	81%	80%
		Volume of sales to households (un-metered)	W.3.A.03	m3	750.951	719.651
		Volume of sales to households (un-metered) relative to plan estimates	W.3.A.04	% of plan estimate	273%	783%
		Volume of sales to com & inst (metered)	W.3.A.05	% of plan estimate	4,048,894	4,486,130
		Volume of sales to com & inst (metered) relative to plan estimates	W.3.A.06	% of plan estimate	84%	90%
		Volume of sales to com & inst (un-metered)	W.3.A.07	% of plan estimate	22.570	18.683
		Volume of sales to com & inst (un-metered) relative to plan estimates	W.3.A.08	% of plan estimate	0%	0%
	Values	Value of water sales to households	W.3.A.09	EUR	7,570,435	7,789,621
		Value of water sales to households relative to plan estimates	W.3.A.10	% of plan estimate	87%	89%
		Value of water sales to com & inst	W.3.A.11	EUR	4,052,243	4,443,477
		Value of water sales to com & inst relative to plan estimates	W.3.A.12	% of plan estimate	87%	95%
Unit costs	Production	Unit operational cost of water production	W.3.B.01	EUR/m3	0.056	0.055
		Unit total cost of water production	W.3.B.02	EUR/m3	0.060	0.058
	Total costs	Unit cost of water sold	W.3.B.03	EUR/m3	0.451	0.415
		Unit cost of water sold and paid for	W.3.B.04	EUR/m3	N/A	N/A
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	W.3.C.01	EUR	231.724	2.881
		Total capital maintenance expenditure relative to plan	W.3.C.02	% of plan estimate	4%	0.06%
		Total capital maintenance expenditure relative to RAB	W.3.C.03	% of RAB	1.1%	0.01%
	Capital enhancement	Total capital enhancement expenditure	W.3.C.04	EUR	710.903	600.540
		Total capital enhancement expenditure relative to plan	W.3.C.05	% of plan estimate	6.0%	9.06%



Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
S - Sewerage (wastewater)						
Non-financial (technical)						
Standards of service	Discharge quality	Discharge quality	S.1.A.01	% pass	N/A	N/A
Reliability	Sewer overflows	Sewer overflows	S.1.B.01	No	2.716	3.315
		Sewer overflows per 100 km of pipe	S.1.B.02	No per 100 km	799	463
Serviceability	Sewer collapses	Sewer collapses	S.1.C.01	No	0	0
		Sewer collapses per 100 km of pipe	S.1.C.02	No per 100 km	0	0
	Wastewater treatment plan overflows	Wastewater treatment plan overflows	S.1.C.03	No	N/A	N/A
Non-financial (commercial)						
Service coverage	Households	Households served	S.2.A.01	No	82.670	89.782
		Coverage (households served relative to total)	S.2.A.02	% total households	89%	96%
		Households served with wastewater treatment	S.2.A.03	No	0	0
		Coverage (households served with wastewater treatment relative to total)	S.2.A.04	% total households	0%	0%
	New connections	New connections (household)	S.2.A.05	No	6.877	7.347
		New connections (commercial and institutional)	S.2.A.06	No	861	742
Complaints	Complaints	Complaints received (technical)	S.2.B.01	No	0	3.627
		Complaints received (commercial)	S.2.B.02	No	0	0
Financial						
Sales	Values	Value of sales to households	S.3.A.01	EUR	700.617	714.879
		Value of sales to households relative to plan	S.3.A.02	% of plan estimate	88%	90%
		Value of sales to com & inst	S.3.A.03	EUR	440.569	482.319
		Value of sales to com & inst relative to plan	S.3.A.04	% of plan estimate	86%	94%
Unit costs	Treatment and disposal	Unit operational cost of treatment and disposal per m³	S.3.B.01	EUR/m3	N/A	N/A
		Unit total cost of treatment and disposal per m³	S.3.B.02	EUR/m3	N/A	N/A
		Unit operational cost of treatment and disposal per household	S.3.B.03	EUR/household	N/A	N/A
		Unit total cost of treatment and disposal per household	S.3.B.04	EUR/household	N/A	N/A
	Collection	Unit operational cost of wastewater collection per household	S.3.B.05	EUR/household	N/A	N/A
		Unit total cost of wastewater collection per household	S.3.B.06	EUR/household	N/A	N/A
		Unit operational cost of wastewater collection per household	S.3.B.07	EUR/household	1.51	1.24
		Unit operational cost of wastewater services per household	S.3.B.08	EUR/household	1.65	1.33
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	S.3.C.01	EUR	6.215	0
		Total capital maintenance expenditure relative to plan	S.3.C.02	% of plan estimate	3%	0%
		Total capital maintenance expenditure relative to RAB	S.3.C.03	% of RAB	0.1%	0%
	Capital enhancement	Total capital enhancement expenditure	S.3.C.04	EUR	15.168	136.509
		Total capital enhancement expenditure relative to plan	S.3.C.05	% of plan estimate	27%	237%
F – Financial						
Sales and revenue collection						
Sales		Total sales	F.1.A.01	EUR	12,763,864	13,430,296
		Total sales relative to plan	F.1.A.02	% of plan estimate	87%	91%
Collection efficiency		Total revenue collection	F.1.B.01	EUR	9,638,404	12,406,535
		Total revenue collection out-performance	F.1.B.02	EUR	-1,792,368	612,265
		Total revenue collection out-performance (relative)	F.1.B.03	% of plan estimate	84%	105%
		Total revenues written off (billing-revenue from previous year)	F.1.B.04	EUR	2,391,457	3,125,460
		Total revenues written off relative to billing	F.1.B.05	% of billing	19%	23%
		Revenue collection relative to billing	F.1.B.06	% of billing	76%	92%
		Accounts receivable	F.1.B.07	EUR	N/A	N/A
		Accounts receivable relative to turnover	F.1.B.08	Days turnover	N/A	N/A
Key financial values and ratios						
Values		Free cash flow	F.2.A.01	EUR	N/A	N/A
Ratios	Returns	Return on capital	F.2.B.01	%	4.80%	5.71%
		Cost of debit	F.2.B.02	%	N/A	N/A
		Gearing	F.2.B.03	ratios	N/A	N/A
	Ratios	Cash interest cover	F.2.B.04	ratios	N/A	N/A
		Funds from operations/debts	F.2.B.05	ratios	N/A	N/A
		Cash interest cover	F.2.B.06	ratios	N/A	N/A

## RWC Hidroregjioni Jugor (Prizren)

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
W - Water supply						
Non-financial (technical)						
Standards of service	Quality	Water quality (bacteriological)	W.1.A.01	% pass	92.9%	98.5%
		Water quality (physical and chemical)	W.1.A.02	% pass	99.7%	94%
	Pressure	Properties affected by low pressure	W.1.A.03	No	0	0
		Properties affected by low pressure	W.1.A.04	% properties	0%	0%
	Reliability	Properties with 24 hour supply	W.1.A.05	No	35.965	37.663
		Properties with 24 hour supply	W.1.A.06	% properties	99%	99%
		Properties with 18-24 hour supply	W.1.A.07	No	200	100
		Properties with 18-24 hour supply	W.1.A.08	% properties	1%	0%
		Properties with less than 18 hour supply	W.1.A.09	No	200	200
		Properties with less than 18 hour supply	W.1.A.10	% properties	1%	1%
Infrastructure serviceability	Non-revenue water	Non-revenue water (total)	W.1.B.01	m3 per year	10,010,227	10,025,665
		Non-revenue water (per connection)	W.1.B.02	litters per cons. per day	654	629
		Non-revenue water (per connection) - adjusted	W.1.B.03	litters per cons. per day	655	630
		Non-revenue water (relative to production)	W.1.B.04	% production	58%	58%
	Pipe bursts	Pipe network bursts frequency	W.1.B.05	bursts per month	156	196
		Pipe network burst per 100 km of pipe	W.1.B.06	No / 100 km	366	462
		Non-financial (commercial)				
Service coverage	Households	Households served	W.2.A.01	No	36.366	37.964
		Coverage (households served relative to total)	W.2.A.02	% total households	67%	69%
	New connections	New connections (household)	W.2.A.03	No	1.415	1.781
		New connections (commercial and institutional)	W.2.A.04	No	189	91
Metering	Metering rate	Metered households relative to total households	W.2.B.01	% total households	95%	94%
		Metered com & inst relative to total com & inst.	W.2.B.02	% com & inst	98%	97%
	Meters installed	Meters installed (households)	W.2.B.03	No	0	1.862
		Meters installed (com & inst)	W.2.B.04	No	0	199
Complaints	Complaints	Complaints received (technical)	W.2.C.01	No	878	1.420
		Complaints received (commercial)	W.2.C.02	No	510	808
Financial						
Sales	Volumes	Volume of sales to households (metered)	W.3.A.01	m3	5,335,395	5,379,416
		Volume of sales to households (metered) relative to plan estimates	W.3.A.02	% of plan estimate	76%	71%
		Volume of sales to households (un-metered)	W.3.A.03	m3	773,761	795,034
		Volume of sales to households (un-metered) relative to plan estimates	W.3.A.04	% of plan estimate	243%	271%
		Volume of sales to com & inst (metered)	W.3.A.05	% of plan estimate	1,084,407	1,055,358
		Volume of sales to com & inst (metered) relative to plan estimates	W.3.A.06	% of plan estimate	70%	66%
		Volume of sales to com & inst (un-metered)	W.3.A.07	% of plan estimate	104.899	115.740
		Volume of sales to com & inst (un-metered) relative to plan estimates	W.3.A.08	% of plan estimate	1,727%	2,391%
	Values	Value of water sales to households	W.3.A.09	EUR	2,639,603	2,680,511
		Value of water sales to households relative to plan estimates	W.3.A.10	% of plan estimate	85%	84%
		Value of water sales to com & inst	W.3.A.11	EUR	1,023,252	1,014,339
		Value of water sales to com & inst relative to plan estimates	W.3.A.12	% of plan estimate	81%	81%
Unit costs	Production	Unit operational cost of water production	W.3.B.01	EUR/m3	0.083	0.082
		Unit total cost of water production	W.3.B.02	EUR/m3	0.085	0.084
	Total costs	Unit cost of water sold	W.3.B.03	EUR/m3	0.397	0.396
		Unit cost of water sold and paid for	W.3.B.04	EUR/m3	N/A	N/A
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	W.3.C.01	EUR	95.923	23.888
		Total capital maintenance expenditure relative to plan	W.3.C.02	% of plan estimate	26%	0.29%
		Total capital maintenance expenditure relative to RAB	W.3.C.03	% of RAB	1.4%	0.34%
		Total capital enhancement expenditure	W.3.C.04	EUR	199.534	1,141,680
	Capital enhancement	Total capital enhancement expenditure relative to plan	W.3.C.05	% of plan estimate	3.5%	13%

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
S - Sewerage (wastewater)						
Non-financial (technical)						
Standards of service	Discharge quality	Discharge quality	S.1.A.01	% pass	N/A	N/A
Reliability	Sewer overflows	Sewer overflows	S.1.B.01	No	987	1.036
		Sewer overflows per 100 km of pipe	S.1.B.02	No per 100 km	366	384
Serviceability	Sewer collapses	Sewer collapses	S.1.C.01	No	45	59
		Sewer collapses per 100 km of pipe	S.1.C.02	No per 100 km	16.7	21.85
	Wastewater treatment plan overflows	Wastewater treatment plan overflows	S.1.C.03	No	N/A	N/A
Non-financial (commercial)						
Service coverage	Households	Households served	S.2.A.01	No	31.292	32.860
		Coverage (households served relative to total)	S.2.A.02	% total households	58%	59%
		Households served with wastewater treatment	S.2.A.03	No	0	0
		Coverage (households served with wastewater treatment relative to total)	S.2.A.04	% total households	0%	0%
	New connections	New connections (household)	S.2.A.05	No	1.126	2.010
		New connections (commercial and institutional)	S.2.A.06	No	174	78
Complaints	Complaints	Complaints received (technical)	S.2.B.01	No	0	63
		Complaints received (commercial)	S.2.B.02	No	0	24
Financial						
Sales	Values	Value of sales to households	S.3.A.01	EUR	313.912	319.249
		Value of sales to households relative to plan	S.3.A.02	% of plan estimate	91%	93%
		Value of sales to com & inst	S.3.A.03	EUR	127.128	125.328
		Value of sales to com & inst relative to plan	S.3.A.04	% of plan estimate	76%	76%
Unit costs	Treatment and disposal	Unit operational cost of treatment and disposal per m³	S.3.B.01	EUR/m3	N/A	N/A
		Unit total cost of treatment and disposal per m³	S.3.B.02	EUR/m3	N/A	N/A
		Unit operational cost of treatment and disposal per household	S.3.B.03	EUR/household	N/A	N/A
		Unit total cost of treatment and disposal per household	S.3.B.04	EUR/household	N/A	N/A
	Collection	Unit operational cost of wastewater collection per household	S.3.B.05	EUR/household	N/A	N/A
		Unit total cost of wastewater collection per household	S.3.B.06	EUR/household	N/A	N/A
		Unit operational cost of wastewater collection per household	S.3.B.07	EUR/household	10.65	10.19
		Unit operational cost of wastewater services per household	S.3.B.08	EUR/household	10.70	10.23
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	S.3.C.01	EUR	0	1.125
		Total capital maintenance expenditure relative to plan	S.3.C.02	% of plan estimate	0%	0.08%
		Total capital maintenance expenditure relative to RAB	S.3.C.03	% of RAB	0%	0.05%
	Capital enhancement	Total capital enhancement expenditure	S.3.C.04	EUR	859.163	1.624
		Total capital enhancement expenditure relative to plan	S.3.C.05	% of plan estimate	15.8%	0.04%
F – Financial						
Sales and revenue collection						
Sales		Total sales	F.1.A.01	EUR	4,103,895	4,139,428
		Total sales relative to plan	F.1.A.02	% of plan estimate	84%	83%
Collection efficiency		Total revenue collection	F.1.B.01	EUR	3,045,725	3,613,049
		Total revenue collection out-performance	F.1.B.02	EUR	-761.114	-358.752
		Total revenue collection out-performance (relative)	F.1.B.03	% of plan estimate	80%	91%
		Total revenues written off	F.1.B.04	EUR	971.282	1,058,171
		Total revenues written off relative to billing	F.1.B.05	% of billing	24%	26%
		Revenue collection relative to billing	F.1.B.06	% of billing	74%	87%
		Accounts receivable	F.1.B.07	EUR	N/A	N/A
		Accounts receivable relative to turnover	F.1.B.08	Days turnover	N/A	N/A
Key financial values and ratios						
Values		Free cash flow	F.2.A.01	EUR	N/A	N/A
Ratios	Returns	Return on capital	F.2.B.01	%	-0.87%	-1.76%
		Cost of debit	F.2.B.02	%	N/A	N/A
	Ratios	Gearing	F.2.B.03	ratios	N/A	N/A
		Cash interest cover	F.2.B.04	ratios	N/A	N/A
		Funds from operations/debts	F.2.B.05	ratios	N/A	N/A
		Cash interest cover	F.2.B.06	ratios	N/A	N/A

