Water Regulatory Authority of Albania

Report on the Performance
on the Water Supply and Sewerage Companies

2015

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Vision

A water supply and sewerage sector, financially self - sustainable. Providing high quality as well as affordable services to all consumers in Albania

Mission

To ensure for all Albanians that water and sewerage service providers deliver the highest achievable quality at a fair price and in a financially sustainable manner.

Content

Abbreviations

WRA	Regulatory Authority of the Sector of Water Supply and Wastewater Disposal and treatment
WSS	Water Supply & Sewerage
NRC	National Regulatory Commission
JSC	Joint Stock Company
MTI	Ministry of Transport and Infrastructure
WSSGD	Water Supply and Sewerage General Directorate
MBU	Monitoring and Benchmarking Unit
LGU	Local Government Units
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IWA	International Water Association
KPI	Key Performance Indicators
WTP	Wastewater Treatment Plant
O&M	Operation and Maintenance Costs

Chair's Foreword

Performance report of water supply and sewerage companies prepared by WRA is an instrument of information and transparency to the public and all stakeholders in the water sector. The report is a comparative statistical document with the previous years for the performance of water sector and water supply and sewerage companies in particular; it also analyzes and presents the performance trend of water companies in Albania highlighting the problems and the recommendations for the improvement of their technical and financial indicators.

The mission of WRA is that the WWS utilities deliver the highest achievable quality at a fair price and in a financially sustainable manner.

WRA in fulfilling its mission to protect consumers continues the efforts for improving the methods and practices that it uses for this purpose.

Performance analysis of WSS utilities for 2015 reflects a negative trend of performance for the financial indicators in terms of operation and total cost coverage, while the service quality does not show any improvement. The increase of expenses and non professional overstaffing of WWS companies still remain quite problematic, while the non revenue water indicator remains in unacceptable levels. On the other hand there is a lack of a physical investment program with the appropriate allocation of funds in order to respond to the demands for the improvement of the quality of services in general, and increasing the access percentage of the population in water supply and sewerage service.

Water sector performance overview for 2015; highlight the necessity in conducting an urgent reform of the sector in improving especially managerial aspects of water companies. As part of this overview, WRA emphasizes mainly the lack of an efficient structure in monitoring and controlling the utilities, which influence directly in poor performance of their executive staff.

2015 is the year of the Territorial Administrative Reform (TAR). TAR brings new challenges for the water sector in terms of a new reorganization of water supply and sewerage services throughout all the new municipalities' territory to provide quality of services to all consumers. In this context, WRA is prepared for this challenge to support this reform with its role and contribution.

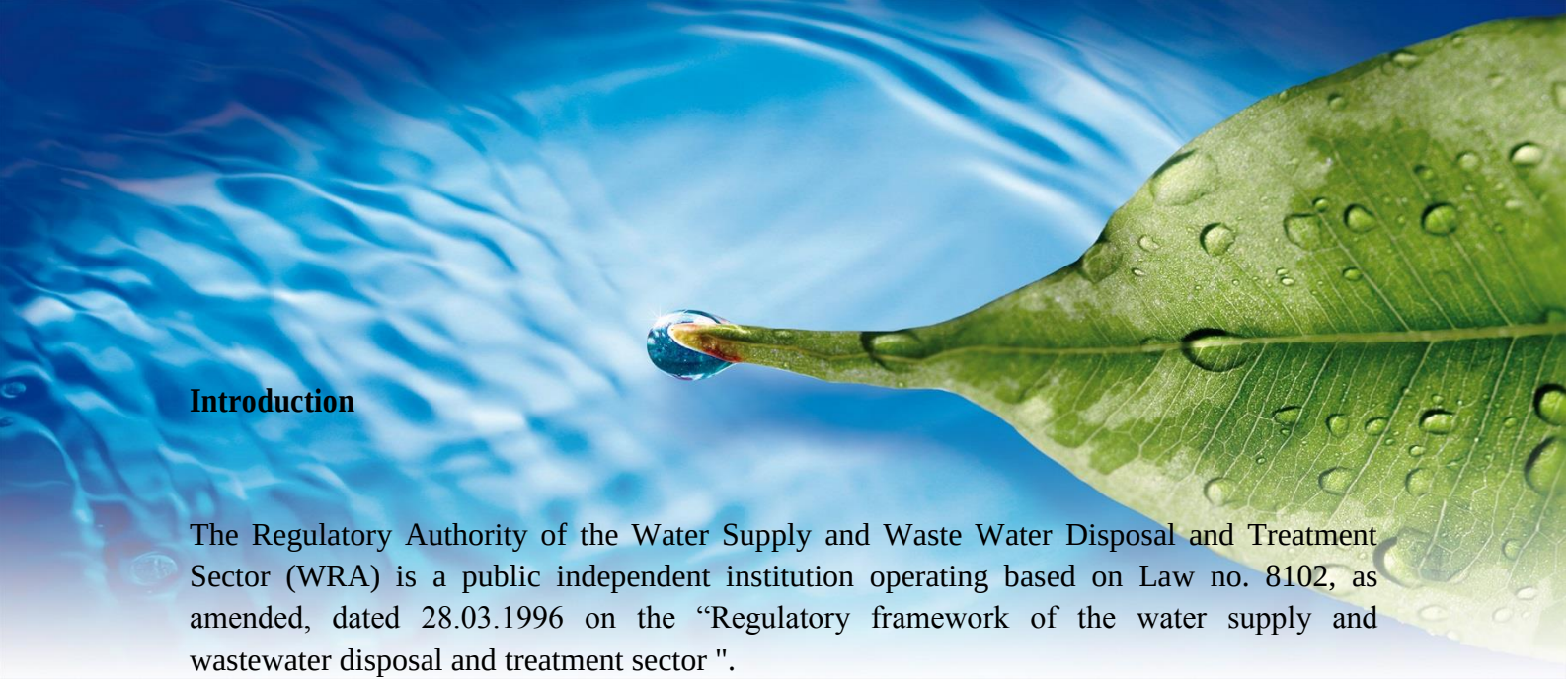
WRA is reinforcing the efforts to enhance cooperation with all stakeholders and institutions to play an active role in the improvement of legal and institutional infrastructure of the water sector. On the other hand, WRA collaborates closely with all international organizations which their work have links with the water and sewerage regulation sector, in order to benefit from best practices and to increase capacity buildings.

Despite problems in the performance of the Albanian water sector for 2015 there are some utilities that are financially sustainable and provide good quality of services for consumers with a 24/7 water supply, bacteriological clean at proper pressure, and with affordable prices. These utilities not only show as a positive example of achievement in the sector, but show the real possibilities that the utilities with a poor performance can improve their economic and technical indicators.

Finally, I would like thank all WRA employees, my predecessor Mr. Avni Dervishi, Commissioners and GIZ for their contribution for the improvement and implementation of regulatory instruments in Albanian water and sewerage sector.

Ndriçim **SHANI**

CHAIRMAN



Introduction

The Regulatory Authority of the Water Supply and Waste Water Disposal and Treatment Sector (WRA) is a public independent institution operating based on Law no. 8102, as amended, dated 28.03.1996 on the "Regulatory framework of the water supply and wastewater disposal and treatment sector ".

WRA exercises regulatory functions in the water supply and sewerage sector. These functions include licensing of service providers, approval of WSS service tariffs, setting uniform standards and rules in the sector, monitoring the performance of WSS companies as well as reporting on the sector condition, etc.

The existence of a regulatory institution in the sector is necessary to orientate these services towards the economies of scale, as well as in determining a fair, independent and impartial tariff policy. In addition, an independent regulator serves to increase the transparency in the sector and inform the public and the governance about the WSS sector developments, being an alternative source of information, benchmarking and assessment review of WSS services.

While exercising its functions defined by law, WRA is led by the principle of impartiality and balance amongst the interests of all stakeholders in the WSS sector, consumers, service providers, local government and investors.

Currently in response to the challenges of Territorial Administrative Reform and the expected reforms in water sector, WRA law is under changing process.

Performance assessment of WWS sector and licensed utilities that operate in this sector, since 2011, is one of the periodic and constant reports that WRA prepare following the Annual Report published in the end of January.

This report aims to provide an independent and objective picture of the situation in the sector, and to enable all stakeholders and the public in general to be informed and to compare the performance of each of the service providers.

The report gives a clear picture of the performance of water supply and sewerage sector, analyzes the causes of poor performance, and provides recommendations for improving the economic and technical performance indicators of utilities. On the other hand, all stakeholders can see the progress achieved in the sector of water supply and sewerage and evaluate the performance of their own utility. This serves as an element of

transparency of the utilities to the consumers, in order to increase their accountability in terms of improving the quality of services to them.

The Performance report is structured in five parts as follow:

- First part introduces a very brief overview of WRA main activities and achievement for 2015.
- The second part presents the general performance of water supply and sewerage sector during 2015.
- The third part, the core of this report, makes a thorough analysis of the performance of WSS utilities, for each of the ten KPIs taken into consideration. This part concludes with the ranking of companies based on the achieved results.
- The fourth part of the report for this year, as special topic, is selected Water Balance in the case WWS Durrës, as a basic element to analyze the situation and the causes of non-revenue water indicator.
- The fifth part presents a summary of the main conclusions.
- In the end of report there is a summary of annexes with detailed data for the utilities and the WWS tariffs they apply.

1. WRA and its Activity in 2015

Licensing

In July 2014, The Albanian Government successfully approved the Administrative-Territorial Reform which is now under implementation. Local government units are organized in 61 municipalities with the aim to increase the efficiency of local governments' resource management, by enhancing their capability to provide high quality and timely services to citizens. This new territorial and administrative organization was foreseen during 2015 to be implemented also in water and sewerage sector, but the package of legal acts with the relevant acts are not yet passed for approval. Also the inventory of assets is not conducted for all WWS systems of administrative units (former communes) to precede the changes that will occur to the WSS utilities.

Despite the unclear situation (restructuring of WWS sector as a result of administrative-territorial reform, Water Regulatory Authority is continuing to perform its functions in the implementation of legal acts in power for all WWS utilities.

The 57 utilities of WSS sector continue to provide water supply and distribution of water for public consumption. During 2015, have applied for a license or renewal of license, 23 (twenty-three) utilities, of which after the completion of all required documentation, were approved and licensed by the NRC, 10 (ten) utilities, while for 13 (thirteen) other applications the process was extended to 2016.

The licensing situation by the end of 2015, taking into consideration the problems outlined above, for 57 utilities operating in water supply and sewerage sector is the following: 43 (forty-three) utilities have a valid license; 7 (seven) utilities are in the process of license renewal; for three (3) utilities the license have expired and they didn't applied for completing the necessary documentation for relicensing; 4 (four) utilities are unlicensed.

During the utilities applications to provide a license or renewal license in 2015, were identified the problems that are already well known for WRA. Among them, still remain critical: frequently changes of legal Director, difficulties in registration in NCR; delays by the utilities in submitting the necessary documents for the licensing procedure. These delays are caused primarily by the lack of environmental authorization (needed in the case of the waste water treatment category), but there are cases where the necessary documentations is delayed as a result of the utility staff negligence.

WRA has been and will always continue to be cooperative and willing to help and support the utilities in solving the problems they have and will have during the Territorial Administrative Reform implementation.

Tariff Regulation

Pursuant to Law No. 8102 dated 28.06.1998 "On the regulatory framework of water supply and disposal and treatment of waste water", as amended, WRA is the authority that approves water and sewerage tariffs.

Based on the powers given by law, WRA has established rules for the application, review the approval of tariffs for water supply and disposal of wastewater in "Tariff Setting Guideline" mandatory to be implemented by all licensed service providers for water supply, disposal and treatment of wastewater.

During 2015 have applied for tariff adjustment water utilities of Korçë Qytet, Krujë, Durrës and Elbasan Qytet. For utilities of Durrës and Elbasan Qytet were submitted the tariff approval application and continued with technical and economic analysis. While for utilities of Korçë and Krujë their proposals were refused due to incomplete application of documents according to the tariff setting guideline.

WRA has supported and will continue to support the efforts of all utilities to increase financial stability, to ensure the quality, efficiency and sustainability of the services they provide to all customers. Tariffs play an important role in this process, but WRA will not continues tariff approval procedure, if the application is not completed as required by the tariff setting guideline.

Also, in 2015 the National Regulatory Commission has examined and takes decision for applications submitted in 2014 for 12 WSS utilities.

Only four utilities had the tariff approval: Ersekë, Sarandë, Korçë Fshat and Elbasan Fshat.

The tariff adjustment proposal was rejected for utilities of Poliçan and Korçë Qytet as their analysis identified that the tariff proposals were unjustified.

In 2015, National Regulatory Commission decided not to consider tariff adjustment proposals for utilities of Lezhë, Krujë, Gjirokastra, Fier, Kukës and Lushnje Qytet. Their application documentation were incomplete according to the requirements of Law No. 8102 and Tariff Setting Guideline. Based on the guideline for all these utilities it was asked completion of the missing documents and the updated data of the application form.

Tariff approval process includes an analysis of costs and performance indicators, setting achievable and challenging targets to companies aiming to improve the quality of service.
For WRA, the main objective in its decision-making process is finding the balance between the protection of the interests of consumers and the increased financial sustainability of companies.

Through a periodic review of tariffs, National Regulatory Commission in its decision tries to improve step by step the cost coverage in order to reduce subsidies and creating opportunities for loans repayment without neglecting the increase of operational efficiency.

For WRA, one of the main elements of the tariff policy is household's consumer affordability to pay the tariffs. Referring to the current tariffs and what utility will propose, it appears that there is still much space until reaching the limit of affordability by households. Despite this fact, WRA is in favor of adopting a policy and gradual increase (not drastic)of tariffs for the justified cases of achieving a quick financial stability by the utilities. It is well known the negative effect that give a drastic increase from a strong reaction of consumers that avoid paying them, especially by vulnerable consumers with low incomes. Affordability is a complex problem that requires commitment from all stakeholders related to this issue, to ensure protection of customers and especially those with low income, as well as companies to reach their financial stability.

In view of this objective, WRA has used its regulatory instruments as tariff structures with crossed subsidy between different categories of consumers and public hearings by increasing the transparency with the public for their expectations and perception about the quality of services and willingness to pay for higher tariffs, monitoring and evaluation of the efficiency and effectiveness of service providers and opportunities for improving the management, etc.

An adequate tariff adjustment needs reliable and continuous monitoring of key performance indicators of utilities. WRA considers necessary using the results of performance monitoring of companies in reviewing and taking decisions for the tariff approval process. Although the monitoring process is implemented with correct and consistent procedures by WSSGD, unfortunately, the authenticity of data received from utilities is not credible.

Accuracy of data that determine the technical and financial performance of the companies has a direct impact on the parameters analyzed which determine the tariffs for consumers. These data also serve as the basis for assessment of the amount of subsidies that central or local government should allocate to cover direct costs to companies with a negative balance.

WRA sees as an immediate challenge reporting accurate and reliable data by the companies. WRA will undertake all appropriate institutional efforts in order to have its own database for water companies.

Consumer Protection and Transparency

Protecting the consumers' interest is one of the WRA's important duties as set by law.
Regarding this function, an important development in 2015, was the approval of the "Guideline for organizing the public hearing on the tariff approval process of water supply and disposal and treatment of wastewater."

This guideline sets out the modalities of organizing open public hearings with their customers in tariff adjustment process, including them directly in decision making. Development of public hearing fulfills two very important principles of the decision-making process, **transparency**-public information regarding company performance, as well as **attract public opinion in decision making**- their voices heard in the process of approving tariffs.

The public hearing is open to the public and utilities should take measures to inform consumers with the local media, as well as through the press.

The minutes of the public hearing is an essential document in the tariff adjustment process. WRA will not take into consideration the tariff application if this document is not part of documents file. In this way, WRA aims to improve the level of communication with the public, increasing transparency and accountability to the consumer in water supply and sewerage sector.

2. Performance of the Water Supply and Sewerage Sector in 2015

Before scrutinizing the individual performance of each utility, this chapter presents an overview of sector performance levels reached in 2015 and the progress made by all companies that provide water supply and waste water. The joint achievements of WSS companies are analyzed taking into account the objectives of the National Water Supply Sector and Sewerage Services Strategy 2011-2017 and WRA's performance benchmarks.

Key Developments

WRA, based on its regulatory mandate, has set policies to be followed for the fulfillment of its mission and vision. These policies aim to achieve the objective of increasing the efficiency of a quality customer service by financially sustainable utilities. In this way, the sector as a whole will go towards the progressive increase of its performance.

The main instruments of WRA to achieve the above objective is licensing of companies with capacities and possibilities that can offer customers services of water supply and disposal and treatment of wastewater within the standards and approved tariffs by the regulator.

WRA notes that the companies have become more compliant and supportive of the regulator's efforts to create a stable and transparent regulatory environment. WSS services sector mainly operates through companies organized as a joint stock company owned by the local government.

There are 57 companies operating in WWS sector, 53 of them are licensed and only 48 of which use tariffs approved by WRA. Sewerage services are not provided by all utilities. This

service is provided by only 32 utilities while there are currently 5 wastewater treatment plants in operation.

The companies do not provide services for the entire population in their area of jurisdiction. For the population outside the jurisdiction areas of companies, the service is provided by departments that operate within local governments, commune and municipalities that are not licensed by WRA. WRA objective has been identifying and finding the legal solution to resolve this situation properly. Water Sector Reform will bring institutional settlement within a reasonable time limit to this problem.

In 2015, the sector has developed constantly, although levels and performance indicators is not adequate compared to the sector's strategic objectives and good performance set by WRA. ***The coverage of water supply and sanitation service and the collection efficiency had a positive trend***. Again this year the revenues from the main activity cover over 100% of operating and maintenance costs for the sector. ***But the trend of labor cost indicators has not been positive. Compared with 2014 this indicator is 20% lower. Sewerage services continue to remain behind water supply services, both in terms of coverage as well as the level of service required to ensure the protection of our waters and environment.***

The main problem in the sector is the ***high level of non-revenue water. This indicator has not changed at least for the last three years.*** WRA has noted repeatedly that the reduction of losses should be a priority of companies. Considering the total losses, control and reduction of technical losses requires time and investment, while the commercial losses remains a priority task for the companies cause this requires improving substantially managerial aspects of their staff towards illegal connections, which do not require significant physical investments in the system.

Non-revenue water analysis based on the "Water Balance" provides detailed data which serve both to the WRA and to the companies for the assessment of the situation and scheduling of measures to be taken for its improvement. In many cases, companies report incorrect data on water balance forms, which fail to give a real situation of technical and commercial losses .In this regard, companies need to improve techniques and their commitment in developing these water balances as an effort to analyze each element of technical and commercial losses in accordance with the water balance model of International Water Association (IWA).

Even though, WRA emphasizes in providing water services the focus is the customer, during 2015 the customer has felt little improvement***. Hours of water supply and quality of drinking water provided by the majority of companies continue to be the at same parameters during the last three years.***

Capital investments continue to play an important role in improving the situation of the sector. In 2015 as in previous years, the main sources of financing have been the state budget

and foreign donors in the form of loans or grants in approximately equal ratios. These investments are mainly focused on the rehabilitation of water supply systems as well as building wastewater treatment plant. Approval of Water Supply Master Plan and Sanitation for Albania for the period 2011-2040 is an important initiative for the sector, which enables investment orientation towards priority areas.

Master Plan document is still not used as a reference document regarding the priority orientation and allocation of funds for capital investment. In addition, National Master Plan includes only service areas managed by companies leaving out the territories in which the water supply services and sewerage services is provided by municipalities or community itself. This Master Plan needs to be updated and supplemented with data for the areas in which services are provided and administered by municipalities, as well as to areas where physical systems of supply water and sewerage services for the population.

The main sources of revenues for companies are the incomes generated by their principal activity and other services they perform for consumers. Even during 2015, the government has accorded subsidies to the companies, because many companies are not even able to finance their main operational activities.
The sector is faced with many problems related to the management and operation. Implementation of the water supply and sanitation sector reform will make possible solving many problems encountered previously in the sector and create all the conditions for a better management according to the principles of regionalization and economies of scale. The reform will include all the areas where the water supply and sewerage services are currently at a very low level of service or in the uncovered areas where such services are not institutionally organized.
In the future, WSS services shall be provided by licensed companies in the entire territory. The reform shall facilitate considerably the legal regulation of the uncovered areas, as they will become part of municipalities. Therefore, under this reform the companies will find solutions to the problems and irregularities in terms of the identification and registration of assets. Registration of the water supply and sewerage assets as well as their certification in the Office of Registration of Immovable Properties will include not only existing assets of WSS companies, but also those assets established by local governments investment, shareholders of WSS companies, which are not currently part of the inventory of these companies as well as local authorities assets, mainly communes, which to date are administered by departments within these communes.

In addition, WSS services reorganization as a function of the new local units will resolve the problem of accountability and responsibility of the company regarding the management of WWS services. Delegation of monitoring and control functions from the owner (municipality councils) to supervisory boards has not resulted effective for companies, but in many cases, has had a negative effect.

Sector Performance Overview and trends

Water Regulatory Authority as an independent institution in the water supply and sewerage sector is legally mandated to present the "state of the sector and its recommendations regarding the measures to be taken to improve this sector." For this reason, WRA monitors and analyzes continuously the performance of overall sector and the companies that provide water supply and sewerage services.

Monitoring and analysis is made based on Key Performance Indicators approved by the National Regulatory Commission.

In 2015, KPI levels for the sector and their trend in the last three years is shown in Table 1.

Table 1. Performance of Water Supply and Sewerage Sector in years 2013, 2014 and 2015

Performance Indicators	2013	2014	2015	Performance Trend	WRA 'Good' Performance Benchmark	Sector Strategy Target 2015
Water Coverage (%)	80.8	80.8	81	=	n/a	93
Sewerage Coverage (%) *	51	51	50	↘	75	85
Drinking Water Quality	n/a	n/a		n/a	n/a	n/a
Hours of Supply (hours/day)	11.5	12.1	12.1	=	18	18
Total Cost Coverage (%)	84.6	87	79	↘	80	78
O&M Cost Coverage (%)	113.8	122	102	↘	100	100
Collection Efficiency (%)	82	91	92	↗	82	96
Staff Efficiency (Staff/1000 connections)	9.5	8.9	8.64	↗	4/6/10	n/a
Non-Revenue Water (%)	67.4	67.2	67	=	30	45
Metering Ratio (%)	59	61.2	64	↗	85	80

(Source: Monitoring and Benchmarking Unit)

* This does not mean that the sewerage coverage has decreased in 2014, but it comes as a result of increased customer access served with water supply in rural areas which is not associated with sewerage service.

The above table summarizes the overall performance of the sector in 2015 compared with 2015 sector strategy targets and challenging benchmarks for 'good' utility performance set by the WRA.
At a first look the results of performance indicators in Table 1 seem contradictory and paradoxical. On one hand it is shown the increase of the staff efficiency and collection efficiency and on another hand, there is a significant decrease of O&M and Total costs coverage indicators. Below is a detailed analysis of each indicator, the impact and interaction with other indicators, which explains the paradoxes that are found in their first appearance.

In 2015, water supply and sewerage coverage has not achieved the objective of the strategy for the sector nor that of the good performance of the WRA. WWS Companies provide water supply services to 81% of the population in their areas, sewerage services are provided only slightly more than half of the resident population (50%). **Compared with 2014, the number of household customers that have access to water supply services in 2015 increased by about 27600 customers and those with access to sewerage service increased by about 31,000 customers.** This shows the low level of physical investment for the expansion of systems and the necessity to find ways and opportunities to increase them at higher levels in response to requests for access to water supply and sewerage systems.

The populations living in urban areas have more access to the service of water supply and sewerage system provided by WSS utilities, 76% of water supply coverage and 98% of wastewater service belongs to urban areas.