## RWC Hidrodrini (Peja)

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
W - Water supply						
Non-financial (technical)						
Standards of service	Quality	Water quality (bacteriological)	W.1.A.01	% pass	92%	98.9%
		Water quality (physical and chemical)	W.1.A.02	% pass	93%	94%
	Pressure	Properties affected by low pressure	W.1.A.03	No	0	0
		Properties affected by low pressure	W.1.A.04	% properties	0%	0%
	Reliability	Properties with 24 hour supply	W.1.A.05	No	36.908	39.107
		Properties with 24 hour supply	W.1.A.06	% properties	100%	100%
		Properties with 18-24 hour supply	W.1.A.07	No	14	14
		Properties with 18-24 hour supply	W.1.A.08	% properties	0%	0%
		Properties with less than 18 hour supply	W.1.A.09	No	0	0
		Properties with less than 18 hour supply	W.1.A.10	% properties	0%	0%
Infrastructure serviceability	Non-revenue water	Non-revenue water (total)	W.1.B.01	m3 per day	16,776,858	16,556,768
		Non-revenue water (per connection)	W.1.B.02	liters per cons. per day	1.101	1.026
		Non-revenue water (per connection) - adjusted	W.1.B.03	liters per cons. per day	1.101	1.026
		Non-revenue water (relative to production)	W.1.B.04	% production	66%	65%
	Pipe bursts	Pipe network bursts frequency	W.1.B.05	bursts per month	57	158
		Pipe network burst per 100 km of pipe	W.1.B.06	No / 100 km	116	239
Non-financial (commercial)						
Service coverage	Households	Households served	W.2.A.01	No	36.921	39.121
		Coverage (households served relative to total)	W.2.A.02	% total households	95%	99%
	New connections	New connections (household)	W.2.A.03	No	2.644	1.756
		New connections (commercial and institutional)	W.2.A.04	No	280	252
Metering	Metering rate	Metered households relative to total households	W.2.B.01	% total households	95%	95%
		Metered com & inst relative to total com & inst.	W.2.B.02	% kom & inst	96%	95%
	Meters installed	Meters installed (households)	W.2.B.03	No	1.057	2.970
		Meters installed (com & inst)	W.2.B.04	No	49	423
Complaints	Complaints	Complaints received (technical)	W.2.C.01	No	2.485	1.309
		Complaints received (commercial)	W.2.C.02	No	68	85
Financial						
Sales	Volumes	Volume of sales to households (metered)	W.3.A.01	m3	6,766,061	7,048,032
		Volume of sales to households (metered) relative to plan estimates	W.3.A.02	% of plan estimate	89%	88%
		Volume of sales to households (un-metered)	W.3.A.03	m3	186.505	178.891
		Volume of sales to households (un-metered) relative to plan estimates	W.3.A.04	% of plan estimate	63%	90%
		Volume of sales to com & inst (metered)	W.3.A.05	% of plan estimate	1,825,801	1,772,266
		Volume of sales to com & inst (metered) relative to plan estimates	W.3.A.06	% of plan estimate	104%	100%
		Volume of sales to com & inst (un-metered)	W.3.A.07	% of plan estimate	4.763	7.769
		Volume of sales to com & inst (un-metered) relative to plan estimates	W.3.A.08	% of plan estimate	24%	78%
	Values	Value of water sales to households	W.3.A.09	EUR	2,091,660	2,186,374
		Value of water sales to households relative to plan estimates	W.3.A.10	% of plan estimate	91%	94%
		Value of water sales to com & inst	W.3.A.11	EUR	1,048,079	1,023,683
		Value of water sales to com & inst relative to plan estimates	W.3.A.12	% of plan estimate	104%	104%
Unit costs	Production	Unit operational cost of water production	W.3.B.01	EUR/m3	0.006	0.005
		Unit total cost of water production	W.3.B.02	EUR/m3	0.008	0.007
	Total costs	Unit cost of water sold	W.3.B.03	EUR/m3	0.242	0.249
		Unit cost of water sold and paid for	W.3.B.04	EUR/m3	N/A	N/A
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	W.3.C.01	EUR	0	2.140
		Total capital maintenance expenditure relative to plan	W.3.C.02	% of plan estimate	0%	1.59%
		Total capital maintenance expenditure relative to RAB	W.3.C.03	% of RAB	0	0
	Capital enhancement	Total capital enhancement expenditure	W.3.C.04	EUR	1,945,692	149,217
		Total capital enhancement expenditure relative to plan	W.3.C.05	% of plan estimate	236%	48%

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
S - Sewerage (wastewater)						
Non-financial (technical)						
Standards of service	Discharge quality	Discharge quality	S.1.A.01	% pass	N/A	N/A
Reliability	Sewer overflows	Sewer overflows	S.1.B.01	No	169	0
		Sewer overflows per 100 km of pipe	S.1.B.02	No per 100 km	133	0
Serviceability	Sewer collapses	Sewer collapses	S.1.C.01	No	0	525
		Sewer collapses per 100 km of pipe	S.1.C.02	No per 100 km	0	343
		Wastewater treatment plan overflows	S.1.C.03	No	N/A	N/A
	Non-financial (commercial)					
Service coverage	Households	Households served	S.2.A.01	No	14.765	15.353
		Coverage (households served relative to total)	S.2.A.02	% total households	38%	39%
		Households served with wastewater treatment	S.2.A.03	No	0	0
		Coverage (households served with wastewater treatment relative to total)	S.2.A.04	% total households	0%	0%
	New connections	New connections (household)	S.2.A.05	No	421	756
		New connections (commercial and institutional)	S.2.A.06	No	83	86
Complaints	Complaints	Complaints received (technical)	S.2.B.01	No	1.084	951
		Complaints received (commercial)	S.2.B.02	No	0	0
Financial						
Sales	Values	Value of sales to households	S.3.A.01	EUR	168.294	181.359
		Value of sales to households relative to plan	S.3.A.02	% of plan estimate	89%	98%
		Value of sales to com & inst	S.3.A.03	EUR	144.790	145.312
		Value of sales to com & inst relative to plan	S.3.A.04	% of plan estimate	101.%	103%
Unit costs	Treatment and disposal	Unit operational cost of treatment and disposal per m³	S.3.B.01	EUR/m3	N/A	N/A
		Unit total cost of treatment and disposal per m³	S.3.B.02	EUR/m3	N/A	N/A
		Unit operational cost of treatment and disposal per household	S.3.B.03	EUR/household	N/A	N/A
		Unit total cost of treatment and disposal per household	S.3.B.04	EUR/household	N/A	N/A
	Collection	Unit operational cost of wastewater collection per household	S.3.B.05	EUR/household	N/A	N/A
		Unit total cost of wastewater collection per household	S.3.B.06	EUR/household	N/A	N/A
		Unit operational cost of wastewater collection per household	S.3.B.07	EUR/household	5.28	4.34
		Unit operational cost of wastewater services per household	S.3.B.08	EUR/household	5.39	4.46
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	S.3.C.01	EUR	0	174
		Total capital maintenance expenditure relative to plan	S.3.C.02	% of plan estimate	0%	0.3%
		Total capital maintenance expenditure relative to RAB	S.3.C.03	% of RAB	0%	0%
	Capital enhancement	Total capital enhancement expenditure	S.3.C.04	EUR	89.247	88.755
		Total capital enhancement expenditure relative to plan	S.3.C.05	% of plan estimate	41%	14%
F – Financial						
Sales and revenue collection						
Sales		Total sales	F.1.A.01	EUR	3,452,823	3,536,728
		Total sales relative to plan	F.1.A.02	% of plan estimate	95%	97%
Collection efficiency		Total revenue collection	F.1.B.01	EUR	2,511,837	2,766,870
		Total revenue collection out-performance	F.1.B.02	EUR	-151,840	-54,342
		Total revenue collection out-performance (relative)	F.1.B.03	% of plan estimate	94%	98%
		Total revenues written off	F.1.B.04	EUR	1,072,765	940,987
		Total revenues written off relative to billing	F.1.B.05	% of billing	31%	27%
		Revenue collection relative to billing	F.1.B.06	% of billing	73%	78%
		Accounts receivable	F.1.B.07	EUR	N/A	N/A
		Accounts receivable relative to turnover	F.1.B.08	Days turnover	N/A	N/A
Key financial values and ratios						
Values		Free cash flow	F.2.A.01	EUR	N/A	N/A
Ratios	Returns	Return on capital	F.2.B.01	%	2.50%	3.02%
		Cost of debit	F.2.B.02	%	N/A	N/A
		Gearing	F.2.B.03	ratios	N/A	N/A
	Ratios	Cash interest cover	F.2.B.04	ratios	N/A	N/A
		Funds from operations/debts	F.2.B.05	ratios	N/A	N/A
		Cash interest cover	F.2.B.06	ratios	N/A	N/A

## RWC Mitrovica (Mitrovica)

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
W - Water supply						
Non-financial (technical)						
Standards of service	Quality	Water quality (bacteriological)	W.1.A.01	% pass	98%	99%
		Water quality (physical and chemical)	W.1.A.02	% pass	98%	100%
	Pressure	Properties affected by low pressure	W.1.A.03	No	1.225	1.225
		Properties affected by low pressure	W.1.A.04	% properties	5.6%	5.1%
	Reliability	Properties with 24 hour supply	W.1.A.05	No	19.307	22.327
		Properties with 24 hour supply	W.1.A.06	% properties	88%	93%
		Properties with 18-24 hour supply	W.1.A.07	No	1.750	0
		Properties with 18-24 hour supply	W.1.A.08	% properties	8%	0%
		Properties with less than 18 hour supply	W.1.A.09	No	891	1.741
		Properties with less than 18 hour supply	W.1.A.10	% properties	4%	7%
Infrastructure serviceability	Non-revenue water	Non-revenue water (total)	W.1.B.01	m3 per year	13,884,319	15,703,746
		Non-revenue water (per connection)	W.1.B.02	litters per cons. per day	1.552	1.606
		Non-revenue water (per connection) - adjusted	W.1.B.03	litters per cons. per day	1.584	1.635
		Non-revenue water (relative to production)	W.1.B.04	% production	60%	62%
	Pipe bursts	Pipe network bursts frequency	W.1.B.05	bursts per month	96	117
		Pipe network burst per 100 km of pipe	W.1.B.06	No / 100 km	165	202
		Non-financial (commercial)				
Service coverage	Households	Households served	W.2.A.01	No	21.948	24.068
		Coverage (households served relative to total)	W.2.A.02	% total households	65%	71%
	New connections	New connections (household)	W.2.A.03	No	2.557	1.683
		New connections (commercial and institutional)	W.2.A.04	No	810	-472
Metering	Metering rate	Metered households relative to total households	W.2.B.01	% total households	65%	64%
		Metered com & inst relative to total com & inst.	W.2.B.02	% cons & inst	92%	89%
	Meters installed	Meters installed (households)	W.2.B.03	No	390	630
		Meters installed (com & inst)	W.2.B.04	No	0	0
Complaints	Complaints	Complaints received (technical)	W.2.C.01	No	1.147	1.468
		Complaints received (commercial)	W.2.C.02	No	162	177
Financial						
Sales	Volumes	Volume of sales to households (metered)	W.3.A.01	m3	2,045,301	2,464,143
		Volume of sales to households (metered) relative to plan estimates	W.3.A.02	% of plan estimate	51%	48%
		Volume of sales to households (un-metered)	W.3.A.03	m3	1,924,824	2,015,598
		Volume of sales to households (un-metered) relative to plan estimates	W.3.A.04	% of plan estimate	118%	261%
		Volume of sales to com & inst (metered)	W.3.A.05	% of plan estimate	564.024	546.379
		Volume of sales to com & inst (metered) relative to plan estimates	W.3.A.06	% of plan estimate	102%	95%
		Volume of sales to com & inst (un-metered)	W.3.A.07	% of plan estimate	28.641	26.064
		Volume of sales to com & inst (un-metered) relative to plan estimates	W.3.A.08	% of plan estimate	120%	477%
	Values	Value of water sales to households	W.3.A.09	EUR	1,666,840	1,871,661
		Value of water sales to households relative to plan estimates	W.3.A.10	% of plan estimate	73%	80%
		Value of water sales to com & inst	W.3.A.11	EUR	509.055	492.287
		Value of water sales to com & inst relative to plan estimates	W.3.A.12	% of plan estimate	101%	99.8%
Unit costs	Production	Unit operational cost of water production	W.3.B.01	EUR/m3	0.043	0.045
		Unit total cost of water production	W.3.B.02	EUR/m3	0.043	0.046
	Total costs	Unit cost of water sold	W.3.B.03	EUR/m3	0.393	0.290
		Unit cost of water sold and paid for	W.3.B.04	EUR/m3	N/A	N/A
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	W.3.C.01	EUR	0	0
		Total capital maintenance expenditure relative to plan	W.3.C.02	% of plan estimate	0%	0%
		Total capital maintenance expenditure relative to RAB	W.3.C.03	% of RAB	0%	0%
	Capital enhancement	Total capital enhancement expenditure	W.3.C.04	EUR	0	8,254,536
		Total capital enhancement expenditure relative to plan	W.3.C.05	% of plan estimate	0%	847%