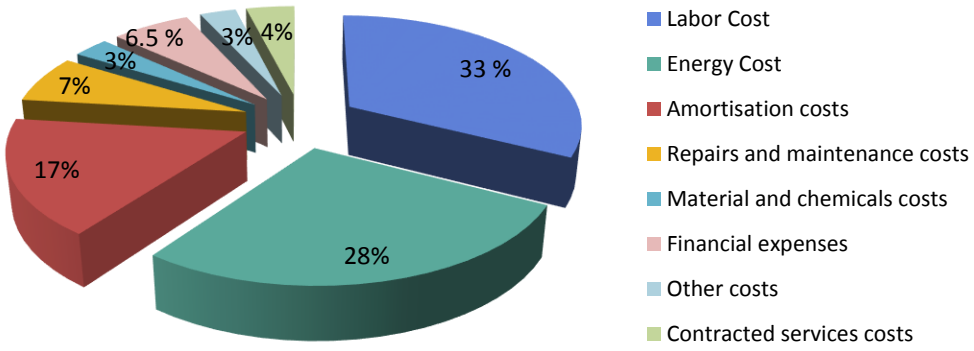
The population in rural areas has access mainly on water supply, 24% of the population receives water supply service and only 2% of the population is covered with wastewater disposal service. In rural areas, these levels indicate that WWS service coverage is far from sector development objectives.

The average coverage of O&M costs with the income derived from primary activity in 2015 is 102%. Nineteen utilities cover over 100% of operation and maintenance costs. The results show a good performance of the sector, not in terms of cost recovery. **Compared with a year ago, this indicator has not a positive trend, the level of coverage of O&M costs decreased by approximately 20%.**

The same can be said in terms of total cost coverage. The average total cost coverage for the sector is 79%. In 2015 three companies have covered all expenses incurred for services provided with their revenues, mainly, large utilities have achieved that result. This indicator has not a positive trend. **Compared with the 2014, the level of the total cost coverage indicator decreased approximately 8% compared with 2015.**

Incomes and expenses analysis for the sector shows no progress in the level of cost coverage with incomes generated, because companies have not shown the same commitment as in the previous years in terms of revenues increase and keeping control over expenses. ***Compared with 2014 revenues from billing increased 4% while costs about 14%.*** The level of expenses has increased in almost all cost items. Labor costs increased 11%, electricity costs by 30%, repairs and maintenance costs are increased with 50%, contracted services costs by 38%. Referring to the total cost, the highest percentage of the total costs are personnel costs, electricity and depreciation, therefore they have a higher impact in the increase of total costs.

Fig. 1 Cost structure of WWS service for 2015



The personnel costs have the biggest specific weight in the total costs. In general, WSS utilities have a higher number of employees per 1000 connections that indicates an inefficient management of human resources. For a small number of utilities, the level of this indicator approximates the region level where the average number of employees per 1,000 connections is not more than 4-5 employees / 1000 connections. For other utilities the number of employees per 1000 connections is twice more compared with the average level of the sector. Thus, the personnel costs are more than half of the company's annual expenses. In 2015, these costs increased as a result of increased number of employees in the sector.

Efficiency staff indicator has a very small positive trend due to the fact that the number of employees and the number of connections increased almost to the same extent about 7%.

Energy costs occupy a considerable part of the total costs. For companies that manage pumping systems such as water supply and wastewater disposal, especially for those that have wastewater treatment plants energy efficiency is a very important indicator with a direct impact on energy cost. ***The increase in energy cost is mainly due to the change in the price of electricity for WWS companies in February 2015. Low voltage consumption price has risen about 16%, while electricity price in medium voltage has risen about 53% (75% of energy consumption for WSS is in medium voltage).*** Compared with 2014, costs for electricity in the sector have increased about 558 million ALL.

However, this does not mean that there are no possibilities for improvement of energy efficiency in order to reduce service costs. Reduction of the cost of electricity for the water supply service is connected with improvement of some other indicators such as reduction of losses, installation of meters, but also with a better management of water supply system, which brings reduction of the volume of water produced and consequently the reduction of energy consumption.

Generally, WSS utilities have water supply systems with pumping system. Most of them also have mechanical sewerage systems, including those utilities managing urban water treatment plants. Many of these utilities have significant financial problems to cover direct costs, specifically energy costs. In principle, WRA is against raising the price of electricity for water and wastewater utilities, especially for those that are not financially sustainable. WRA is under taking detailed analysis of this situation in order to propose to the Energy Regulator Authority a reduced price for the water supply sector. Reducing the price of electricity for this vital sector will improve important aspect for all utilities work in general and for those with financial difficulties, in particular.

On the other hand, utilities should make more efforts to apply practices to improve energy efficiency. In many cases this is quite obvious, such as replacing a pump with the best features which does not require big physical investment. Through by a GIZ funded project "Save Energy" there are set priorities for twenty-two (22) utilities. The study identified where the efforts and investment should be directed in order to improve energy efficiency. Given the conclusions of this study, it is indispensable to extend this study to all water supply systems across the country.

Depreciation expenses occupy a significant part in total costs. For utilities, for which the financing sources of investment are loans, credit costs occupy an important part in the total cost. The development of asset management plans will make possible reducing of these costs. Asset management planning means low cost service as well as low risk in possession and operation the assets throughout their lifecycle.

Currently, none of the companies ***have an asset management plan.*** One of the reasons is the lack of knowledge and capacity of company's staff. It remains a challenge the drafting and use of this very important instrument under the company management activity in general.

In 2015, the average collection efficiency in the sector is 92%. This indicator has exceeded the target for good performance of the WRA, but has not reached the strategic objective for the sector. Basically, collection efficiency indicator is directly related to the management and the results clearly reflects the work of the utility itself. Generally, during this year companies have shown attention towards collection rate. Revenue collection by consumers billing is the main source of incomes to WSS companies as a key element of achieving their financial sustainability. On the other hand, the increase of financial stability requires that WSS

companies realize the collection process in time. For many utilities it remains problematic collection of debts, for which they need to reinforce their efforts. WRA encourages all companies to follow the example of the best performers in this regard in order to ensure their financial stability in the future.

Metering ratio is an indicator that gets a positive trends. WWS companies have continued to install meters to customers in their service area. The performance of this indicator for the sector in general has been positive. The average metering ratio in 2015 is 64%. The sector has not reached the target of the sector development and the good performance of this indicator as set by WRA. Water consumption metering reduces the level of water abuse that currently causes significant financial losses for companies and also creates opportunities to match production with the water demand.
Meters installation is a process which has seen positive developments every year, however, the level of flat rate billing for customers remains high. There are a few WWS Companies that have installed meters for all customers in their service area. Most of the companies provide metered and unmetered service. For a limited number of companies the metered service is in a negligible level. The data shows that the installation of meters has not been completed for all non-household customers, who have a legal obligation to install the meter with their own expense, a process which should have been completed in 2010. In some cases, this category of customers presents technical reasons for not installing water meters, however companies must be seriously engaged to solve these problems because often these consumers are significantly under billed for the quantities they consume.

WRA considers metering installation process fully reachable from WWS companies, and therefore supports and encourages all companies to design and implement programs for the installation of individual meters also in water production.

Installing water meters for the whole water supply system is directly related to improving the indicator "Non-revenue water". Increasing the levels of metering in water supply systems should normally be accompanied by a reduction of non-revenue water, for the administrative losses, but the level of administrative losses has remained unchanged. This shows that the WWS companies are not making the necessary efforts to improve aspects of their managerial work.

Non – revenue water is an indicator that at least in the past three years remains with no positive trend and is the main concern in the sector. Most of the water produced, or 67% of the water produced is non-revenue water. Although the control and reduction of losses cannot be achieved immediately, there is space for reducing them, because a considerable part belongs to administrative losses. For this reason, WRA has noted repeatedly that the reduction of losses should be a priority of the WWS companies. The experience of companies with the best performance of this indicator shows that the investment programs for a large-scale replacement of outdated infrastructure is only one aspect for the reduction of non-revenue water.

The basic elements of non-revenue water are total losses that include administrative and technical ones. Considering the total losses, control and reduction of technical losses requires time and investment, regarding the administrative ones it remains a priority task of utilities to reduce them, which seeks mainly improvement of management aspects of their staff towards non-correct billing and illegal connections, which do not require significant physical investments in system.

Analysis of non- revenue water based on the "Water Balance" provides detailed data that serve to both companies and regulator to assess the situation and programming the measures to be taken. The document serves as the appropriate instrument for scanning administrative and technical losses of water systems state. WRA has asked companies to fulfill balance water excel sheets and submitting them to WRA based on a model developed by the regulator based on the International Water Supply Association (IWA) model. In many cases, companies haven't fulfilled water balance excel sheets in the required standard and there are lacking of details or information for each category of losses. It remains a challenge for companies to improve techniques and commitment to detail each element of technical and commercial losses in accordance with international model of IWA. SHUKALB has occasionally organized training in this topic, but it is noticed that such training should be more often and the commitment of companies should be serious to bring appropriate staff to be training.

In 2015, Staff Efficiency is an indicator which has not undergone any changes. WSS companies generally operate with a high number of employees, but there are utilities where staff efficiency is in contemporary levels.
The staff cost currently occupies a large percentage of the operation and maintenance costs of water supply and sewerage companies and is a key element to increase the financial sustainability of companies. Overstaffing is often caused by political interference of hiring nonprofessional's employees who not only artificially increase personnel costs, but these people with disengagement and lack of professionalism influence the other company staff.

Reduction of staff at appropriate levels can be achieved by optimizing the organizational structure with qualified and motivated employees and establishing clear horizontal and vertical internal operating procedures. This type of analysis and organization of companies should be the subject of a study supported by adequate expertise, which can develop job description for each position. Generally they are part of the company's 5-year Business Plan.

Regarding the quality of service to customers, measured by continuity of service and quality of drinking water, the sector performance is not good. In 2015 the average hours of water supply has not changed compared with 2014. Customers are supplied with water 12.1 hours per day on average. This indicator has failed to reach the strategic objectives and the good performance set by WRA. The lack of continuous water supply, regardless the causes, has an impact on water quality. Most customers are not supplied with uninterruptedly water and proper pressure.

Companies provide water supply to a certain time schedule. The duration of water supply varies from 4-24 hours per day. Companies that provide uninterrupted supply of water and proper pressure are utilities of Korca Qytet, Pogradec, Librazhd and Bilisht.

Even though, WRA is not directly the responsible institution for monitoring the quality of drinking water it considers as one of the main indicators to fulfill its mandate in relation to consumer protection. There are two main parameters that assess the safety of drinking water supply, the implementation of bacteriological (coliform) standards and the percentage of residual chlorine. For WRA any incompatibility with standards poses a risk to public health and reduces the trust of customers for the service provided.

Service providers, though they are trying to improve the quality of water at the point of supply, do not guarantee the quality of water to customers for many other reasons which are water supply interruptions, changes in water pressure, drilling pipe ,illegal connections, keeping water in tankers and suction pumps installed by customers etc.

Regarding to wastewater quality, the situation has not changed. Across the country, there are 5 wastewater treatment plants which treat wastewater for a limited number of customers. With the putting in operation of other treatment plants the situation will improve. Increasing the level of wastewater treatment will play an important role in environmental protection and quality of life of consumers.

3.Performance Analysis of Water Supply and Sewerage Utilities

This part of the report will analyze and assess the individual performance of the water supply and sewerage utilities for the year 2015, as well as their progress since 2013. The method applied for assessment is based on the ten key performance indicators. Each of them is briefly described as follows.

3.1. Key Performance Indicators

Monitoring and comparative assessment of the performance of water supply and sewerage utilities is based on 10 key performance indicators approved by the National Regulatory Commission. These indicators have analyzed and assessed the most important aspects of work of the utilities, providing us a comprehensive overview of the level of services provided. Data of the annual performance indicators of WRA utilities are obtained by the Monitoring and Benchmarking Unit at GDWSS.
The key performance indicators are given in Table 2.

Table 2. Overview of key performance indicators 2015

KPI	Description
1 –O&M cost coverage	Percentage of operating and maintenance costs (excluding the amortization and capital costs) covered by revenues.
2 – Total cost coverage	Percentage of total costs for the services provided, covered by the company revenues.
3 – Collection rate	Ratio between the revenue collection and the amount billed to the clients.
4 – Staff efficiency	Number of company staff per 1000 WSS connections
5 – Non-revenue water	Percentage of water produced that is not billed to the clients.
6 – Metering ratio	Percentage of connections with meters (number of clients) as percentage to the total number of connections (clients).
7 – Water supply duration	Average hours of daily water supply.
8 – Drinking Water Quality	Percentage of tests for water quality, which meet the bacteriological (coliform) standards and those of residual chlorine.
9 – Sewerage Coverage	Part of population within the service area of a company, which is provided sanitation/sewerage service but not necessarily the treatment of wastewater.
10 – Regulatory perception	Assessment of the utility activity in accordance with the regulatory framework.

Given the objective of the Water Regulatory Authority (WRA) to have a financially viable sector, which provides services at the best quality for consumers, performance indicators to assess each utility separately and the sector in general are selected to evaluate economic situation of the utilities, current management capacity and service performance to customers. In this context, wit is first initially analyzed the individual performance of each utility and then compared the levels achieved between the utilities, identifying best performers and best practices within the country.

The level of performance indicators highlights the impact of internal factors such as improved management, but also the impact of external factors such as investment by the central government, donor grants etc. The achieved levels of indicators such as measuring level or coverage of sanitation services do not depend only on the work of service providers, because capital investment is required in order to upgrade their level. However, many other indicators such as the collection rate, staff efficiency, non-revenue water and coverage of costs depend directly on the work of utilities. Internal efforts of the utilities play a key role for their improvement.

Regulatory perception is another indicator of the analysis through which is evaluated the cooperation of utilities in the regulatory process by supporting the efforts of WRA to establish a transparent and sustainable environment,.

Performance analysis: Groups of Utilities

In order to have a realistic comparative performance evaluation between the utilities, WRA has decided that the water supply and sanitation companies are divided in three groups according to the number of drinking water supply connections as a proper way to make the distinction between the large or small companies.

	Company Size (connections number)	Utilities number in group
Group 1	> 15,000 water supply connections	11
Group 2	3,000 - 15,000 water supply connections	20[2]
Group 3	< 3,000 water supply connections	24

Table 3. Group of utilities

Source of information: WRA

[2] Utilities of Himarë in the second and utility Bradashesh in the third group are not part of the analysis because they have not reported any data.

Table 4 reflects the division of utilities according to groups.

Table 4. Division of companies into their groups

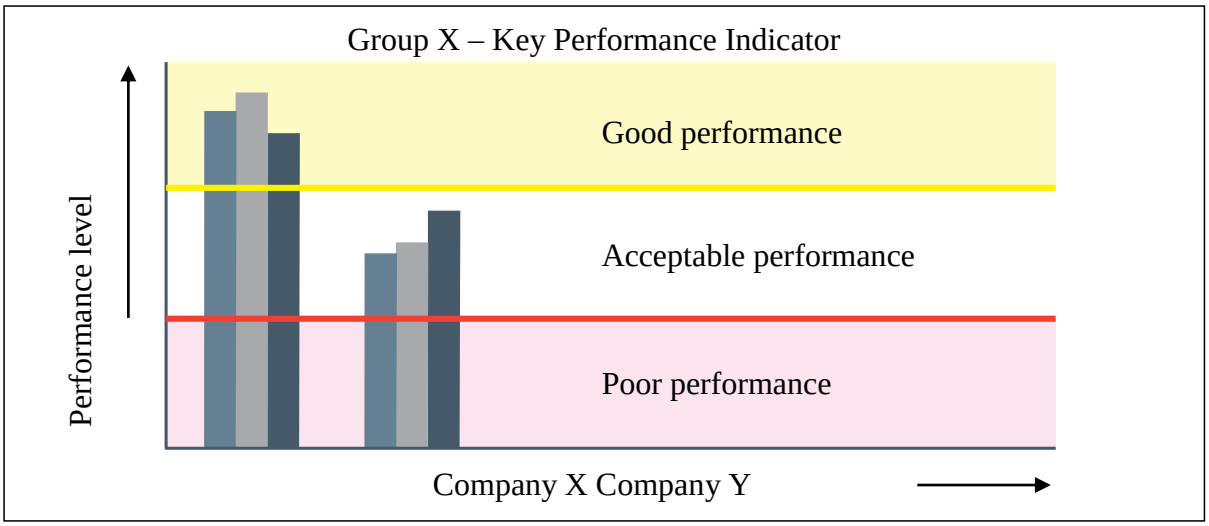
Service	Utility	Number of connections (water supply systems)	Service	Utility	Number of connections (water supply systems)
Group 1			**Group 3**		
WSS	Tiranë	197,722	WSS	Delvinë	2,832
WSS	Durrës	75,507	WS	Divjakë	2,798
WSS	Vlorë	44,436	WS	Bulqizë	2,746
WSS	Elbasan (Q)	31,249	WSS	Fushë-Krujë	2,535
WSS	Fier	30,034	WSS	Peqin	2,473
WSS	Shkodër	27,708	WS	Ura-Vajgurore	2,404
WSS	Berat -Kuçovë	25,025	WS	Novoselë	2,300
WSS	Kavajë	24,220	WS	Orikum	1,948
WSS	Korçë	22,445	WS	Çorovodë	1,883
WS	Elbasan Fshat	17,585	WSS	Ersekë	1,654
WSS	Sarandë	15,068	WS	Poliçan	1,579
Group 2			WS	Selenicë	1,509
WSS	Pogradec	14,345	WS	Tropojë	1,495
WSS	Lushnje	11,193	WSS	Mirditë	1,359
WSS	Gjirokastër	9,462	WS	Has	1,351
WSS	Lezhë	8,787	WSS	Bashkia Pukë	1,105
WS	Korçë Fshat	6,990	WS	Këlcyrë	1,002
WS	Lushnje Fshat	6,488	WS	Vau Dejës	942
WS	Kurbin	6,054	WSS	Libohovë	783
WS	Shkodër Fshat	5,841	WSS	FushëArrëz	604
WSS	Librazhd	5,191	WSS	Rubik	578
WSS	Kukës	5,026	WSS	Pukë Fshat	523
WS	Patos	4,747	WSS	Krastë	420
WSS	Mallakastër	4,339	WS	Gjirokastër Fshat	384
WSS	Burrel	4,326			
WS	Gramsh	4,047			
WSS	Rrogozhinë	4,015			
WSS	Krujë	3,668			
WSS	Tepelenë	3,550			
WS	Peshkopi	3,497			
WS	Përmet	3,426			
WSS	Bilisht	3,243			

Source of information WRA

Performance Analysis regarding the objectives set by WRA

For the purpose of analysis for each KPI, WRA has defined the levels for the assessment of performance of utilities, respectively the good performance, acceptable and poor performance level. These performance levels divided into limits are graphically presented in Figure 2. In the performance analysis graphs for each indicator, the yellow line shows the level of the objective on which the performance is considered good, while the red line shows that the performance level underneath it is considered poor.

Figure 2: Example of graphs and KPI analysis



To determine the performance of utilities, WRA has selected ten (10) performance indicators, which are calculated for each company separately. WRA has defined as seen in Table 5 the categorization of utility performance evaluations by categories of good, acceptable or poor performance, compared to the estimated values of the performance indicators of each company with that of these three categories. The comparative values of categories: good, acceptable and poor performance, are given in Table 5.

Table 5. Classification of benchmarking for key performance indicators

Key performance indicators		Benchmarking		
		Good	Acceptable	Poor
1 –O&M cost coverage		≥ 100%	80 - 100%	≤ 80%
2 – Total cost coverage		≥ 80%	50 - 80%	≤ 50%
3 – Collection Efficiency		≥ 82%	60 - 82%	≤ 60%
4 – Staff efficiency (number of company staff serving every 1000 connections)[3]	Group 1	≤ 4	4 – 6	≥ 6
	Group 2	≤ 6	6 – 10	≥ 10
	Group 3	≤ 10	10 – 15	≥ 15
5 – Non-revenue water		≤ 30%	30 - 50%	≥ 50%
6 – Metering Ratio		≥ 85%	n/a	<85
7 – Hours of Water supply		≥ 18 hours/day	8 - 18 hours/day	≤ 8 hours/day
8 – Drinking water quality		≥ 95%	90 - 95%	≤ 90%
9 – Sewerage Coverage		≥ 75%	50 - 75%	≤ 50%
10 – Regulatory Perception		n/a	n/a	n/a

Ranking of Water Supply and Sewerage Utilities

This part provides an evaluation of the overall performance of each of the companies, based on the assessment of 9 indicators out of a total of ten. In order to compare the water supply and sewerage utilities, their ranking/classification is based on the total amount of points collected from the detailed analysis of each KPI.

To each indicator is assigned a specific weight and are given point to reflect the utility performance against the levels of objectives set by WRA.

Equal or above performance the level of the aimed objective set by WRA are given maximum points. For most of the indicators, when the performance is below the aimed objective for a good performance, the utility is evaluated only with an appropriate share of the available points. For indicators as staff efficiency, non-revenue water, collection rate and drinking water quality, the poor performance is heavily penalized, without assigning any

[3] For KPI Staff Efficiency, the benchmarking objective is higher for the small utilities, considering that larger utilities (which commonly serve the areas of higher population density) find it easier to maintain a lower staff number per 1000 connections.

points. In this case, scoring is made if the current performance falls within the level of acceptable performance.

Accuracy and Credibility of Data

The key performance indicators are calculated on the basis of data reported by the water supply and sewerage utilities at the Monitoring Unit within the General Directorate of Water Supply and Sanitation. Data accuracy, reliability and timely control play a key role for the assessment of utility performance. During the performance analysis of 2015 it was observed lack in reporting, and some inaccurate reporting. For WRA, data accuracy and reliability take on importance not only for the evaluation of sector and WSS utility performance in this report, but also to make the right decisions regarding the licensing of utilities, setting of tariffs and monitoring of the objectives set for WSS utilities. WRA has deemed crucial the aspect of data accuracy. WRA will be committed to have an independent database required for the calculation of the basic performance indicators, which will be subject to continuous verification in site of their accuracy. WRA possesses the necessary expertise and logistics to ensure the verification of utility data accuracy.

3.1.1 Operation and Maintenance Cost Coverage

One of the key indicators enabling the assessment of the financial situation of a utility is "O&M cost coverage". This indicator measure what proportions of direct O&M costs is covered by the revenue generated from the main activity.

In 2015 the average level of this indicator for the whole WSS sector is 102% compared to 122% in the previous year. The trend is negative, although the indicator has exceeded the level of good performance objective. The sector in this indicator has suffered a sensitive decline, as a result of the worsening ratio between income and expenses. The 4% increase of revenues from the main activity has not covered the increase of operating and maintenance costs by 21%.

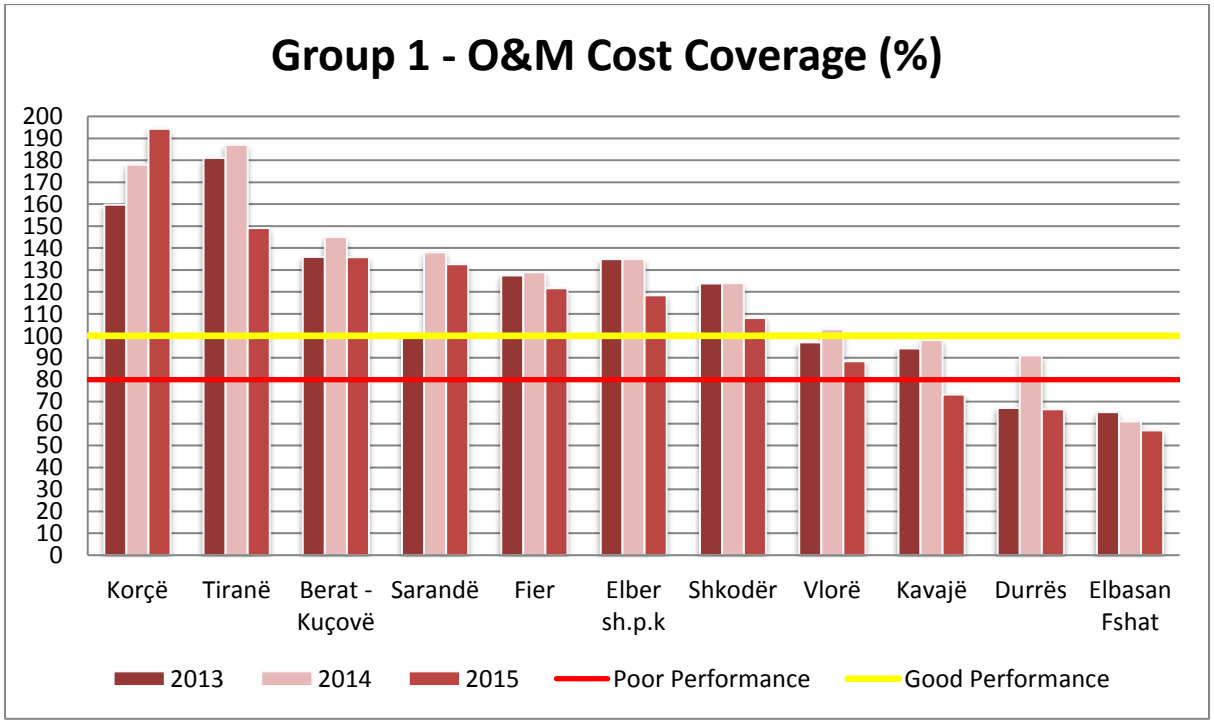
First group of Utilities

The first group includes the large companies, where the indicator "O&M cost coverage" for most of the companies of this group has been over 100 % for some consecutive years.
Figure 3 graphically presents the first group of companies in relation to the performance of indicator "O&M cost coverage".