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
S - Sewerage (wastewater)						
Non-financial (technical)						
Standards of service	Discharge quality	Discharge quality	S.1.A.01	% pass	N/A	N/A
Reliability	Sewer overflows	Sewer overflows	S.1.B.01	No	1.049	0
		Sewer overflows per 100 km of pipe	S.1.B.02	No per 100 km	519	0
Serviceability	Sewer collapses	Sewer collapses	S.1.C.01	No	0	0
		Sewer collapses per 100 km of pipe	S.1.C.02	No per 100 km	0	0
	Wastewater treatment plan overflows	Wastewater treatment plan overflows	S.1.C.03	No	N/A	N/A
Non-financial (commercial)						
Service coverage	Households	Households served	S.2.A.01	No	17.308	18.357
		Coverage (households served relative to total)	S.2.A.02	% total households	51%	54%
		Households served with wastewater treatment	S.2.A.03	No	2.198	0
		Coverage (households served with wastewater treatment relative to total)	S.2.A.04	% total households	12.7%	0%
	New connections	New connections (household)	S.2.A.05	No	636	1.461
New connections (commercial and institutional)		S.2.A.06	No	454	-148	
Complaints	Complaints	Complaints received (technical)	S.2.B.01	No	1.591	0
		Complaints received (commercial)	S.2.B.02	No	0	0
Financial						
Sales	Values	Value of sales to households	S.3.A.01	EUR	298.246	327.798
		Value of sales to households relative to plan	S.3.A.02	% of plan estimate	79%	89%
		Value of sales to com & inst	S.3.A.03	EUR	142.481	129.982
		Value of sales to com & inst relative to plan	S.3.A.04	% of plan estimate	118%	110%
Unit costs	Treatment and disposal	Unit operational cost of treatment and disposal per m³	S.3.B.01	EUR/m3	N/A	N/A
		Unit total cost of treatment and disposal per m³	S.3.B.02	EUR/m3	N/A	N/A
		Unit operational cost of treatment and disposal per household	S.3.B.03	EUR/household	N/A	N/A
		Unit total cost of treatment and disposal per household	S.3.B.04	EUR/household	N/A	N/A
	Collection	Unit operational cost of wastewater collection per household	S.3.B.05	EUR/household	N/A	N/A
		Unit total cost of wastewater collection per household	S.3.B.06	EUR/household	N/A	N/A
		Unit operational cost of wastewater collection per household	S.3.B.07	EUR/household	16.43	8.46
		Unit operational cost of wastewater services per household	S.3.B.08	EUR/household	16.44	8.46
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	S.3.C.01	EUR	0	0
		Total capital maintenance expenditure relative to plan	S.3.C.02	% of plan estimate	0%	0%
		Total capital maintenance expenditure relative to RAB	S.3.C.03	% of RAB	0%	0%
	Capital enhancement	Total capital enhancement expenditure	S.3.C.04	EUR	0	426,34
		Total capital enhancement expenditure relative to plan	S.3.C.05	% of plan estimate	0%	0%
F – Financial						
Sales and revenue collection						
Sales	Total sales		F.1.A.01	EUR	2,616,622	2,821,728
	Total sales relative to plan		F.1.A.02	% of plan estimate	80%	85%
Collection efficiency	Total revenue collection		F.1.B.01	EUR	1,459,998	1,652,594
	Total revenue collection out-performance		F.1.B.02	EUR	-467,580	-524,217
	Total revenue collection out-performance (relative)		F.1.B.03	% of plan estimate	76%	75%
	Total revenues written off		F.1.B.04	EUR	1,268,268	1,156,624
	Total revenues written off relative to billing		F.1.B.05	% of billing	48%	41%
	Revenue collection relative to billing		F.1.B.06	% of billing	56%	59%
	Accounts receivable		F.1.B.07	EUR	N/A	N/A
	Accounts receivable relative to turnover		F.1.B.08	Days turnover	N/A	N/A
Key financial values and ratios						
Values		Free cash flow	F.2.A.01	EUR	N/A	N/A
Ratios	Returns	Return on capital	F.2.B.01	%	-11,16	1.34
		Cost of debit	F.2.B.02	%	N/A	N/A
		Gearing	F.2.B.03	ratios	N/A	N/A
	Ratios	Cash interest cover	F.2.B.04	ratios	N/A	N/A
		Funds from operations/debts	F.2.B.05	ratios	N/A	N/A
		Cash interest cover	F.2.B.06	ratios	N/A	N/A

## RWC Radoniqi (Gjakova)

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
W - Water supply						
Non-financial (technical)						
Standards of service	Quality	Water quality (bacteriological)	W.1.A.01	% pass	100%	99.7%
		Water quality (physical and chemical)	W.1.A.02	% pass	100%	100%
	Pressure	Properties affected by low pressure	W.1.A.03	No	140	0
		Properties affected by low pressure	W.1.A.04	% properties	0.50%	0%
	Reliability	Properties with 24 hour supply	W.1.A.05	No	27,813	29,734
		Properties with 24 hour supply	W.1.A.06	% properties	99%	100%
		Properties with 18-24 hour supply	W.1.A.07	No	155	0
		Properties with 18-24 hour supply	W.1.A.08	% properties	1%	0%
		Properties with less than 18 hours supply	W.1.A.09	No	155	0
		Properties with less than 18 hours supply	W.1.A.10	% properties	1%	0%
Infrastructure serviceability	Non-revenue water	Non revenue water (total)	W.1.B.01	m3 per year	6,642,820	7,230,107
		Non revenue water (per connection)	W.1.B.02	litres per cons. per day	571	590
		Non revenue water (per connection) - adjusted	W.1.B.03	litres per cons. per day	573	590
		Non revenue water (relative to production)	W.1.B.04	% production	48%	47%
	Pipe bursts	Pipe network bursts frequency	W.1.B.05	bursts per month	176	211
		Pipe network bursts per 100 km of pipe	W.1.B.06	No / 100 km	392	403
Non-financial (commercial)						
Service coverage	Households	Households served	W.2.A.01	No	28,123	29,734
		Coverage (households served relative to total)	W.2.A.02	% total households	99%	102%
	New connections	New connections (household)	W.2.A.03	No	1,660	1,562
		New connections (commercial and institutional)	W.2.A.04	No	123	51
Metering	Metering rate	Metered households relative to total households	W.2.B.01	% total households	95%	97%
		Metered com & inst relative to total com & inst.	W.2.B.02	% com & inst	100%	100%
	Meters installed	Meters installed (households)	W.2.B.03	No	373	357
		Meters installed (com & inst)	W.2.B.04	No	11	39
Complaints	Complaints	Complaints received (technical)	W.2.C.01	No	43	189
		Complaints received (commercial)	W.2.C.02	No	345	714
Financial						
Sales	Volumes	Volume of sales to households (metered)	W.3.A.01	m3	5,878,972	6,789,131
		Volume of sales to households (metered) relative to plan estimates	W.3.A.02	% of plan estimate	96%	110%
		Volume of sales to households (un-metered)	W.3.A.03	m3	389,300	356,874
		Volume of sales to households (un-metered) relative to plan estimates	W.3.A.04	% of plan estimate	75%	71%
		Volume of sales to com & inst (metered)	W.3.A.05	% of plan estimate	810,875	871,862
		Volume of sales to com & inst (un-metered) relative to plan estimates	W.3.A.06	% of plan estimate	97%	104%
		Volume of sales to com & inst (metered)	W.3.A.07	% of plan estimate	0	0
		Volume of sales to com & inst (un-metered) relative to plan estimates	W.3.A.08	% of plan estimate	0%	0%
	Values	Value of water sales to households	W.3.A.09	EUR	2,556,508	2,567,138
		Value of water sales to households relative to plan estimates	W.3.A.10	% of plan estimate	95%	96%
		Value of water sales to com & inst	W.3.A.11	EUR	692,200	711,101
		Value of water sales to com & inst relative to plan estimates	W.3.A.12	% of plan estimate	96%	100%
Unit costs	Production	Unit operational cost of water production	W.3.B.01	EUR/m3	0.025	0.028
		Unit total cost of water production	W.3.B.02	EUR/m3	0.031	0.033
	Total costs	Unit cost of water sold	W.3.B.03	EUR/m3	0.373	0.357
		Unit cost of water sold and paid for	W.3.B.04	EUR/m3	N/A	N/A
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	W.3.C.01	EUR	403,322	108,949
		Total capital maintenance expenditure relative to plan	W.3.C.02	% of plan estimate	54%	14%
		Total capital maintenance expenditure relative to RAB	W.3.C.03	% e RAB	5.9%	1.5%
		Total capital enhancement expenditure	W.3.C.04	EUR	864,891	1,898,531
	Capital enhancement	Total capital enhancement expenditure relative to plan	W.3.C.05	% of plan estimate	25%	171%



Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
<b>S - Sewerage (wastewater)</b>						
<b>Non-financial (technical)</b>						
Standards of service	Discharge quality	Discharge quality	S.1.A.01	% pass	N/A	N/A
Reliability	Sewer overflows	Sewer overflows	S.1.B.01	No	749	0
		Sewer overflows per 100 km of pipe	S.1.B.02	No per 100 km	945	0
Serviceability	Sewer collapses	Sewer collapses	S.1.C.01	No	0	8
		Sewer collapses per 100 km of pipe	S.1.C.02	No per 100 km	0	9.88
	WWTP overflows	Wastewater treatment plant overflows	S.1.C.03	No	N/A	N/A
<b>Non-financial (commercial)</b>						
Service coverage	Households	Households served	S.2.A.01	No	17,356	20,878
		Coverage (households served relative to total)	S.2.A.02	% total households	61%	72%
		Households served with wastewater treatment	S.2.A.03	No	0	0
		Coverage (households served with wastewater treatment relative to total)	S.2.A.04	% total households	0%	0%
	New connections	New connections (household)	S.2.A.05	No	5,976	1,067
		New connections (commercial and institutional)	S.2.A.06	No	473	-72
Complaints	Complaints	Complaints received (technical)	S.2.B.01	No	254	316
		Complaints received (commercial)	S.2.B.02	No	22	75
<b>Financial</b>						
Sales	Values	Value of sales to households	S.3.A.01	EUR	374,081	357,132
		Value of sales to households relative to plan	S.3.A.02	% of plan estimate	114%	108%
		Value of sales to com & inst	S.3.A.03	EUR	140,399	156,052
		Value of sales to com & inst relative to plan	S.3.A.04	% of plan estimate	113%	127%
Unit costs	Treatment and disposal	Unit operational cost of treatment and disposal per m <sup>3</sup>	S.3.B.01	EUR/m <sup>3</sup>	N/A	N/A
		Unit total cost of treatment and disposal per m <sup>3</sup>	S.3.B.02	EUR/m <sup>3</sup>	N/A	N/A
		Unit operational cost of treatment and disposal per household	S.3.B.03	EUR/ household	N/A	N/A
		Unit total cost of treatment and disposal per household	S.3.B.04	EUR/ household	N/A	N/A
	Collection	Unit operational cost of wastewater collection per household	S.3.B.05	EUR/ household	N/A	N/A
		Unit total cost of wastewater collection per household	S.3.B.06	EUR/ household	N/A	N/A
		Unit operational cost of wastewater services per household	S.3.B.07	EUR/ household	7.86	7.41
		Unit total cost of wastewater services per household	S.3.B.08	EUR/ household	8.95	8.04
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	S.3.C.01	EUR	37,899	3,608
		Total capital maintenance expenditure relative to plan	S.3.C.02	% of plan estimate	190%	14%
		Total capital maintenance expenditure relative to RAB	S.3.C.03	% of RAB	2.3%	0.2%
	Capital enhancement	Total capital enhancement expenditure	S.3.C.04	EUR	4,313	98,554
		Total capital enhancement expenditure relative to plan	S.3.C.05	% of plan estimate	0.1%	2.2%
<b>F – Financial</b>						
<b>Sales and revenue collection</b>						
Sales		Total sales	F.1.A.01	EUR	3,763,187	3,791,423
		Total sales relative to plan	F.1.A.02	% of plan estimate	97%	99%
Collection efficiency		Total revenue collection	F.1.B.01	EUR	3,145,009	3,586,413
		Total revenue collection out-performance	F.1.B.02	EUR	184,079	590,401
		Total revenue collection out-performance(relative)	F.1.B.03	% of plan estimate	106%	120%
		Total revenues written off	F.1.B.04	EUR	588,178	618,178
		Total revenues written off relative to billing	F.1.B.05	% of billing	16%	16%
		Revenue collection relative to billing	F.1.B.06	% of billing	84%	95%
		Accounts receivable	F.1.B.07	EUR	N/A	N/A
		Accounts receivable relative to turnover	F.1.B.08	Days turnover	N/A	N/A
<b>Key financial values and ratios</b>						
Values		Free cash flow	F.2.A.01	EUR	N/A	N/A
Ratios	Returns	Return on capital	F.2.B.01	%	5.02%	2.19%
		Cost of debt	F.2.B.02	%	N/A	N/A
	Ratios	Gearing	F.2.B.03	ratio	N/A	N/A
		Cash interest cover	F.2.B.04	ratio	N/A	N/A
		Funds from operations/debt	F.2.B.05	ratio	N/A	N/A
		Debt service coverage rate	F.2.B.06	ratio	N/A	N/A