The level of aimed objective for good performance set by WRA is exceeded by 7 companies, respectively: Korçë, Tiranë, Berat-Kuçovë, Sarandë, Elbasan, Fier and Shkodër utilities.
For year 2015, the company with the best performance in the first group continues to be Korçë utility, where the O & M cost coverage is at the level of 194.28% out of 178% that was in the previous year. It is worth stressing that this utility is the only one in this group with an increase of this indicator by (+16.28%).

JSC WS Elbasan Fshat utility continues to be the company with the poorest performance for the third consecutive year, where O & M cost coverage is 56.92%, a result which is worsened compared to the previous year because the cost coverage rate is reduced by (-4.28%). The poor performance range also includes Kavajë and Durrës utilities, respectively with 73.21% and 66.48%.

Figure 3. O&M cost coverage for the first group, year 2015



It is worth stressing that Tiranë, Berat Kuçovë, Sarandë, Fier, Elbasan and Shkodër utilities, notwithstanding their high level of this indicator, in 2015 have marked a sensitive decline in terms of the operating and maintenance cost coverage. Downgrading of the cost coverage

level for Vlora utility to (-14.66) has made this company to become from a company with very good performance to a company with acceptable performance. Further, for Durrës and Kavajë utilities, the decrease by (-24.52) and (-24.79) has entered those companies in the level of poor performance from acceptable performance they were in the previous year.

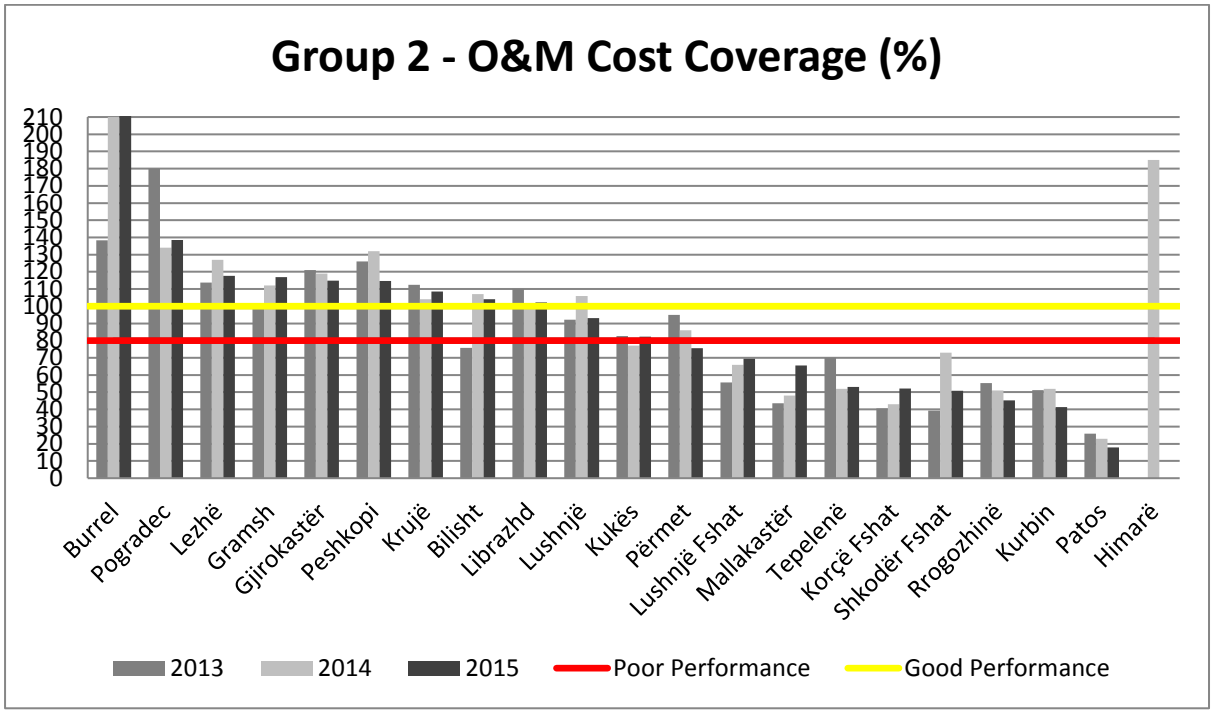
Second group of Utilities

In 2015 there were 9 companies in the second group, which have managed to cover the operating and maintenance costs above 100%, as result they are ranked among the good performance companies. The company with the best performance is Burrel utility, which covers 240% of O&M costs. This result is not real because it is related to the inaccurate data reporting to the Monitoring Unit, an issue also observed in 2014. Referring to the data of financial balance sheet of Burrel utility for 2014, O&M cost coverage is 114%. Accordingly, this company cannot be classified as the best performance company in this group. Burrel utility has still not delivered the financial balance sheet of the utility for the year 2015, therefore we do not have an accurate outcome of this indicator.

The company with the best O&M coverage is Pogradec utility with 138.55%, a result which is improved (+4.55%) in 2015 compared to the previous year.
Even for this year Patos utility is the company with the poorest performance, where the level of O&M cost coverage with income from the activity, is only 17.95%. For three consecutive years, this company not only has the lowest level of this indicator in the second group, but also the trend has been negative. 8 other companies fall within the range of poor performance. For these companies the operating and maintenance cost coverage level is far from the target of 80% of the acceptable performance. For Kurbin, Rrogozhinë, Shkodër Fshat, Korçë Fshat and Tepelenë utilities, O&M cost coverage varies from 41.28% to 53.1%.

The range of acceptable performance includes Lushnje Qytet utility; with 93.06% of O&M cost coverage, as well as Kukës utility with 82.3%.

Figure 4. O&M cost coverage for the second group in 2015



In the second group, Mallakastër utility is the company with the best progress regarding O&M cost coverage and continues to fall within the range of poor performance. Compared to year 2014, the level of this indicator is increased by 17.61%. Utilities of Gramsh, Krujë and Kukës have also marked progress on this indicator. The group of poor performance companies also includes their companies, specifically Lushnje Fshat, Korçë Fshat and Tepelenë utilities, which has made efforts to improve this indicator, however there has been little progress and the cost coverage level continues to be low.

Utilities of Peshkopi and Lezhe though ranked among the good performance companies for O& M cost coverage, this year they have had a negative trend of this indicator. O&M cost coverage level is decreased for utilities of Peshkopi with (-17.24%) and Lezhë whith (-9.34%). This indicator has shown a sensitive negative trend for utilities of Shkodër Fshat (-22.22%) Peshkopi (-17.24%), Lushnje (-12.94%) and Përmet (-10.49%)

The decrease of cost coverage level for Lushnje utility has made this company to become from a good performance company to a company with acceptable performance and Përmet utility from a company with acceptable performance to a company with poor performance. The opposite applied to happen to Kukës utility, the progress of this indicator has made the company to be shifted from a poor performance company to the one with acceptable performance.

Compared to 2014, of 20 companies of this group, 10 have improved this indicator in 2015 and other 10 companies have made it worse.

Third group of Utilities

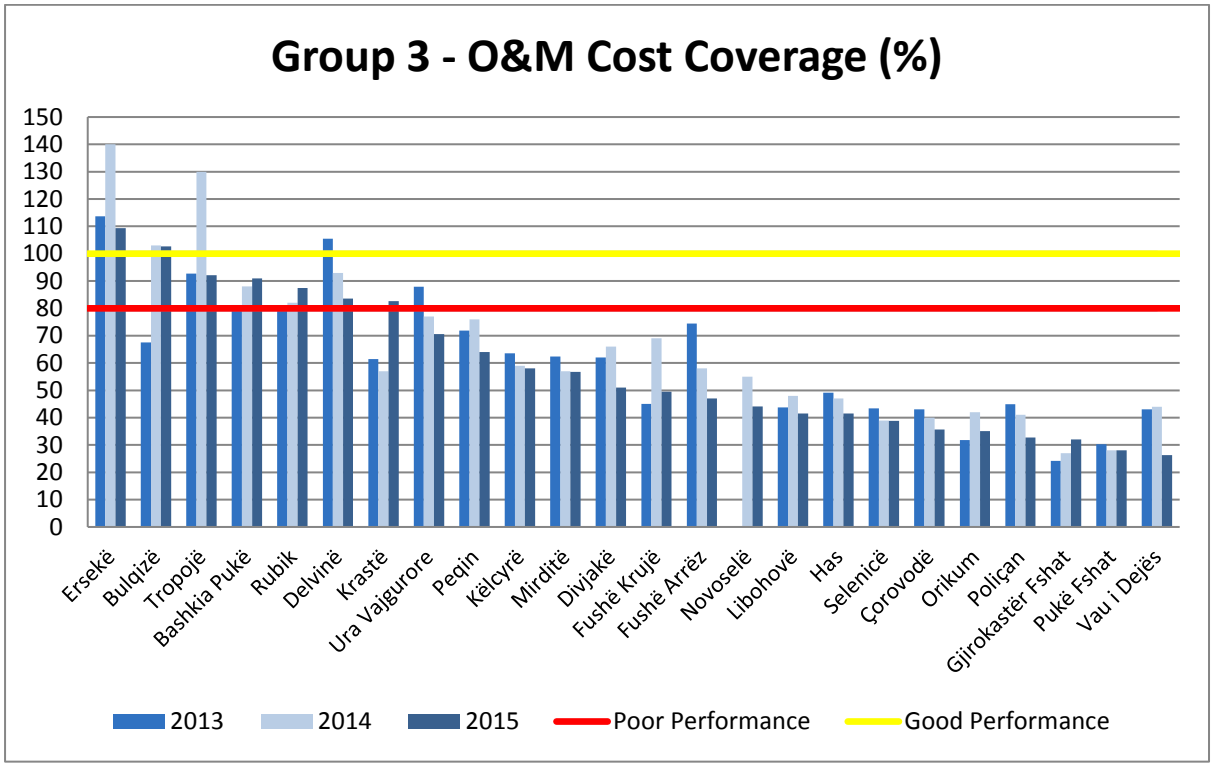
In this group, the level of the target set by WRA for good performance, to cover O & M costs is achieved only by the two companies, Ersekë and Bulqizë utilities respectively with 109.32% and 102.73%. Ersekë utility has continued to be the company with the best performance in the group, although the level of cost coverage for the company decreased by (-30.68%) compared to 2014.

The area of acceptable performance ranked 5 companies, among which Krastë utility, which in 2014 was part of the group of companies with poor performance. Compared to 2014, the company increased the level of O & M cost coverage (+ 25.68%). The opposite occurred to Tropojë utility, which from the best performer in 2014 with 130% exceeded the level of acceptable performance with 92.18% coverage of costs for 2015. Other companies with acceptable performance are utilities of Pukë with 90.97%; Rubik with 87.44% and Delvinë with 83.61%.

Of 24 companies of this group, 17 are ranked below the red line, namely within the poor performance range. The company with the poorest performance is Vau Dejës utility, which covers only 26.3% of the operating and maintenance costs. Results show that 12 companies fail to cover 50% of O&M costs, respectively: Pukë Fshat 28.1%, Gjirokastër Fshat 32.09%, Poliçan 32.75%, Orikum 35.07%, Çorovodë 35.7%, Selenice 38.8%, Has 41.51%, Libohovë 41.53%, Novoselë 44.06%, Fushë Arrëz 47.08% and Fushë Krujë 49.43%.

The group of poor performance includes also five companies, specifically Ura Vajgurore, Peqin, Këlcyre, Mirditë and Divjakë utilities, where O&M cost coverage varies from 51% to 70%.