## RWC Bifurkacioni (Ferizaj)

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
W - Water supply						
Non-financial (technical)						
Standards of service	Quality	Water quality (bacteriological)	W.1.A.01	% pass	99.5%	98.6%
		Water quality (physical and chemical)	W.1.A.02	% pass	99.6%	96.7%
	Pressure	Properties affected by low pressure	W.1.A.03	Nr	1,943	1,943
		Properties affected by low pressure	W.1.A.04	% properties	10%	8.9%
	Reliability	Properties with 24 hour supply	W.1.A.05	Nr	3,376	10,216
		Properties with 24 hour supply	W.1.A.06	% properties	18%	47%
		Properties with 18-24 hour supply	W.1.A.07	Nr	14,648	9,864
		Properties with 18-24 hour supply	W.1.A.08	% properties	76%	45%
		Properties with less than 18 hours supply	W.1.A.09	Nr	1,130	1,851
		Properties with less than 18 hours supply	W.1.A.10	% properties	6%	8%
Infrastructure serviceability	Non-revenue water	Non revenue water (total)	W.1.B.01	m³ per year	3,905,572	3,816,466
		Non revenue water (per connection)	W.1.B.02	litres per cons. per day	501	428
		Non revenue water (per connection) - adjusted	W.1.B.03	litres per cons. per day	564	464
		Non revenue water (relative to production)	W.1.B.04	% production	52%	52%
	Pipe bursts	Pipe network bursts frequency	W.1.B.05	bursts per month	48	56
		Pipe network bursts per 100 km of pipe	W.1.B.06	No / 100 km	252	270
Non-financial (commercial)						
Service coverage	Households	Households served	W.2.A.01	No	19,153	21,931
		Coverage (households served relative to total)	W.2.A.02	% total household cons.	88%	89%
	New connections	New connections (household)	W.2.A.03	No	4,204	1,352
		New connections (commercial and institutional)	W.2.A.04	No	194	393
Metering	Metering rate	Metered households relative to total households	W.2.B.01	% total households	91%	92%
		Metered com & inst relative to total com & inst	W.2.B.02	% com & inst	87%	91%
	Meters installed	Meters installed (households)	W.2.B.03	No	3,872	1,542
		Meters installed (com & inst)	W.2.B.04	No	536	178
Complaints	Complaints	Complaints received (technical)	W.2.C.01	No	214	10
		Complaints received (commercial)	W.2.C.02	No	159	253
Financial						
Sales	Volumes	Volume of sales to households (metered)	W.3.A.01	m³	2,632,301	2,589,886
		Volume of sales to households (metered) relative to plan estimates	W.3.A.02	% of plan estimate	79%	72%
		Volume of sales to households (un-metered)	W.3.A.03	m³	506,735	497,934
		Volume of sales to households (un-metered) relative to plan estimates	W.3.A.04	% of plan estimate	147%	296%
		Volume of sales to com & inst (metered)	W.3.A.05	% of plan estimate	358,548	318,040
		Volume of sales to com & inst (metered) relative to plan estimates	W.3.A.06	% of plan estimate	163%	139%
		Volume of sales to com & inst (un-metered)	W.3.A.07	% of plan estimate	78,109	53,136
		Volume of sales to com & inst (un-metered) relative to plan estimates	W.3.A.08	% of plan estimate	53%	40%
	Values	Value of water sales to households	W.3.A.09	EUR	1,342,775	1,288,483
		Value of water sales to households relative to plan estimates	W.3.A.10	% of plan estimate	90%	86.5%
		Value of water sales to com & inst	W.3.A.11	EUR	398,309	321,646
		Value of water sales to com & inst relative to plan estimates	W.3.A.12	% of plan estimate	122%	102%
Unit costs	Production	Unit operational cost of water production	W.3.B.01	EUR/m³	0.056	0.046
		Unit total cost of water production	W.3.B.02	EUR/m³	0.058	0.048
	Total costs	Unit cost of water sold	W.3.B.03	EUR/m³	0.386	0.395
		Unit cost of water sold and paid for	W.3.B.04	EUR/m³	N/A	N/A
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	W.3.C.01	EUR	159,365	142,261
		Total capital maintenance expenditure relative to plan	W.3.C.02	% of plan estimate	82%	39%
		Total capital maintenance expenditure relative to RAB	W.3.C.03	% of RAB	4.8%	4.2%
		Total capital enhancement expenditure	W.3.C.04	EUR	109,928	6,753
	Capital enhancement	Total capital enhancement expenditure relative to plan	W.3.C.05	% of plan estimate	146%	85%

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
S - Sewerage (wastewater)						
Non-financial (technical)						
Standards of service	Discharge quality	Discharge quality	S.1.A.01	% pass	N/A	N/A
Reliability	Sewer overflows	Sewer overflows	S.1.B.01	No	463	556
		Sewer overflows per 100 km of pipe	S.1.B.02	No per 100 km	209	246
Serviceability	Sewer collapses	Sewer collapses	S.1.C.01	No	6	0
		Sewer collapses per 100 km of pipe	S.1.C.02	No per 100 km	2.7	0
	WWTP overflows	Wastewater treatment plant overflows	S.1.C.03	No	N/A	N/A
Non-financial (commercial)						
Service coverage	Households	Households served	S.2.A.01	No	17,327	19,144
		Coverage (households served relative to total)	S.2.A.02	% total households	80%	77%
		Households served with wastewater treatment	S.2.A.03	No	0	0
		Coverage (households served with wastewater treatment relative to total)	S.2.A.04	% total households	0%	0%
	New connections	New connections (household)	S.2.A.05	No	2,417	1,218
		New connections (commercial and institutional)	S.2.A.06	No	325	26
Complaints	Complaints	Complaints received (technical)	S.2.B.01	No	11	0
		Complaints received (commercial)	S.2.B.02	No	3	53
Financial						
Sales	Values	Value of sales to households	S.3.A.01	EUR	321,793	323,733
		Value of sales to households relative to plan	S.3.A.02	% of plan estimate	73%	75%
		Value of sales to com & inst	S.3.A.03	EUR	137,042	121,289
		Value of sales to com & inst relative to plan	S.3.A.04	% of plan estimate	124%	111%
Unit costs	Treatment and disposal	Unit operational cost of treatment and disposal per m³	S.3.B.01	EUR/m3	N/A	N/A
		Unit total cost of treatment and disposal per m³	S.3.B.02	EUR/m3	N/A	N/A
		Unit operational cost of treatment and disposal per household	S.3.B.03	EUR/ household	N/A	N/A
		Unit total cost of treatment and disposal per household	S.3.B.04	EUR/ household	N/A	N/A
	Collection	Unit operational cost of wastewater collection per household	S.3.B.05	EUR/ household	N/A	N/A
		Unit total cost of wastewater collection per household	S.3.B.06	EUR/ household	N/A	N/A
		Unit operational cost of wastewater services per household	S.3.B.07	EUR/ household	5.30	10.16
		Unit total cost of wastewater services per household	S.3.B.08	EUR/ household	5.99	10.45
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	S.3.C.01	EUR	8,132	5,120
		Total capital maintenance expenditure relative to plan	S.3.C.02	% of plan estimate	6%	3%
		Total capital maintenance expenditure relative to RAB	S.3.C.03	% of RAB	1%	0.6%
	Capital enhancement	Total capital enhancement expenditure	S.3.C.04	EUR	6,772	0
		Total capital enhancement expenditure relative to plan	S.3.C.05	% of plan estimate	9.6%	0%
F – Financial						
Sales and revenue collection						
Sales	Total sales		F.1.A.01	EUR	2,199,919	2,055,151
	Total sales relative to plan		F.1.A.02	% of plan estimate	93%	88%
Collection efficiency	Total revenue collection		F.1.B.01	EUR	1,440,483	1,676,225
	Total revenue collection out-performance		F.1.B.02	EUR	-212,339	-23,292
	Total revenue collection out-performance(relative)		F.1.B.03	% of plan estimate	87%	99%
	Total revenues written off		F.1.B.04	EUR	634,998	759,436
	Total revenues written off relative to billing		F.1.B.05	% of billing	29%	37%
	Revenue collection relative to billing		F.1.B.06	% of billing	65%	82%
	Accounts receivable		F.1.B.07	EUR	N/A	N/A
	Accounts receivable relative to turnover		F.1.B.08	Days turnover	N/A	N/A
Key financial values and ratios						
Values		Free cash flow	F.2.A.01	EUR	N/A	N/A
Ratios	Returns	Return on capital	F.2.B.01	%	3.00%	-5.50%
		Cost of debt	F.2.B.02	%	N/A	N/A
		Gearing	F.2.B.03	ratio	N/A	N/A
	Ratios	Cash interest cover	F.2.B.04	ratio	N/A	N/A
		Funds from operations/debt	F.2.B.05	ratio	N/A	N/A
		Debt service coverage rate	F.2.B.06	ratio	N/A	N/A

## RWC Hidromorava (Gjilan)

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
W - Water supply						
Non-financial (technical)						
Standards of service	Quality	Water quality (bacteriological)	W.1.A.01	% pass	99.8%	96.7%
		Water quality (physical and chemical)	W.1.A.02	% pass	100%	100%
	Pressure	Properties affected by low pressure	W.1.A.03	No	993	248
		Properties affected by low pressure	W.1.A.04	% properties	4.56%	1.06%
	Reliability	Properties with 24 hour supply	W.1.A.05	No	12,665	22,962
		Properties with 24 hour supply	W.1.A.06	% properties	58%	99%
		Properties with 18-24 hour supply	W.1.A.07	No	127	139
		Properties with 18-24 hour supply	W.1.A.08	% properties	1%	1%
		Properties with less than 18 hours supply	W.1.A.09	No	8,964	141
		Properties with less than 18 hours supply	W.1.A.10	% properties	41%	1%
Infrastructure serviceability	Non-revenue water	Non revenue water (total)	W.1.B.01	m³ per day	5,181,472	4,699,450
		Non revenue water (per connection)	W.1.B.02	litres per cons. per day	588	499
		Non revenue water (per connection) - adjusted	W.1.B.03	litres per cons. per day	656	500
		Non revenue water (relative to production)	W.1.B.04	% production	61%	57%
	Pipe bursts	Pipe network bursts frequency	W.1.B.05	bursts per month	82	48
		Pipe network bursts per 100 km of pipe	W.1.B.06	No / 100 km	459	172
Non-financial (commercial)						
Service coverage	Households	Households served	W.2.A.01	No	21,755	23,242
		Coverage (households served relative to total)	W.2.A.02	% total households	68%	71%
	New connections	New connections (household)	W.2.A.03	No	-490	3,464
		New connections (commercial and institutional)	W.2.A.04	No	-672	962
Metering	Metering rate	Metered households relative to total households	W.2.B.01	% total households	85%	86%
		Metered com & inst relative to total com & inst.	W.2.B.02	% com & inst	77%	78%
	Meters installed	Meters installed (households)	W.2.B.03	No	667	227
		Meters installed (com & inst)	W.2.B.04	No	56	30
Complaints	Complaints	Complaints received (technical)	W.2.C.01	No	2,654	508
		Complaints received (commercial)	W.2.C.02	No	210	119
Financial						
Sales	Volumes	Volume of sales to households (metered)	W.3.A.01	m3	2,412,303	2,578,614
		Volume of sales to households (metered) relative to plan estimates	W.3.A.02	% of plan estimate	82%	84%
		Volume of sales to households (un-metered)	W.3.A.03	m3	495,522	485,075
		Volume of sales to households (un-metered) relative to plan estimates	W.3.A.04	% of plan estimate	88%	108%
		Volume of sales to com & inst (metered)	W.3.A.05	% of plan estimate	400,444	423,698
		Volume of sales to com & inst (metered) relative to plan estimates	W.3.A.06	% of plan estimate	99%	99%
		Volume of sales to com & inst (un-metered)	W.3.A.07	% of plan estimate	45,654	45,913
		Volume of sales to com & inst (un-metered) relative to plan estimates	W.3.A.08	% of plan estimate	106%	143%
	Values	Value of water sales to households	W.3.A.09	EUR	1,212,685	1,261,203
		Value of water sales to households relative to plan estimates	W.3.A.10	% of plan estimate	86.97%	92.09%
		Value of water sales to com & inst	W.3.A.11	EUR	363,256	372,852
		Value of water sales to com & inst relative to plan estimates	W.3.A.12	% of plan estimate	94.46%	97.07%
Unit costs	Production	Unit operational cost of water production	W.3.B.01	EUR/m3	0.066	0.063
		Unit total cost of water production	W.3.B.02	EUR/m3	0.068	0.066
	Total costs	Unit cost of water sold	W.3.B.03	EUR/m3	0.407	0.407
		Unit cost of water sold and paid for	W.3.B.04	EUR/m3	N/A	N/A
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	W.3.C.01	EUR	170,669	22,792
		Total capital maintenance expenditure relative to plan	W.3.C.02	% of plan estimate	56%	2%
		Total capital maintenance expenditure relative to RAB	W.3.C.03	% of RAB	6.5%	0.9%
		Total capital enhancement expenditure	W.3.C.04	EUR	33,387	92,198
	Capital enhancement	Total capital enhancement expenditure relative to plan	W.3.C.05	% of plan estimate	7%	15%