Figure 5. O&M cost coverage for the third group in 2015



The trend of this indicator for companies of this group is negative. In 2015, the level of O & M cost coverage has a positive trend only for four companies. The company with the best performance in the group is Krastë utility, which has increased the level of cost recovery with (+ 25.68%) compared to 2014. For utilities as Rubik, Pukë Municipality and Gjirokastër Fshat, the increase is not more than 5%. For 20 other companies, for majority of them, the trend of covering and maintenance cost coverage is negative or remained at the same level as in 2014.

Conclusions

Following the analysis of this indicator for the three groups of companies, it results that WSS companies have not attempted to increase the level of O& M cost coverage. As a result, the level of O & M cost coverage for the sector in 2015 was reduced from 122% in 2014 to 102% in 2015.

Within the sector, 18 companies have managed to cover with over 100% O & M costs, 8 are ranked at the coverage level of 80%-100% and 29 companies are below the level of 80%, of which 16 companies do not cover even 50% of O&M costs. The latter ones don't have the financial ability to afford the costs. The continuity of their activity still depends on the subsidy allocated from the state budget.

In 2015, WSS companies have generally not done a good job in terms of the control of expenses and have not made proper efforts to increase revenues. The operating and maintenance costs are increased with around 21%, while revenues from the main activity by

only 4%. In 2015, almost all items of operating and maintenance cost are increased compared to previous year. However, the highest impact has been produced from the increase of energy and labor costs representing also the largest part of operating and maintenance costs. Compared to 2014, 50% of the increase of operating and maintenance costs has derived as a result of the increase of energy price and about 25% from the increase of labor costs. The latter ones increased as a result of the increased number of employees, which is generally unjustified.

WRA considers O&M cost coverage with revenues from the activity, as a first step toward the full cost coverage in the future. The change of tariffs plays a key role in the company revenues level and as a result, also on cost coverage. Setting of fair tariffs requires cost estimation for every service implemented by the utilities, which is also reflected in the Methodology for setting WRA tariffs.

For WRA the increase of revenues should derive not only from the increase of tariffs, but also through regular efforts to reduce service costs by enhancing the management and technical effectiveness.

Financial sustainability of WSS companies is related to a number of indicators as non-revenue water, metering level, collection rate, staff efficiency, etc. The results of performance of these indicators affect not only to each other but also the company's financial and economic situation. Most of WSS companies have a negative balance sheet for 2015.

3.1.2 Total Cost Coverage

The main objective of each company is the coverage of all costs with the income generated from its main activity and other services. Based on the government strategy for the sector, this objective will be gradually achieved, firstly starting with the operating and maintenance cost coverage to gradually shift to the total cost coverage.

Based on the analysis of operating and maintenance cost coverage, the expectations for the total cost coverage trend are predictable. As long as the companies have low level and/or negative trend in the first indicator, the gap in the second indicator is necessarily widened. This is because the revenues from the activity should cover more costs because the operating and maintenance costs are added the amortization and credit costs.

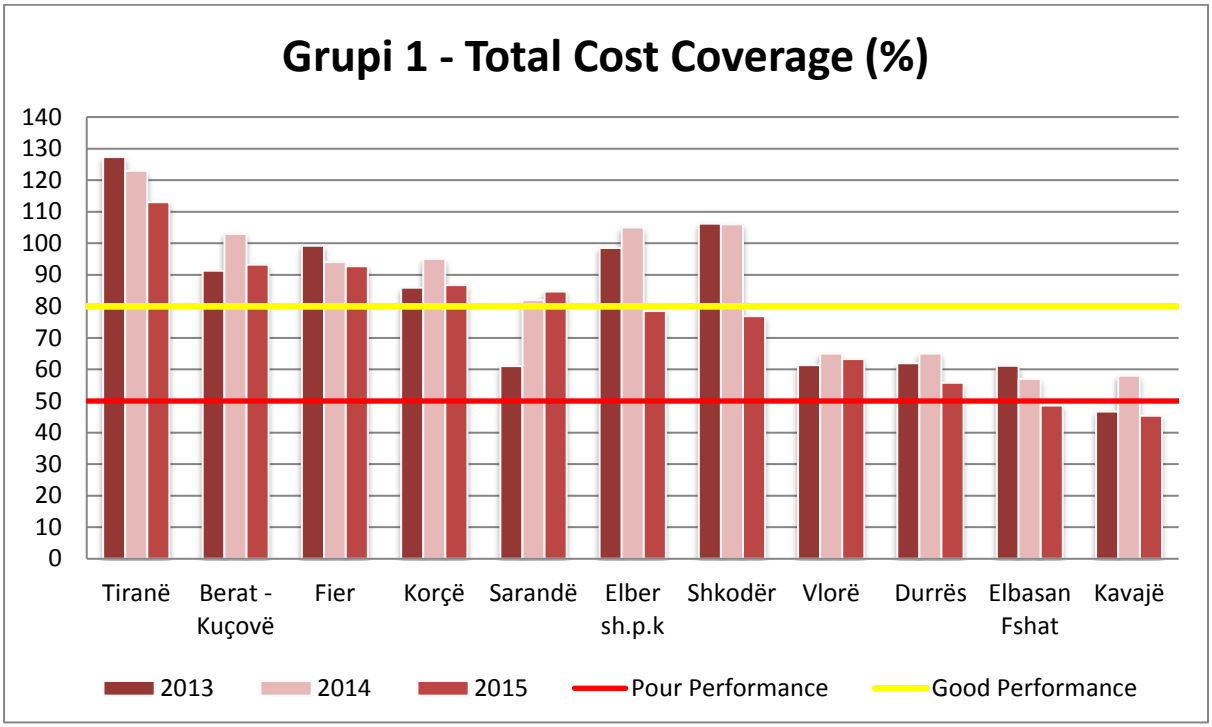
In 2015, the average of total cost coverage for the sector is 79%. The achieved level is closer to the good performance target level set by WRA and has met the objective of strategy for the sector, but the trend has been negative. For three consecutive years, the total cost coverage level has marked progress, while in 2015, compared to previous year, the total cost coverage level for the sector is decreased by 8%.

First group of Utilities

As observed from the following graph, total cost coverage level for the first group companies is different. For 2015 there are 5 companies ranked at the good performance level with over 80% of cost coverage, respectively ulitilies of: Tiranë 113%, Berat-Kuçovë 93%, Fier 92.7%, Korçë 86.7% and Sarandë with 84.7%.

The range of acceptable performance includes utilities of: Shkodër 70.8%, Elbasan with 70.9% and Vlore with 65% and Durrës with 52.1%. Utilities of Elbasan Fshat with 48.5% and Kavajë with 46.2% of total cost coverage still remain within the range of poor performance companies.

Figure 6. Total cost coverage for the first group in 2015



During 2015 most of the first group companies fall into the acceptable levels of the total cost coverage. However, except Sarandë utility which has improved this indicator from 82% to 84.7%, for other companies the trend has been negative compared to year 2014. Tiranë utility, though being the best performance company, has had a total cost coverage level of negative trend, decreasing to (-9.96%). In this group, the highest decline of the indicator is reported by utilities of Shkodër with (-29.15%) and Elbasan (-26.47), this decline has made these companies to be ranked from the good performance level to the acceptable performance level. Also, downgrading of the level of cost total coverage for Kavajë utility with (-12.67%) and Elbasan Fshat utility (-8.46%), has made those companies to be shifted from the acceptable performance to the poor performance level.

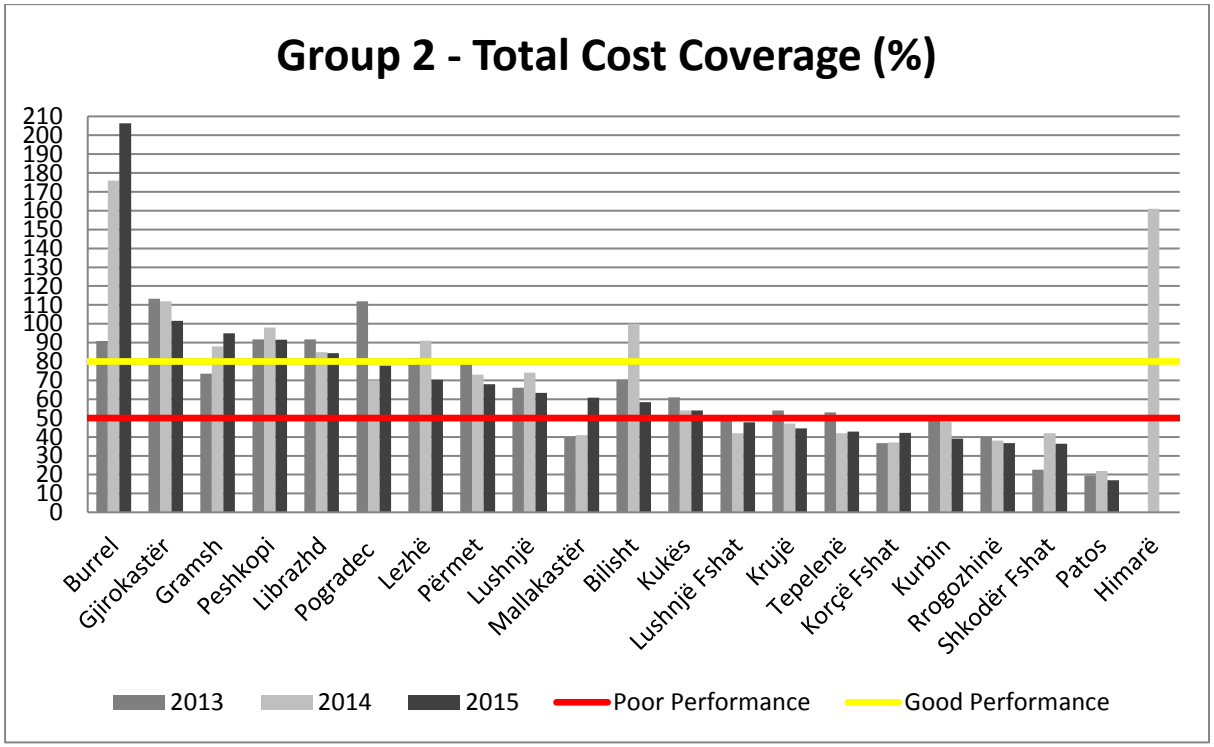
Second group of Utilities

In the second group, the target set by WRA for good performance is exceeded by 5 out of 21 companies of this group: Gjirokastër with 101.54%, Gramsh with 94.89%, Peshkopi with 91.62%, Librazhd with 84.35% of total cost coverage. Based on the data reported by Burrel utility, it follows that this company covers 206.29% of total costs. This result is not realistic as it is related to the inaccurate data reporting to the Monitoring Unit, an issue also observed in 2014. Referring to the data of financial balance sheet of Burrel utility l for 2014 (the company has not submitted the financial balance sheet of 2015), total cost coverage with income from the activity is 100%, accordingly, this company cannot be ranked the first.

The acceptable performance level at 50%-80% of the total cost coverage includes 7 companies, specifically Pogradec with 77.76%, Përmet with 67.92%, Lezhë with 70.24%, Lushnje with 63.43%, Mallakastër with 60.80%, Bilisht with 58.36% and Kukës with (53.99%).

The poor performance range includes 8 companies: Kurbin, Krujë, Tepelenë, Shkodër Fshat, Mallakastër, Rrogozhinë, Korçë Fshat, and Lushnje Fshat where the total cost coverage reaches up to 48%. Patos utility continues to be ranked the last for the third consecutive year, with the lowest level of this indicator (17.08%).

Figure 7. Total cost coverage for the second group in 2015



During 2015 this indicator for 8 companies has marked progress compared to 2014. The companies with the best positive trends are: Lushnje Fshat with (5.75%), Korçë Fshat with (5.19%) and Tepelenë with (0.73%).

The trend has been negative for 9 companies of this group. The highest decrease was reported by Bilisht utility with (-41.64%), which from a company that covered 100% total costs in 2014, in 2015 managed to cover 58.36% of these costs. Even for Lezhë utility the trend of this indicator has been negative, the total cost coverage level has been reduced by (-20.76%) compared to 91% in 2014 has reached 70.24% in 2015. This negative trend has also made the companies be shifted from the range of performance held in classification for year 2014.