Category / sub-category	Sub-sub-category	Indicator	Ref	Unit	2015	2016
S - Sewerage (wastewater)						
Non-financial (technical)						
Standards of service	Discharge quality	Discharge quality	S.1.A.01	% pass	N/A	N/A
Reliability	Sewer overflows	Sewer overflows	S.1.B.01	No	1,273	0
		Sewer overflows per 100 km of pipe	S.1.B.02	No per 100 km	606	0
Serviceability	Sewer collapses	Sewer collapses	S.1.C.01	No	0	0
		Sewer collapses per 100 km of pipe	S.1.C.02	No per 100 km	0	0
		WWTP overflows	Wastewater treatment plant overflows	S.1.C.03	No	N/A
Non-financial (commercial)						
Service coverage	Households	Households served	S.2.A.01	No	16,517	18,927
		Coverage (households served relative to total)	S.2.A.02	% total households	51%	58%
		Households served with wastewater treatment	S.2.A.03	No	0	0
		Coverage (households served with wastewater treatment relative to total)	S.2.A.04	% total households	0%	0%
	New connections	New connections (household)	S.2.A.05	No	806	4,014
		New connections (commercial and institutional)	S.2.A.06	No	93	210
Complaints	Complaints	Complaints received (technical)	S.2.B.01	No	1,273	144
		Complaints received (commercial)	S.2.B.02	No	0	4
Financial						
Sales	Values	Value of sales to households	S.3.A.01	EUR	200,891	218,663
		Value of sales to households relative to plan	S.3.A.02	% of plan estimate	98%	109%
		Value of sales to com & inst	S.3.A.03	EUR	82,467	85,783
		Value of sales to com & inst relative to plan	S.3.A.04	% of plan estimate	122%	133%
Unit costs	Treatment and disposal	Unit operational cost of treatment and disposal per m³	S.3.B.01	EUR/m3	N/A	N/A
		Unit total cost of treatment and disposal per m³	S.3.B.02	EUR/m3	N/A	N/A
		Unit operational cost of treatment and disposal per household	S.3.B.03	EUR/ household	N/A	N/A
		Unit total cost of treatment and disposal per household	S.3.B.04	EUR/ household	N/A	N/A
	Collection	Unit operational cost of wastewater collection per household	S.3.B.05	EUR/ household	N/A	N/A
		Unit total cost of wastewater collection per household	S.3.B.06	EUR/ household	N/A	N/A
		Unit operational cost of wastewater services per household	S.3.B.07	EUR/ household	6.61	5.72
		Unit total cost of wastewater services per household	S.3.B.08	EUR/ household	7.14	6.15
Capital expenditure	Capital maintenance	Total capital maintenance expenditure	S.3.C.01	EUR	0	0
		Total capital maintenance expenditure relative to plan	S.3.C.02	% of plan estimate	0%	0
		Total capital maintenance expenditure relative to RAB	S.3.C.03	% of RAB	0%	0
	Capital enhancement	Total capital enhancement expenditure	S.3.C.04	EUR	784	2,062
		Total capital enhancement expenditure relative to plan	S.3.C.05	% of plan estimate	0.3%	0.3%
F – Financial						
Sales and revenue collection						
Sales		Total sales	F.1.A.01	EUR	1,859,299	1,938,501
		Total sales relative to plan	F.1.A.02	% of plan estimate	91%	96%
Collection efficiency		Total revenue collection	F.1.B.01	EUR	1,456,928	1,583,451
		Total revenue collection out-performance	F.1.B.02	EUR	-136,785	-6,524
		Total revenue collection out-performance(relative)	F.1.B.03	% of plan estimate	91%	99.59%
		Total revenues written off	F.1.B.04	EUR	483,487	402,371
		Total revenues written off relative to billing	F.1.B.05	% of billing	26%	21%
		Revenue collection relative to billing	F.1.B.06	% of billing	78%	82%
		Accounts receivable	F.1.B.07	EUR	N/A	N/A
		Accounts receivable relative to turnover	F.1.B.08	Days turnover	N/A	N/A
Key financial values and ratios						
Values		Free cash flow	F.2.A.01	EUR	N/A	N/A
Ratios	Returns	Return on capital	F.2.B.01	%	-0.31%	0.90%
		Cost of debt	F.2.B.02	%	N/A	N/A
		Gearing	F.2.B.03	ratio	N/A	N/A
	Ratios	Cash interest cover	F.2.B.04	ratio	N/A	N/A
		Funds from operations/debt	F.2.B.05	ratio	N/A	N/A
		Debt service coverage rate	F.2.B.06	ratio	N/A	N/A

## ANNEX 2. Definitions and rational

## A. Performance indicators definitions

Section	Ref	Indicator	Unit	Definition
<b>W - Water supply</b>				
<b>Non-financial (technical)</b>				
Standards of service	W.1.A.01	Water quality (bacteriological)	% pass	Percentage of bacteriological test results passing prescribed standards for bacteriological quality in the reporting period.
	W.1.A.02	Water quality (physical and chemical)	% pass	Percentage of physical and chemical test results passing prescribed standards for physical and chemical quality in the reporting period.
	W.1.A.03	Properties affected by low pressure	No	Average number of served properties over the reporting period situated in zones that regularly experience pressure below minimum pressure levels. Does not include short term intermittent periods of low pressure.
	W.1.A.04	Properties affected by low pressure	% properties	Average number of properties defined in W.1.A.3 divided by estimated number of server propertied in the service areas
	W.1.A.05	Properties with 24 hour supply	No	Average number of properties in the reporting period that enjoy continual water supply (excluding exceptional supply disruptions) for 23 or more hours per day
	W.1.A.06	Properties with 24 hour supply	% properties	Percentage of served properties in the reporting period that enjoy continual water supply (excluding exceptional supply disruptions) for 23 or more hours per day.
	W.1.A.07	Properties with 18-24 hour supply	No	Average number of properties in the reporting period that enjoy continual water supply (excluding exceptional supply disruptions) for 18-23 hours per day.
	W.1.A.08	Properties with 18-24 hour supply	% properties	Percentage of served properties in the reporting period that enjoy continual water supply (excluding exceptional supply disruptions) for 18-23 or more hours per day
	W.1.A.09	Properties with less than 18 hours supply	No	Average number of properties in the reporting period that enjoy continual water supply (excluding exceptional supply disruptions) for less than 18 hours per day.
	W.1.A.10	Properties with less than 18 hours supply	% properties	Percentage of served properties in the reporting period that enjoy continual water supply (excluding exceptional supply disruptions) for less than 18 hours per day.
Infrastructure serviceability	W.1.B.01	Non revenue water (total)	m3 per day	Average volume of NRW (difference between water production and water sold) per day over the reporting period
	W.1.B.02	Non revenue water (per connection)	litres per cons. per day	Average volume of NRW divided by the total number of connections in the service area.
	W.1.B.03	Non revenue water (per connection) - adjusted	litres per cons. per day	Average volume of NRW divided by the total number of connections in the service area adjusted for restricted supplies.
	W.1.B.04	Non revenue water (relative to production)	% production	Total volume of NRW divided by total volume of production
	W.1.B.05	Pipe network bursts frequency	bursts per month	Average number of pipe bursts per month
	W.1.B.06	Pipe network bursts per 100 km of pipe	No / 100 km	Total number of pipe bursts per year per 100 km of pipe (excluding service connections)
<b>Non-financial (commercial)</b>				
Service coverage	W.2.A.01	Households served	No	Total average number of households over the reporting period served with a piped water supply as defined in the license agreements
	W.2.A.02	Coverage (households served relative to total)	% total households	Total average number of households over the reporting period served with a piped water supply in the service area divided by the total average number of households (served and un-served) in the defined service area.
	W.2.A.03	New connections (household)	No	Total number of new water supply connections to households (excluded reconnections) during the reporting period.
	W.2.A.04	New connections (commercial and institutional)	No	Total number of new water supply connections to commercial and institutional consumers (excluded reconnections) over the reporting period.
Metering	W.2.B.01	Metered households relative to total households	% total households	Average number of metered (meters functioning) households over the reporting period dividend by the average number of households served with a piped water supply in the service area as defined in licence agreements
	W.2.B.02	Metered com & inst relative to total com & inst	% com & inst	Average number of metered (meters functioning) commercial and institutional consumers during the reporting period divided by the average number of commercial and institutional consumers served with a piped water supply in the service area as defined in licence agreements.
	W.2.B.03	Meters installed (households)	No	Total household meters installed in the reporting period.
	W.2.B.04	Meters installed (com & inst)	No	Total commercial and institutional consumer meters installed in the reporting period.
Complaints	W.2.C.01	Complaints received (technical)	No	Total number of complaints received by the RWC in relation to levels of service (poor water quality, pressure, reliability, disruption due to construction activities and other technical issues) in the reporting period.
	W.2.C.02	Complaints received (commercial)	No	Total number of complaints received by the RWC in relation to water supply billing and tariffs in the reporting period
<b>Financial</b>				
Sales	W.3.A.01	Volume of sales to households (metered)	m3	Total volume of water sold to metered households in reporting period.
	W.3.A.02	Volume of sales to households (metered) relative to plan estimates	% of plan estimate	Total volume of water sold to metered households in reporting period divided by volume of metered household sales estimated in the business plan for the same reporting period
	W.3.A.03	Volume of sales to households (un-metered)	m3	Total volume of water sold to un-metered households in reporting period.
	W.3.A.04	Volume of sales to households (un-metered) relative to plan estimates	% of plan estimate	Total volume of water sold to un-metered households in reporting period divided by volume of un-metered household sales estimated in the business plan for the same reporting period
	W.3.A.05	Volume of sales to com & inst (metered)	% of plan estimate	Total volume of water sold to metered commercial and institutional consumers in reporting period.
	W.3.A.06	Volume of sales to com & inst (metered) relative to plan estimates	% of plan estimate	Total volume of water sold to metered commercial and institutional consumers in reporting period divided by volume of metered household sales estimated in the business plan for the same reporting period