Respectively Pogradec and Përmet utilities have shifted from a good performance to the acceptable performance range. Also, a negative trend in total cost coverage is shown by utilities of Lushnje Qytet with (-10.57%) and Kurbin with (-8.95%).

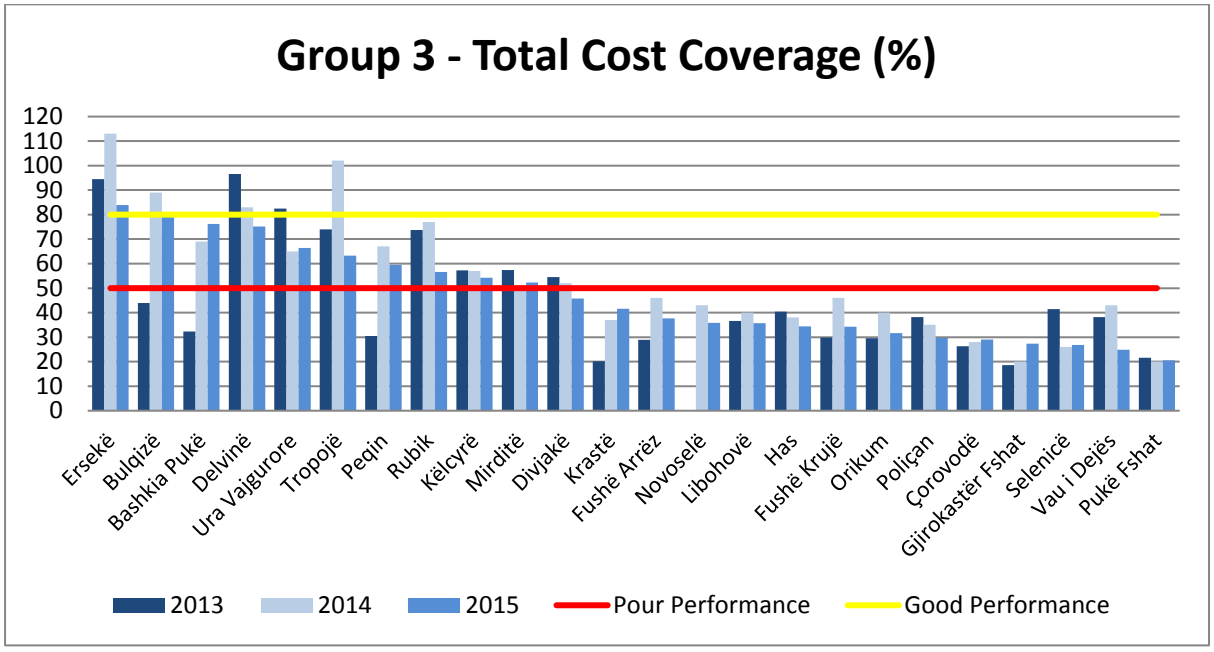
Third group of Utilities

In the third group two companies are ranked above the target of 80% set by WRA for good performance, respectively Erekë utility (83.39%), which has the best level of this indicator in this group and Bulqize utility with (80.90%).

The range of acceptable performance includes companies as: Rubik with 65.59%, Pukë Municipality with 76.14%, Delvinë with 75.10%, Peqin with 65.45%, Ura Vajgurore with 66.41%, Këlcyrë with 54.22%, Tropojë with 63.33% and Mirditë with 52.35%.

Most of the companies in this group do not cover even 50% of the total cost. Lower levels of total cost coverage are reported by utilities of Orikum with 29.66%, Çorovodë with 29.04%, Gjirokastër Fshat with 27.37%, Selenicë , Vau i Dejës and Pukë Fshat with 20.60%.

Figure 8. Total cost coverage for the third group in 2015



The performance of companies in this group not only for the level but also for the progress is not good. Although the total cost coverage level compared to previous year, is improved for 9 companies, generally positive changes have been at a low level, without noting any significant improvement of the situation. Pukë Fshat utility has the best progress in the group, with an increase of total cost coverage with (7.14%).

For thirteen companies, the trend of this indicator has been negative. A significant decrease of the cost coverage is shown by utilities of Tropojë with (-38.67%), Këlcyrë with (-20.41%) and Ersekë with (-29.11%).
This group is still very far from the strategic objective of cost coverage.

Conclusions

The average level of total cost coverage for WSS sector in 2015, as well as the progress of this indicator demonstrates that some of WSS companies are making continuous efforts to cover by their own income the costs of services delivered. The performance analysis shows that the best results of total cost coverage are achieved by the large water supply and sanitation companies, further, most of the small companies continue to depend on external financial sources. In 2015 the increase of expenses has been higher than the increase of revenues in the sector. This has downgraded the cost coverage levels.

Table 6 below introduces the progress of the main expenses and revenues items for the period 2013 - 2015.

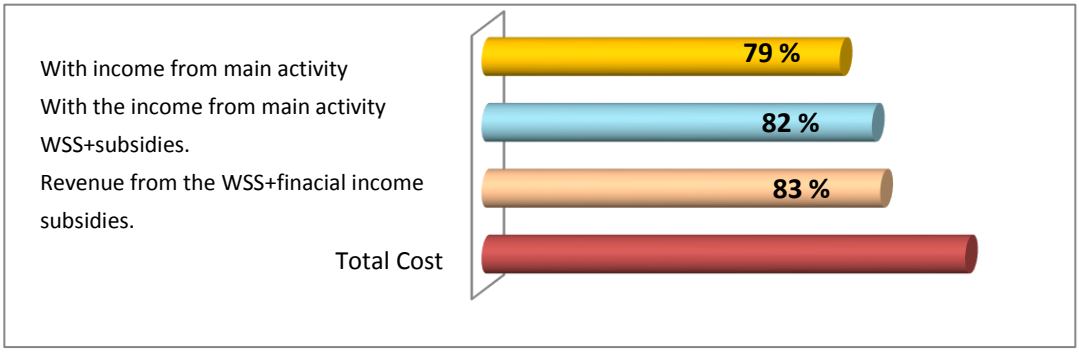
Table 6. Progress of main items of expenses and revenues 2013-2015

			000/ALL
Name	2013	2014	2015
Labor costs	2,529,386	2,558,318	2,840,900
Energy/electricity	1,831,898	1,861,948	2,419,476
Repair and maintenance	705,783	406,313	607,931
Materials and chemicals	233,970	250,210	214,895
Other	225,567	154,574	227,631
Contracted services	208,217	248,064	337,162
Total O&M costs	5,734,821	5,479,426	6,647,993
Amortizations	1,410,319	1,518,904	1,496,879
Financial expenses	576,149	468,014	450,109
Financial provisions	438,704	236,792	223,917
TOTAL costs	8,159,993	7,703,136	8,818,898
Revenues from WSS activity	6,049,689	6,344,062	6,616,196
Other revenues related to the activity	474,542	366,696	169,653
Total WSS revenues	6,524,231	6,710,758	6,785,849
Subsidies	586,998	439,999	430,000
Other financial revenues	151,846	87,556	110,910
Total revenues from all sources	7,263,076	7,238,312	7,326,759

Even for 2015 the cost structure is the same, where most of the total cost is represented by personnel costs, electricity and depreciation, and for some companies also the credit/loan costs.
Total costs are calculated by adding to O&M costs the expenses of depreciation, loan interests and financial provisions. For 2015 these three items (depreciation, loan interests and financial provisions) are almost at the same level compared to the previous year, which means that increase of total cost level has been influenced by the increase of operating and maintenance costs. As we have also highlighted in the analysis of indicator "Operating and Maintenance cost coverage", the increase of these costs has been also influenced by the increase of energy cost, salaries and expenses, and other expenses. If the energy price for 2015 had not been changed, the total cost coverage would be about 83%.

During the last three years, capital costs represent on average 25% -30% of total costs. However, there are companies as Korçe utility, where capital costs (depreciation + loan cost) represent over 50% of total costs. This company manages to cover O & M costs at 194%. High capital costs decrease the coverage level of total costs to 87%. In the same situation are those companies that have started to repay the loans for investment.
For WSS companies the main sources of income are from the main activity, but besides them they also have other income deriving from other sources as subsidies allocated from the state budget and financial income. In total income, those from WS activity represent 92.6%, financial income 1.5% and those from subsidies represent 5.9%. Taking into account all income from the activity, total cost coverage for 2015 is estimated at 83%.

Figure 9. Total cost coverage according to revenues



Therefore, most of the revenues for the company to pay costs come from its water supply and sewerage activity. Accordingly, billing services to all customers in the service area and collection revenue is one of the main duty of companies work. On the other hand, the improvement of indicators that directly affect service costs such as non-revenue water or staff efficiency bring cost decrease in two main cost items. For 2015, the average cost for 1m^3 water produced is 25 ALL and the cost for 1 m^3 of water billed is 79 ALL. Comparison of these figures clearly shows that only 1/3 of water is billed. Therefore, a better management of

the system, as well as study of the needs for water, intervention with investments in WSS network should diminished this gap. Its improvement will lead to cost decrease and therefore WSS companies are financially more solid. A more detailed analysis of these losses will be reflected in the analysis of indicator "Non-Revenue Water".
WRA will continue to encourage and support all WSS companies to increase financial stability and improve customer service. The priority should be to improve the company management and not increased revenues only from the change of tariffs. During this year, we observe that for companies that have applied new tariffs during 2015, respectively Saranda, Elbasan Fshat, Korçe Fshat and Ersekë utilities increased revenues only by the influence of new tariffs while billing level has remained almost the same as in 2014.

It is clear that financially weak companies will continue to need funding from the state budget or donors for investments. WRA supports the government strategic objective to draft business plans as an important tool for investment planning needs, management and monitoring. Development of business plans with realistic targets and relevant funding sources must be one of the main duties of companies work.

3.1.3 Collection efficiency

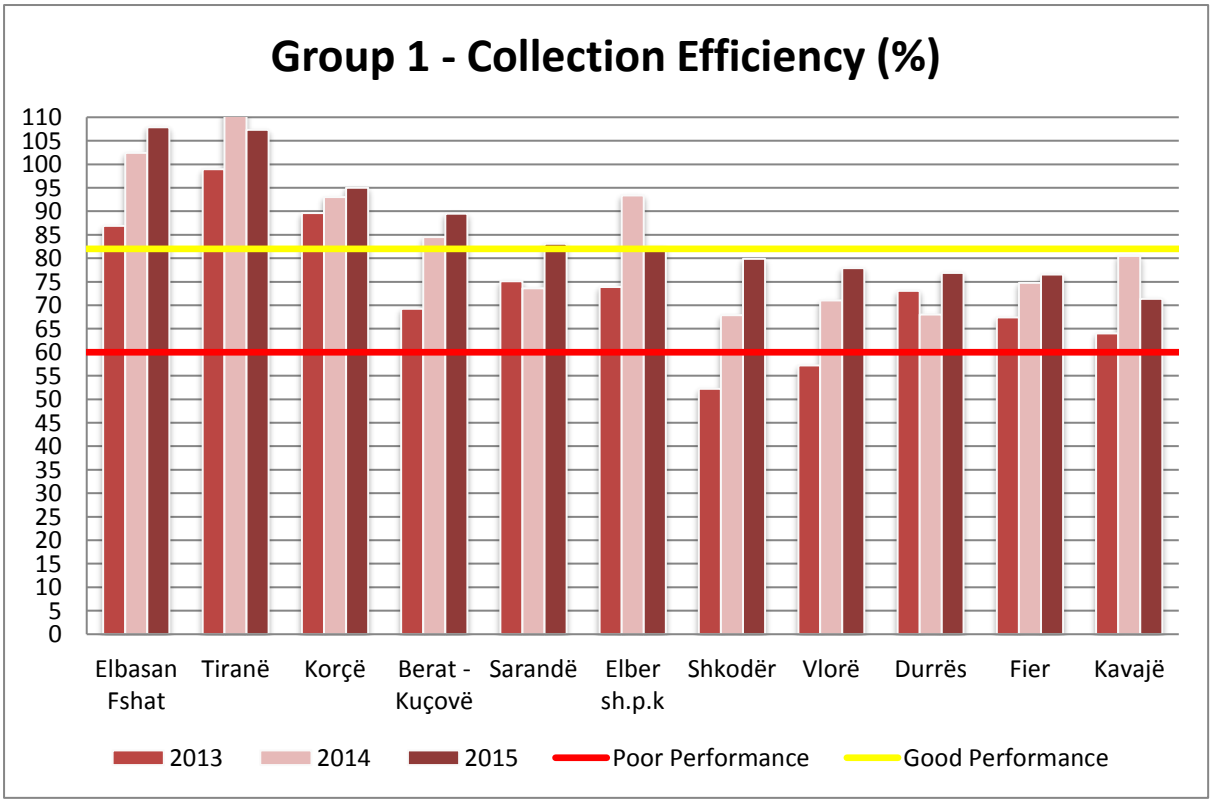
Collection efficiency is the ratio between the amount billed for services to customers and the revenue actually collected. This indicator sheds light on how effective the company is in securing its liquidity. Good performance in collection efficiency is essentially a management task.