Section	Ref	Indicator	Unit	Definition
	W.3.A.07	Volume of sales to com & inst (un-metered)	% of plan estimate	Total volume of water sold to un-metered commercial and institutional consumers in reporting period.
	W.3.A.08	Volume of sales to com & inst (un-metered) relative to plan estimates	% of plan estimate	Total volume of water sold to un-metered commercial and institutional consumers in reporting period divided by volume of un-metered household sales estimated in the business plan for the same reporting period
	W.3.A.09	Value of water sales to households	EUR	Total EUR value of water sales to households including fixed monthly charge component of tariff.
	W.3.A.10	Value of water sales to households relative to plan estimates	% of plan estimate	Total value of water sold to households in reporting period divided by value of water sold estimated in the business plan for the same reporting period (adjusted for inflation)
	W.3.A.11	Value of water sales to com & inst	EUR	Total EUR value of water sales to commercial and institutional consumers including fixed monthly charge component of tariff
	W.3.A.12	Value of water sales to com & inst relative to plan estimates	% of plan estimate	Total value of water sold to commercial and institutional consumers in reporting period divided by value of water sold estimated in the business plan for the same reporting period (adjusted for inflation).
Unit costs	W.3.B.01	Unit operational cost of water production	EUR/m3	Total operating cost of water production in the reporting period divided by the volume of water produced in the same period.
	W.3.B.02	Unit total cost of water production	EUR/m3	Total cost (operating + capital maintenance provisions) of water production in the reporting period divided by the volume of water produced in the same period.
	W.3.B.03	Unit cost of water sold	EUR/m3	Total cost (operating + capital maintenance provisions) of the water supply business activity in the reporting period divided by the volume of water sold in the same period.
	W.3.B.04	Unit cost of water sold and paid for	EUR/m3	Total cost (operating + capital maintenance provisions) of the water supply business activity in the reporting period divided by the volume of water sold and paid for in the same period.
Capital expenditure	W.3.C.01	Total capital maintenance expenditure	EUR	Total capital maintenance expenditure (infrastructure renewals + investment in non-infrastructure capital maintenance).
	W.3.C.02	Total capital maintenance expenditure relative to plan	% of plan estimate	Total capital maintenance expenditure (infrastructure renewals + investment in non-infrastructure capital maintenance) divided by infrastructure renewals and current cost depreciation provisions in the business plan.
	W.3.C.03	Total capital maintenance expenditure relative to RAB	% of RAB	Total capital maintenance expenditure (infrastructure renewals + investment in non-infrastructure capital maintenance) divided by the regulatory asset base value of water assets
	W.3.C.04	Total capital enhancement expenditure	EUR	Total capital enhancement expenditure (infrastructure enhancement + investment in non-infrastructure capital enhancement).
	W.3.C.05	Total capital enhancement expenditure relative to plan	% of plan estimate	Total capital enhancement expenditure (infrastructure enhancement + investment in non-infrastructure capital enhancement) divided by infrastructure enhancement and non-infrastructure enhancement provisions in the business plan.
<b>S - Sewerage (wastewater)</b>				
<b>Non-financial (technical)</b>				
Standards of service	S.1.A.01	Discharge quality	% pass	Percentage of wastewater treatment plant effluent quality tests passing prescribed standards for environmental quality in the reporting period.
Reliability	S.1.B.01	Sewer overflows	No	Number of reported incidents of sewer flooding reported to the RWC (or identified by RWC personnel) in the reporting period
	S.1.B.02	Sewer overflows per 100 km of pipe	No per 100 km	Number of reported incidents of sewer flooding reported to the RWC (or identified by RWC personnel) in the reporting period divided by the length of sewer network.
Serviceability	S.1.C.01	Sewer collapses	No	Number of reported incidents of sewer collapses reported to the RWC (or identified by RWC personnel) in the reporting period.
	S.1.C.02	Sewer collapses per 100 km of pipe	No per 100 km	Number of reported incidents of sewer collapses reported to the RWC (or identified by RWC personnel) in the reporting period divided by the length of sewer network.
	S.1.C.03	Wastewater treatment plant overflows	No	Number of incidents of wastewater treatment plant overflows in the reporting period
<b>Non-financial (commercial)</b>				
Service coverage	S.2.A.01	Households served	No	Total average number of households over the reporting period served with water borne piped sewerage system (including those connected to well functioning septic tanks in rural and semi-rural areas) in the service area as defined in licence agreements.
	S.2.A.02	Coverage (households served relative to total)	% total households	Total average number of households over the reporting period served with water borne piped sewerage system (including those connected to well functioning septic tanks in rural and semi-rural areas) in the service area divided by the total average number of households (served and un-served) in the defined service area.
	S.2.A.03	Households served with wastewater treatment	No	Total average number of households over the reporting period served with water borne piped sewerage system leading to a wastewater treatment plant (including well functioning septic tanks in rural and semi-rural areas) in the service area as defined in licence agreements
	S.2.A.04	Coverage (households served with wastewater treatment relative to total)	% total households	Total average number of households over the reporting period served with water borne piped sewerage system leading to a wastewater treatment plant in the service area divided by the total number of households in the defined service area..
	S.2.A.05	New connections (household)	No	Total number of new sewerage connections to households (excluded reconnections) over the reporting period.
	S.2.A.06	New connections (commercial and institutional)	No	Total number of new sewerage connections to commercial and institutional consumers (excluded reconnections) over the reporting period.
Complaints	S.2.B.01	Complaints received (technical)	No	Total number of complaints received by the RWC in relation to levels of service (sewer overflows etc. in the reporting period.
	S.2.B.02	Complaints received (commercial)	No	Total number of complaints received by the RWC in relation to wastewater billing and tariffs in the reporting period.
<b>Financial</b>				
Sales	S.3.A.01	Value of sales to households	EUR	Total EUR value of wastewater services sales to households
	S.3.A.02	Value of sales to households relative to plan	% of plan estimate	Total value of wastewater services sold to households in reporting period divided by value of wastewater services sold estimated in the business plan for the same reporting period (adjusted for inflation)
	S.3.A.03	Value of sales to com & inst	EUR	Total EUR value of wastewater services sales to commercial and institutional consumers



Section	Ref	Indicator	Unit	Definition
	S.3.A.04	Value of sales to com & inst relative to plan estimates	% of plan estimate	Total value of wastewater services sold to commercial and institutional consumers in reporting period divided by value of wastewater services sold estimated in the business plan for the same reporting period (adjusted for inflation)
Unit costs	S.3.B.01	Unit operational cost of treatment and disposal per m <sup>3</sup>	EUR/m <sup>3</sup>	Total operating cost of wastewater treatment and disposal in the reporting period divided by the measured volume of wastewater delivered to the wastewater treatment plants in the same period
	S.3.B.02	Unit total cost of treatment and disposal per m <sup>3</sup>	EUR/m <sup>3</sup>	Total cost (operating + capital maintenance provisions) of wastewater treatment and disposal in the reporting period divided by the volume of wastewater delivered in the same period
	S.3.B.03	Unit operational cost of treatment and disposal per household	EUR/ household	Total operating cost of wastewater treatment and disposal in the reporting period divided by the average number of households and household equivalents served by wastewater treatment facilities in the same period
	S.3.B.04	Unit total cost of treatment and disposal per household	EUR/ household	Total cost (operating + capital maintenance provisions) of wastewater treatment and disposal in the reporting period divided by the average number of households and household equivalents served by wastewater treatment facilities in the same period
	S.3.B.05	Unit operational cost of wastewater collection per household	EUR/ household	Total operating cost of the wastewater collection in the reporting period divided by the average number of households and household equivalents in the same period
	S.3.B.06	Unit total cost of wastewater collection per household	EUR/ household	Total cost (operating + capital maintenance provisions) of the wastewater collection in the reporting period divided by the average number of households and household equivalents in the same period
	S.3.B.07	Unit operational cost of wastewater services per household	EUR/ household	Total operating cost of the wastewater services business activity in the reporting period divided by the average number of households and household equivalents in the same period
	S.3.B.08	Unit total cost of wastewater services per household	EUR/ household	Total cost (operating + capital maintenance provisions) of the wastewater services business activity in the reporting period divided by the average number of households and household equivalents in the same period
Capital expenditure	S.3.C.01	Total capital maintenance expenditure	EUR	Total capital maintenance expenditure (infrastructure renewals + investment in non-infrastructure capital maintenance).
	S.3.C.02	Total capital maintenance expenditure relative to plan	% of plan estimate	Total capital maintenance expenditure (infrastructure renewals + investment in non-infrastructure capital maintenance) divided by infrastructure renewals and current cost depreciation provisions in the business plan.
	S.3.C.03	Total capital maintenance expenditure relative to RAB	% of RAB	Total capital maintenance expenditure (infrastructure renewals + investment in non-infrastructure capital maintenance) divided by the regulatory asset base value of wastewater assets
	S.3.C.04	Total capital enhancement expenditure	EUR	Total capital enhancement expenditure (infrastructure enhancement + investment in non-infrastructure capital enhancement)
	S.3.C.05	Total capital enhancement expenditure relative to plan	% of plan estimate	Total wastewater capital enhancement expenditure (infrastructure enhancement + investment in non-infrastructure capital enhancement) divided by wastewater infrastructure enhancement and non-infrastructure enhancement provisions in the business plan
<b>F – Financiar</b>				
<b>Shitjet dhe arkëtimi i të ardhurave</b>				
Sales	F.1.A.01	Total sales	EUR	Total value of services (water and wastewater) sold (billing) excluding connection fees and other income in the reporting period.
	F.1.A.02	Total sales relative to plan	% of plan estimate	Total value of services (water and wastewater) sold (billing) excluding connection fees and other income in the reporting period divided by the total sales estimated in the business plan for the same reporting period
Revenue collection	F.1.B.01	Total revenue collection	EUR	Total cash received from water sales (excluding connection fees and other income) in the reporting period.
	F.1.B.02	Total revenue collection out-performance	EUR	Total cash received from water sales (excluding connection fees and other income) in the reporting period less the cash receipts from sales expected in the business plan over the same period
	F.1.B.03	Total revenue collection outperformance(relative)	% of plan estimate	Total cash received from water sales (excluding connection fees and other income) in the reporting period divided by the cash receipts from sales expected in the business plan over the same period
	F.1.B.04	Total revenues written off	EUR	Total revenues written off (excluding connection fees and other income) in accordance with RAG in the reporting period
	F.1.B.05	Total revenues written off relative to billing	% of billing	Total revenues written off in accordance with RAG in the reporting period divided by the total sales (excluding connection fees and other income) over the same period.
	F.1.B.06	Revenue collection relative to billing	% of billing	Total cash received from water sales (excluding connection fees and other income) in the reporting period divided by the total billing (excluding connection fees and other income)
	F.1.B.07	Accounts receivable	EUR	Total accounts receivable after write offs (not more than 12 months old) from billed sales (excluding connection fees and other income) in the reporting period
	F.1.B.08	Accounts receivable relative to turnover	Days turnover	Total accounts receivable after write offs (not more than 12 months old) from billed sales (excluding connection fees and other income) in the reporting period divided by the total billing (excluding connection fees and other income)
<b>Key financial values and ratios</b>				
Values	F.2.A.01	Free cash flow	EUR	Total net cash flow from operations over the reporting period.
Ratios	F.2.B.01	Free cash flow	EUR	Total net income from operating activities before interest, dividends and corporation taxes divided by average regulatory asset base (RAB) over the reporting period.
	F.2.B.02	Return on capita	%	Total interest payments made in the reporting period divided by the average value of debt in the reporting period.
	F.2.B.03	Cost of debt	%	Long-term debt divided by regulatory asset base (a slight deviation from gearing as defined in conventional financial accounting)
	F.2.B.04	Gearing	ratio	Net cash flow before interest and taxes divided by interest payments in the reporting period.
	F.2.B.05	Cash interest cover	ratio	Net cash flow from operating activities less tax paid less net interest paid, all divided by net debt
	F.2.B.06	Funds from operations/debt	ratio	Net cash flow from operating activities less net interest paid less repayment of principal, all divided by debt service (interest and repayment of principal)



## B. Rationality for measuring performance

Performance measuring criteria of water supply service and wastewater services are such that a score of 100% indicates the level of service provision compared to a modern performance of service efficient and functional water supply.

### Performance measurement structure

Group	Performance measurement	Sub-group coefficient		Group coefficient	
Water Supply	Drinking water quality	25%	100%	45%	100%
	Pressure	5%			
	Availability	20%			
	Service coverage	20%			
	Cost efficiency	10%			
	Non-revenue water	20%			
Wastewater	Discharge quality	20%	100%	35%	
	Reliability	20%			
	Service coverage	50%			
	Cost efficiency	10%			
Regulatory Reporting	The points (Reliability) determined by the Audit	5%		5%	
Financial / commercial	Profitability	5%		15%	
	Commercial efficiency	10%			

## Criteria, definitions, coefficient and calculations for performance measurement

Parameter	Performance measurement criteria
<b>Water supply performance measurement</b>	
Water quality	<p><u>Definition:</u> The combination of bacteriological and physical/chemical test performance on the basis of 75:25 relative weighting <u>Performance category weighting: 25%</u></p> <p><u>Calculation:</u> [ U.1.A.01 x 0.75 + U.1.A.02 x 0.25 ] x 25%</p>
Pressure	<p><u>Definition:</u> The percentage of properties unaffected by pressure falling below minimum pressure levels and physical/chemical test performance on the basis of 75:25 relative weighting <u>Performance category weighting: 5%</u></p> <p><u>Calculation:</u> [100% - U.1.A.04] x 5%</p>
Availability	<p><u>Definition:</u> Defined as the (adjusted) percentage of properties unaffected by irregular intermittent supplies. This indicator is adjusted to reflect the degree by which those affected by supply interruptions are affected by weighting the number of households with a supply less than 18 hrs with factor of 2. <u>Performance category weighting: 20%</u></p> <p><u>Calculation:</u> [100% - 0.5 x U.1.A.08 - U.1.A.10] x 20%</p>
Service Coverage	<p><u>Definition:</u> The percentage of population in the service area served with a piped water supply. <u>Performance category weighting: 20%</u></p> <p><u>Calculation:</u> [U.2.A.02] x 20%</p>
Non-revenue water	<p><u>Definition:</u> Total NRW volume divided by total volume of water produced <u>Performance category weighting: 20%</u></p> <p><u>Calculation:</u> NRW(%) * 20% * Kb, Kb-Credibility weighing (derived from audit process -2016), If NRW(%) ≤ 25% = 20% Or NRW(%) ≥ 60% = 0% Else [60% - NRW%] / 35% ] x 20%</p>
Cost Efficiency	<p><u>Definition:</u> The unit cost of water sold relative to the unit cost estimated in the tariff review (UWT) (excluding return on capital). A unit cost of less than or equal to 90% of UT will score 100% and a unit cost equal to or exceeding 140% of UWT will score 0%. Unit costs between 90% and 140% of UWT are calculated pro-rata <u>Performance category weighting: 10%</u></p> <p><u>Calculation:</u> If W.3.B.03 ≥ 140% x UWT = 0% or If W.3.B.03 ≤ 90% x UWT = 100% x 10% = 10% Else [(140% - (W.3.B.03/UWT)) / 50%] x 10%</p>
<b>Wastewater services performance measurement</b>	
Wastewater discharge quality	<p><u>Definition:</u> As no discharge quality monitoring is undertaken a surrogate indicator based upon the percentage of population served by functioning wastewater treatment facilities (including well functioning septic tanks in rural and semi-rural areas) is applied. <u>Performance category weighting: 20%</u></p> <p><u>Calculation:</u> [S.2.A.04] x 20%</p>
Reliability	<p><u>Definition:</u> The annual number of sewer overflow incidents per 100 km of pipe relative to an ideal level of 0 to a maximum of 100 <u>Performance category weighting: 20%</u></p> <p><u>Calculation:</u> If S.1.B.02 ≥ 100 = 0% Else [100 - S.1.B.02] x 20%</p>

Parameter		Performance measurement criteria
Reliability		<u>Definition:</u> The annual number of sewer overflow incidents per 100 km of pipe relative to an ideal level of 0 to a maximum of 100 <u>Performance category weighting:</u> 20% <u>Calculation:</u> If S.1.B.02 $\geq 100$ = 0% Else $[100 - S.1.B.02] \times 20\%$
Service Coverage		<u>Definition:</u> The percentage of population in the service area served with a water borne sewerage system (including well functioning septic tanks in rural and semi-rural areas) <u>Performance category weighting:</u> 50% <u>Calculation:</u> $[S.2.A.02] \times 50\%$
Cost Efficiency		<u>Definition:</u> Defined as unit cost of wastewater services per household served relative to the unit cost estimated in the tariff review (UST) (excluding return on capital). A unit cost of less than or equal to 90% of UST will score 100% and a unit cost equal to or exceeding 140% of UST will score 0%. Unit costs between 90% and 140% of UST are calculated pro-rata <u>Performance category weighting:</u> 10% <u>Calculation:</u> If $W.3.B.03 \geq 140\% \times U_{ST}$ = 0% or If $W.3.B.03 \leq 90\% \times U_{ST}$ = $100\% \times 10\%$ = 10% else $[(140\% - (W.3.B.03/U_{ST})) / 50\%] \times 10\%$
<b>Combined services and commercial performance measurement</b>		
Water supply		<u>Definition:</u> Water performance score multiplied by overall performance weighting <u>Overall performance weighting:</u> 45% <u>Calculation:</u> $[Water\ performance\ score] \times 45\%$
Wastewater services		<u>Definition:</u> Wastewater services performance score multiplied by overall performance weighting <u>Overall performance weighting:</u> 35% <u>Calculation:</u> $[Wastewater\ performance\ score] \times 35\%$
<b>Regulatory Reporting</b>		
Regulatory Reporting		<u>Definition:</u> <u>Reliability of the data determined by the Audit process</u> <u>Calculation:</u> $[Reliability\ of\ the\ data\ performance\ score] \times 35\%$
Financial / commercial Cost efficiency	Profitability	<u>Definition:</u> Return on capital is defined as regulatory accounts divided by return on equity given tariff review (ROCp) <u>Coefficient of performance by category:</u> 10% <u>Calculation:</u> If $F.2.B.02 \leq 0\%$ = 0% or If $F.2.B.02 \geq ROCp$ = 5% else $[F.2.B.02 / ROCp] \times 5\%$
	Commercial efficiency	<u>Definition:</u> Efficiency of revenue collection as measurement by revenue collected divided by the total billing with a range of 60% which is equal to zero performance up to a maximum of 100% which is ideal performance. <u>Coefficient of performance by category:</u> 10% <u>Calculation:</u> If $F.1.B.06 \leq 60\%$ = 0% or If $F.2.B.02 \geq 100\%$ = 10% others $[F.2.B.02 - 60\%] / 40\% \times 10\%$

### ANNEX 3. Financial statements by Regulatory accounting

The comprehensive statement of incomes has been prepared based on data submitted to WSRA and in compliance with the Regulatory Accounting Guidelines (RAG):

- In turnover are taken into account revenues from regular billing, other operating revenues and subsidies excluding financial revenues (non-operating).
- Maintenance capital expenditures, is defined through asset renewals expenditure in the production and distribution infrastructure, and depreciation of non-infrastructure assets in the production, distribution and business activities.
- Commissions from bad debts, is defined as the difference between billing and collection from last year's rate adjusted for inflation.
- Net profit, is the difference between income and expenses (operating + capital maintenance), discounting and commission of debts without involvement of non-operating expenses

#### RWC Prishtina (Prishtina)

	2015	2016
Turnover	13,154,783	13,791,273
Operating costs	8,996,812	8,699,898
<b>Net operating income (excluding capital maintenance)</b>	<b>4,157,971</b>	<b>5,091,375</b>
Capital maintenance (infrastructure renewals + cc depreciation)	358,958	256,227
<b>Net operating income (including capital maintenance)</b>	<b>3,799,013</b>	<b>4,835,148</b>
Commissions from bad debts	2,384,304	3,125,460
<b>Net operating income (after bad debts)</b>	<b>1,414,709</b>	<b>1,709,688</b>
Interest on long term loans	0	0
<b>Pre-tax profit</b>	<b>1,414,709</b>	<b>1,709,688</b>
Taxation on profits	0	0
<b>Net post-tax profit</b>	<b>1,414,709</b>	<b>1,709,688</b>

**RWC Hidroregjioni Jugor (Prizren)**

	2015	2016
Turnover	4,189,972	4,217,604
Operating costs	3,245,219	3,268,639
<b>Net operating income (excluding capital maintenance)</b>	<b>944,753</b>	<b>948,965</b>
Capital maintenance (infrastructure renewals + cc depreciation)	58,233	58,077
<b>Net operating income (including capital maintenance)</b>	<b>886,520</b>	<b>890,888</b>
Commissions from bad debts	965,480	1,058,171
<b>Net operating income (after bad debts)</b>	<b>(-81,856)</b>	<b>(-167,283)</b>
Interest on long term loans	0	0
<b>Pre-tax profit</b>	<b>(-81,856)</b>	<b>(-167,283)</b>
Taxation on profits	0	0
<b>Net post-tax profit</b>	<b>(-81,856)</b>	<b>(-167,283)</b>

**RWC Hidrodrini (Peja)**

	2015	2016
Turnover	3,537,564	3,558,375
Operating costs	2,203,826	2,299,252
<b>Net operating income (excluding capital maintenance)</b>	<b>1,333,738</b>	<b>1,259,123</b>
Capital maintenance (infrastructure renewals + cc depreciation)	50,763	54,229
<b>Net operating income (including capital maintenance)</b>	<b>1,282,975</b>	<b>1,204,894</b>
Commissions from bad debts	1,069,556	940,987
<b>Net operating income (after bad debts)</b>	<b>213,419</b>	<b>263,907</b>
Interest on long term loans	0	0
<b>Pre-tax profit</b>	<b>213,419</b>	<b>263,907</b>
Taxation on profits	0	0
<b>Net post-tax profit</b>	<b>213,419</b>	<b>263,907</b>

**RWC Mitrovica (Mitrovica)**

	2015	2016
Turnover	3,022,045	3,711,121
Operating costs	2,457,922	2,447,903
<b>Net operating income (excluding capital maintenance)</b>	<b>564,123</b>	<b>1,263,218</b>
Capital maintenance (infrastructure renewals + cc depreciation)	20,526	19,999
<b>Net operating income (including capital maintenance)</b>	<b>543,597</b>	<b>1,243,219</b>
Commissions from bad debts	1,264,474	1,156,624
<b>Net operating income (after bad debts)</b>	<b>(-720,877)</b>	<b>86,595</b>
Interest on long term loans	0	0
<b>Pre-tax profit</b>	<b>(-720,877)</b>	<b>86,595</b>
Taxation on profits	0	0
<b>Net post-tax profit</b>	<b>(-720,877)</b>	<b>86,595</b>

**RWC Radoniqi (Gjakova)**

	2015	2016
Turnover	3,866,323	3,878,317
Operating costs	2,579,339	2,846,672
<b>Net operating income (excluding capital maintenance)</b>	<b>1,286,983</b>	<b>1,031,645</b>
Capital maintenance (infrastructure renewals + cc depreciation)	264,528	216,296
<b>Net operating income (including capital maintenance)</b>	<b>1,022,455</b>	<b>815,349</b>
Commissions from bad debts	586,418	618,178
<b>Net operating income (after bad debts)</b>	<b>436,037</b>	<b>197,171</b>
Interest on long term loans	0	0
<b>Pre-tax profit</b>	<b>436,037</b>	<b>197,171</b>
Taxation on profits	0	0
<b>Net post-tax profit</b>	<b>436,037</b>	<b>197,171</b>

**RWC Bifurkacioni (Ferizaj)**

	2015	2016
Turnover	2,258,510	2,132,695
Operating costs	1,444,038	1,571,806
<b>Net operating income (excluding capital maintenance)</b>	<b>814,472</b>	<b>560,888</b>
Capital maintenance (infrastructure renewals + cc depreciation)	57,100	29,837
<b>Net operating income (including capital maintenance)</b>	<b>757,372</b>	<b>531,051</b>
Commissions from bad debts	633,098	759,436
<b>Net operating income (after bad debts)</b>	<b>124,274</b>	<b>(-228,385)</b>
Interest on long term loans	0	0
<b>Pre-tax profit</b>	<b>124,274</b>	<b>(-228,385)</b>
Taxation on profits	0	0
<b>Net post-tax profit</b>	<b>124,274</b>	<b>(-228,385)</b>

**RWC Hidromorava (Gjilan)**

	2015	2016
Turnover	1,975,799	2,027,254
Operating costs	1,466,830	1,528,580
<b>Net operating income (excluding capital maintenance)</b>	<b>508,969</b>	<b>498,674</b>
Capital maintenance (infrastructure renewals + cc depreciation)	38,714	61,686
<b>Net operating income (including capital maintenance)</b>	<b>470,255</b>	<b>436,988</b>
Commissions from bad debts	482,040	402,371
<b>Net operating income (after bad debts)</b>	<b>(-11,785)</b>	<b>34,617</b>
Interest on long term loans	0	0
<b>Pre-tax profit</b>	<b>(-11,785)</b>	<b>34,617</b>
Taxation on profits	0	0
<b>Net post-tax profit</b>	<b>(-11,785)</b>	<b>34,617</b>

## ANNEX 4. Tariff statements (2015-2017)

The following tariffs have started to apply since 1 January 2015, and are parts of tariff determination for the period of three years (2015-2017).

### Current tariff statements for 2016

	Unit	RWC Prishtina	RWC Hidroregjioni Jugor	RWC Hidrodrini	RWC Mitrova	RWC Radoniqi	RWC Bifurkacioni	RWC Hidromorava
<b>Households</b>								
Water supply monthly charge	EUR/month	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Water supply volume charge	EUR/m3	0.39	0.36	0.24	0.36	0.36	0.34	0.33
Wastewater charge (based on consumed water amount)	EUR/m3	0.05	0.06	0.06	0.09	0.09	0.12	0.08
<b>Commercial and Institutional consumers</b>								
Water supply monthly charge	EUR/month	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Water supply volume charge	EUR/m3	0.88	0.69	0.48	0.73	0.71	0.69	0.65
Wastewater charge (based on consumed water amount)	EUR/m3	0.11	0.11	0.13	0.23	0.22	0.29	0.20

### Tariff statement for 2017

	Unit	RWC Prishtina	RWC Hidroregjioni Jugor	RWC Hidrodrini	RWC Mitrova	RWC Radoniqi	RWC Bifurkacioni	RWC Hidromorava
<b>Households</b>								
Water supply monthly charge	EUR/month	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Water supply volume charge	EUR/m3	0.39	0.36	0.24	0.36	0.36	0.34	0.33
Wastewater charge (based on consumed water amount)	EUR/m3	0.05	0.06	0.06	0.09	0.09	0.12	0.08
<b>Commercial and Institutional consumers</b>								
Water supply monthly charge	EUR/month	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Water supply volume charge	EUR/m3	0.88	0.69	0.4569	0.73	0.71	0.69	0.65
Wastewater charge (based on consumed water amount)	EUR/m3	0.11	0.11	0.1214	0.23	0.22	0.29	0.20



## ANNEX 5. Summary of performance indicators -2016

Indicators	Prishtina	Hidroregjioni	Hidrodrini	Mitrovica	Radoniqi	Bifurkacioni	Hidromorava	Sector
Water service coverage (%)	112%	69%	99%	71%	102%	76%	71%	90%
Wastewater service coverage (%)	96%	59%	39%	54%	72%	66%	58%	69%
Water production (l/p/d)	220	202	314	434	267	166	234	251
Water sales (l/p/d)	104	85	111	198	141	79	101	104
Billed water for households (l/d)	82	72	89	94	125	71	87	86
Billed water for households (%)	79%	84%	80%	89%	89%	89%	87%	83%
Billed water for industrial – commercial consumers (%)	11%	7%	9%	4%	7%	8%	8%	9%
Billed water for institutional consumers (%)	10%	9%	10%	8%	4%	3%	5%	8%
Non-revenue water (%)	53%	58%	65%	62%	47%	52%	57%	57%
Failed tests in total (%)	2.2%	2.8%	2.4%	1.1%	0.2%	1.9%	2.3%	2.0%
Percentage of read consumption (%)	97%	88%	98%	78%	96%	84%	85%	91%
Efficiency of total staff ('000 consumers)	4.4	7.2	4.8	8.4	7.8	7.8	5.5	5.9
Operational expenses(€/m3/produced) <sup>15</sup>	0.19	0.16	0.09	0.11	0.17	0.18	0.17	0.15
Operational expenses (€/cons.)-water	70	64	48	82	77	53	50	65
Operational expenses (€/cons.)-wastewater	0.43	10.61	6.44	6.40	4.48	7.19	4.66	4.28
Capital expenses (€/cons.)-water	5	26	3	301	58	6	4	38
Sales income (€/cons.)-wastewater	100	83	71	86	95	64	58	86
Sales income (€/cons.)-wastewater	11.2	11.3	16.8	21.3	20.8	20.0	13.2	14.3
No. of service complaints ('000 cons.)	60	50	31	60	26	10	22	44
Collection (%)	92%	87%	78%	59%	95%	82%	82%	86%
Collection rate - households (%)	87%	88%	77%	50%	93%	79%	78%	82%
Collection rate - commercial/industrial consumers	103%	64%	82%	117%	92%	92%	89%	94%
Collection rate- institutional consumers	99%	119%	79%	69%	115%	89%	98%	97%
Labour coverage norm	1.47	1.13	1.21	0.70	1.29	1.12	1.09	1.24

<sup>15</sup>This indicator takes into account all operating costs for water supply services (e.g. production, distribution and business activity), which differs from the indicator presented in this report in the part of the costs, which indicator is based only on operating costs for production of water.

## ANNEX 6. Statistical data - 2016

Data	Prishtina	Hidroregjioni	Hidrodrini	Mitrovica	Radoniqi	Bifurkacioni	Hidromorava	Total
Produced water (m3)	44,846,198	17,371,213	25,563,726	25,199,252	15,247,974	7,275,462	8,232,750	143,736,575
No. of consumers total-water	122,404	44,633	45,207	27,403	34,353	25,285	28,001	327,286
Total consumers with meters	119,678	42,368	42,577	18,669	33,779	23,293	23,065	303,429
Complaints - Water	7,343	2,228	1,394	1,645	903	263	627	14,403
Operational expenses - Water	8,549,239	2,850,253	2,189,131	2,260,478	2,661,229	1,344,305	1,388,472	21,243,107
Capital expenses- Water	603,421	1,165,568	151,357	8,254,536	2,007,481	149,014	114,990	12,446,367
Capital expenses from RWC- Water	524,515	120,519	151,357		471,401	24,328	68,667	1,360,787
Quantity of billed water m <sup>3</sup>	21,215,819	7,345,548	9,006,958	5,052,184 9,495,506 <sup>16</sup>	8,017,867	3,458,996	3,533,300	57,630,672
Billed water for consumers with meters	20,477,485	6,434,774	8,820,298	3,010,522	7,660,993	2,907,926	3,002,312	52,314,310
Income from fixed tariffs	1,751,800	665,584	618,706	373,238	498,545	356,688	342,473	4,607,034
Total revenues for water supply	10,481,298	3,029,267	2,591,351	1,990,710	2,779,694	1,253,441	1,291,582	23,417,342
Other operational expenses- Water	32,490	6,003	0	3,155	28,649	18,815	8,982	98,094
No. consumers- Wastewater	106,908	39,513	19,397	21,487	24,632	22,210	23,038	257,185
No. of Complaints- Wastewater	0	87	951	0	391		144	1573
Operational expenses for services of Wastewater	150,659	418,386	110,120	187,425	185,443	227,501	140,108	1,419,642
Total capital expenses- Wastewater	136,509	136,509	88,929	426	102,162	5,120	0	469,655
Total capital expenses by RWC - Wastewater	136,509	136,509	136,509	136,509	136,509	136,509	136,509	136,509
Invoicing m <sup>3</sup> for services of Wastewater	18,686,679	6,464,476	4,141,034	3,791,078		3,183,245	3,351,332	39,617,844
Incomes from sales - Wastewater.	1,197,198	444,577	326,671	457,780	513,184	445,022	304,446	3,688,879

<sup>16</sup> This figure ( 9,495,506) included the invoicing for the Northern part as well

Other operational Incomes - Wastewater	32,490	32,490	32,490	32,490	32,490	32,490	32,490	32,490
Total expenses for Water and Wastewater	8,699,898	3,268,639	2,299,251	2,447,903	2,846,672	1,571,806	1,528,580	22,662,749
Total collected cash	12,406,535	3,613,050	2,766,871	1,652,594	3,586,414	1,676,225	1,583,451	27,285,139
Total staff	537	322	218	230	267	196	153	1923
Total population	500,315	343,848	224,257	184,724	153,451	158,552	134,797	1,699,944
Population coverage with water services	558,334	236,154	222,725	131,102	156,332	119,790	96,230	1,520,668
Population coverage with wastewater services	478,495	204,407	87,408	99,993	109,768	104,567	78,364	1,163,002
Length of water system	1892	509	997	695.6	715	271	389	5,469
Length of wastewater system	1093	270	177	216	81	230	210.3	2,277

## ANNEX 7. Contact details

### Regional Water Companies

RWC	Chief Executive Officer	Phone No.	E-mail address	Address
RWC Prishtina (Prishtina)	Ilir Avdullahu	038/540 749 ext.128	ilir.abdullahu@kur-prishtina.com	Str. Tahir Zajmi, PN , Prishtinë 10000
RWC Hidroregjioni Jugor (Prizren)	Besim Baraliu	029/244 150	besimbaraliu@hotmail.com	Str . Vatra Shqiptare, Prizren, 20000
RWC Hidrodri (Peja)	Agron Tigani	039/432 355	a.tigani@hidrodri.com	Str . Lekë Dukagjini, no.156, Peja 30000,
RWC Mitrovica (Mitrovica)	Sami Miftari	028/533 707	sami.miftari@hotmail.com	Str . Bislam Bajgora , NN, Mitrovica 40000
RWC Radoniqi (Gjakova)	Ismet Ahmeti	0390/320 503	ismet.ahmeti@hotmail.com	Str . UÇK, no.07, Gjakova, 50000
RWC Hidromorava (Gjilan)	Muhamed Suliqi	0280/321 104	Muhamed_suliqi@hotmail.com	Str . UÇK, NN, Gjilan 60000
RWC Bifurkacioni (Ferizaj)	Nazif Asllani	0290/320 650	n_asllani@hotmail.com	Str . Enver Topalli, no.42/A, Ferizaj, 70000
NPH Ibër-Lepenc	Januz Kabashi	038/225 007	jkabashi@hotmail.com	Rr. Bill Clinton no.13, Prishtina, 10000

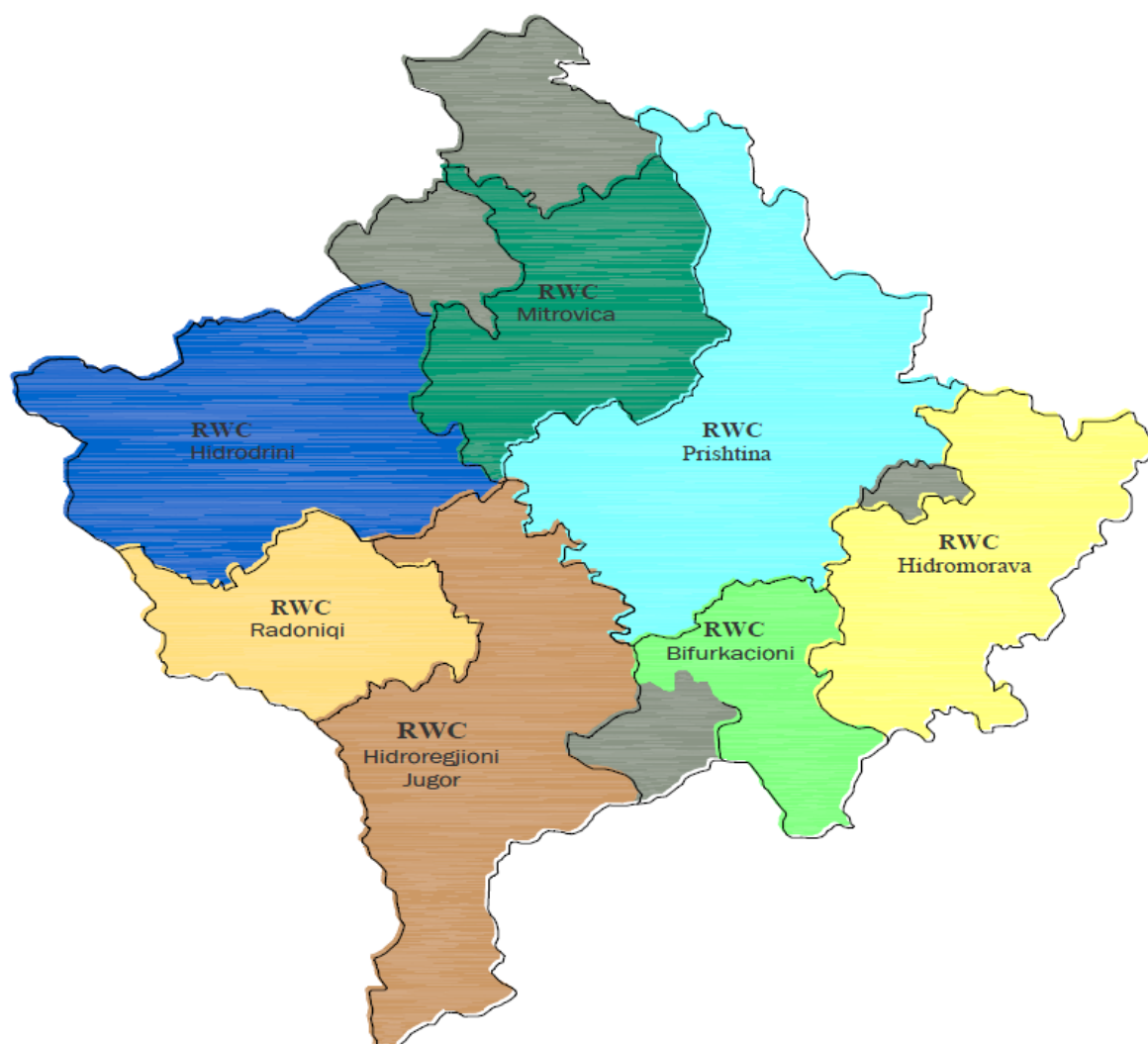
### Water Service Regulatory Authority

WSRA	Name	Phone No.	E-mail address	Address
Director	Raif Preteni	038/249 165 111	raif.preteni@arru-rks.org	Str. Ali Pashë Tepelena, Prishtina, 10000
Deputy Director	Xhelal Selmani	038/249 165/114	xhelal.selmani@arru-rks.org	Str. Ali Pashë Tepelena, Prishtina, 10000
Head of Law and Licensing Department	Mejreme Cernobregu	038/249 165/117	mejreme.cernobregu@arru-rks.org	Str. Ali Pashë Tepelena, Prishtina, 10000
Head of Performance and Monitoring Department	Qamil Musa	038/249 165/121	qamil.musa@arru-rks.org	Str. Ali Pashë Tepelena, Prishtina, 10000
Head of Tariff Regulatory Finances Department	Sami Hasani	038/249 165/120	sami.hasani@arru-rks.org	Str. Ali Pashë Tepelena, Prishtina, 10000
Head of Administration and Finances Department	Ramiz Krasniqi	038/249 165/110	ramiz.krasniqi@arru-rks.org	Str. Ali Pashë Tepelena, Prishtina, 10000
Contact person for consumers	Behxhet Bala	038/249 165/101	behxhet.bala@arru-rks.org	Str. Ali Pashë Tepelena, Prishtina, 10000

### Consumer Counselling Commission

CCC	Name	Position	Municipality	E-mail
CCC Prishtina	Avdi Gjonbalaj	Chairperson	Prishtina	avdi_gjonbalaj@yahoo.com
CCC Prizren	Merita Gorani	Chairperson	Prizren	meritagorani@gmail.com
CCC Peja	Ilirjana Dukaj	Chairperson	Peja	ilirianadukaj@hotmail.com
CCC Mitrovica	Adem Kërleshi	Chairperson	Mitrovica	adem.kerleshi@rks-gov.net
CCC Gjakova	Erlinda Rizvanolli	Chairperson	Gjakova	erlinda.rizvanolli@rks-gov.net
CCC Ferizaj	Ilmi Mustafa	Chairperson	Ferizaj	hilmi.mustafa@rks-gov.net
CCC Gjilan	Dritë Kajtazi	Chairperson	Gjilan	drite.kajtazi@rks-gov.net

## ANNEX 8. RWC Service zones



RWC Prishtina	RWC Hidroregjioni jugor	RWC Hidrodrini	RWC Mitrovica	RWC Radoniqi	RWC Bifurkacioni	RWC Hidromorava	Municipalities outside services of RWC
Prishtina Podujeva Fushe Kosova Obiliq Lipjan Drenas Shtime Graçanica	Prizren Suhareka Malisheva Dragash Mamusha	Peja Klina Istog Junik Deçan	Mitrovica Skenderaj Vushtri	Gjakova Rahovec	Ferizaj Kaçanik Hani i Elezit Shterpce	Gjilan Kamenica Viti Novobrdë Klllokot Ranillug Partesh	Mitrovica North Zubin Potok Leposaviq Zveçan