In 2015, the average collection efficiency for the water supply and sewerage sector is 92% with a slight improvement with + 1% vs. 2014. This indicator, although for several years has positive trend still it has not reached the target level specified in Sector Strategy which for 2015 is 96%.

First Group of Utilities

For 2015, in the first group, Elbasan Fshat and Tirana utilities are the best performer for this indicator respectively with 107.85% and 107.34%. The results show that these utilities have worked to collect the outstanding debts. The level achieved in the collection efficiency from Korca with 95.02%, Berat Kuçovë 89.46%, Saranda 83.1% and Elbasan with 82.49% ranked these utilities in the range of good performance. Target level set by WRA for good performance in collection efficiency has been reached and surpassed by them. Kavaja utility have the lowest collection rate with 71.35%, however this utility lie above the acceptable level for this indicator.

Graph 10. Collection Efficiency for group 1 in 2015

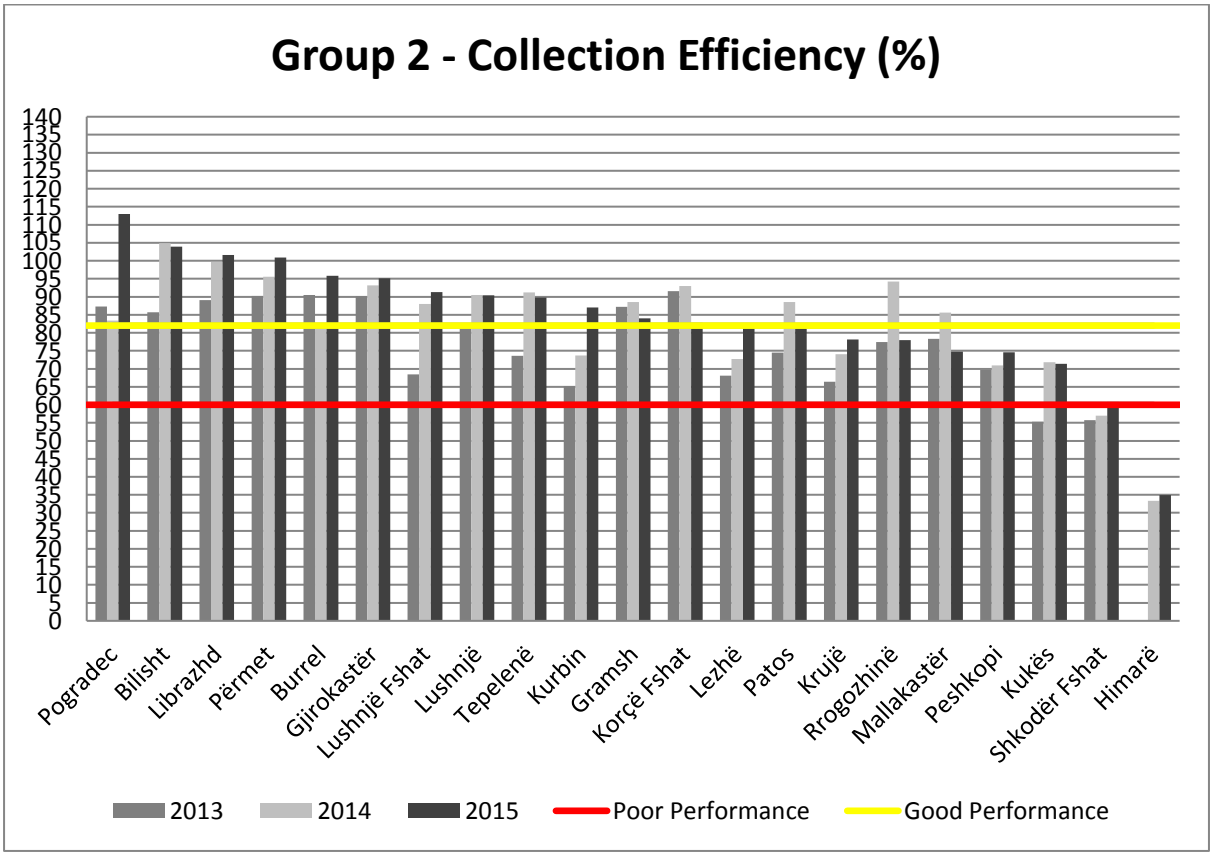


Utilities of Shkodra, Saranda and Durrës marked significant improvement compared with 2014 on collection eficciency. They increased collection efficiency in 2015 respectively 11.99% and 8.86% 9.48%.
Collection efficiency has decreased for Elbasan Qytet with (-10.88) and Kavaja (-9.12%), which indicates that these utilities have not done enough and have not shown the same attention as the previous year in terms of collection efficiency. In 2014 these two utilities had significant progress in this indicator.
It is worth mentioning that in this group there is no utility at the level of poor performance.

Second Group of Utilities

In the second group, 13 out of 21 utilities have a collection efficiency of more than 82%, the target level for good performance set by WRA. For four of these companies collection efficiency is above the level of 100%.
In this group, Pogradec is the utility with the best performance with 113.03% collection efficiency. This company also stands for better trends during this year. Compared with the previous year collection rate has increased by 29.67%. Also, utilities with 100% collection rate are Bilisht with 103.95%, Librazhd with 101.6% and Përmet with 100.89%.
In the range of acceptable performance (60% -82%) there are 7 utilities and only one utility has been performing poorly.

Graph 11. Collection Efficiency for group 2 in 2015



Compared with 2014, the collection rate in 2015 for 13 out of 21 utilities in this group has had a positive trend. Along Pogradec utility, a very good performance has also Kurbin, Burrel and Lezha utilities, respectively increase the collection efficiency 13.28%, +13.13% and + 9.79%.
The collection efficiency levels significantly decreased for 6 companies. Rrogozhinë utility has recorded the largest decline in this indicator (-16.29%), Mallakastra utility with (-10.82%) and Korçë Fshat with (-10.21%).

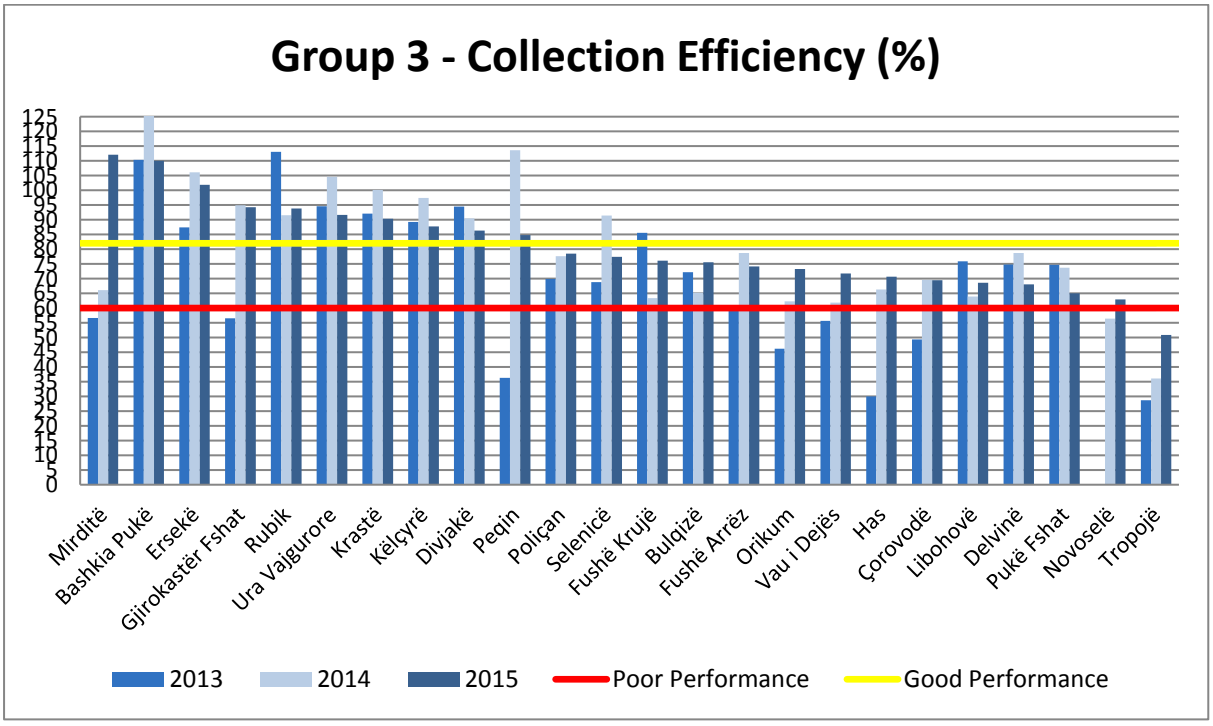
Third Group of Utilities

The third group includes 24 companies. The collection efficiency for ten of them for 2015 is greater than 82% which is the target level of good performance, 13 companies are at acceptable performance level (60-82%) and only one water supply company falls in the range of poor performance under 60%.

Mirdita utility is the company with the best performance with 112.06%, followed by the Pukë Municipality with 110% and Ersekë with 101.9%. These results have come as a result of the good work that is done for the collection of outstanding debts.

In the range of good perfomance over 82% can also be mentioned the following utilities: Gjirokastër Fshat, Rubik, Ura Vajgurore, Krastë, Këlcyrë, Divjakë and Peqin.
The majority of the utilities are in the range of acceptable performance. Utilities that perform better in this level are Poliçan, Selenicë and Fushë Krujë.

Graph 12. Collection Efficiency for group 3 in 2015



It should be noted that in the third group, utilities as Vau Dejës, Has, Novoselë, Tropojë and Poliçan stand at low levels of this indicator, but they must be appraised for ongoing efforts towards improving collection efficiency.

During the last three years, the level of collection for these utilities has had a positive trend.
Best positive trend in this group for the increase of the collection efficiency compared with 2014 showed utilities of Fushë Krujë with (+ 12.76%), Orikum with (+ 10.94%) and Bulqizë with (+10.33). Not all the utilities have made the necessary efforts in collecting revenue; compared with 2014 the collection efficiency for some of them is significantly decreased.
Large reductions of this indicator were recorded by Pukë Municipality with (-16.52%), Selenicë with (-14.1%), Ura Vajgurore (-12.89%), Delvinë with (-10.65%) and Pukë Fshat with (-8.73%).

Conclusions

The overall trend of collection efficiency for the WSS sector at the end of 2015 recorded a slight progress, from 91% in 2014 to 92% in 2015. Generally, utilities have worked better in terms of collection revenue. Some of them have developed strategies and action plans for the recovery of debt which has resulted in a collection rate over 100%.
In 2015, 29 out of 56 utilities have the collection efficiency on the good performance level, defined by WRA, 9 of which have the collection rate over 100%. 25 in the range of acceptable performance (60%-82%) and only two below the poor performance level (above 60%)
Generally, the performance for this indicator is good. This shows that managers of companies and their staff have made the necessary efforts to increase their collection rates. A good efficiency in revenue collection is related with the financial sustainability of utilities that directly affects the solvency of the company.
Increase of the company solvency makes possible the liquidation of obligations to employees, suppliers, payment of interest on loans taken, which means timely settlement of obligations to third parties.
For WRA, example of best performers should be followed by the companies for which this indicator is not at the required level and those who have not had a positive performance in revenue collection.

3.1.4 Staff Efficiency

The indicator used to evaluate the staff efficiency is the number of employees per 1000 connections. Staff efficiency is the indicator that allows us to understand how human resources are managed by WSS companies, the capacity to be used to increase the efficiency at work thus improving the efficiency of the company.
One of the main directions of providing a more effective service is to improve operational efficiency in order to reduce service costs.

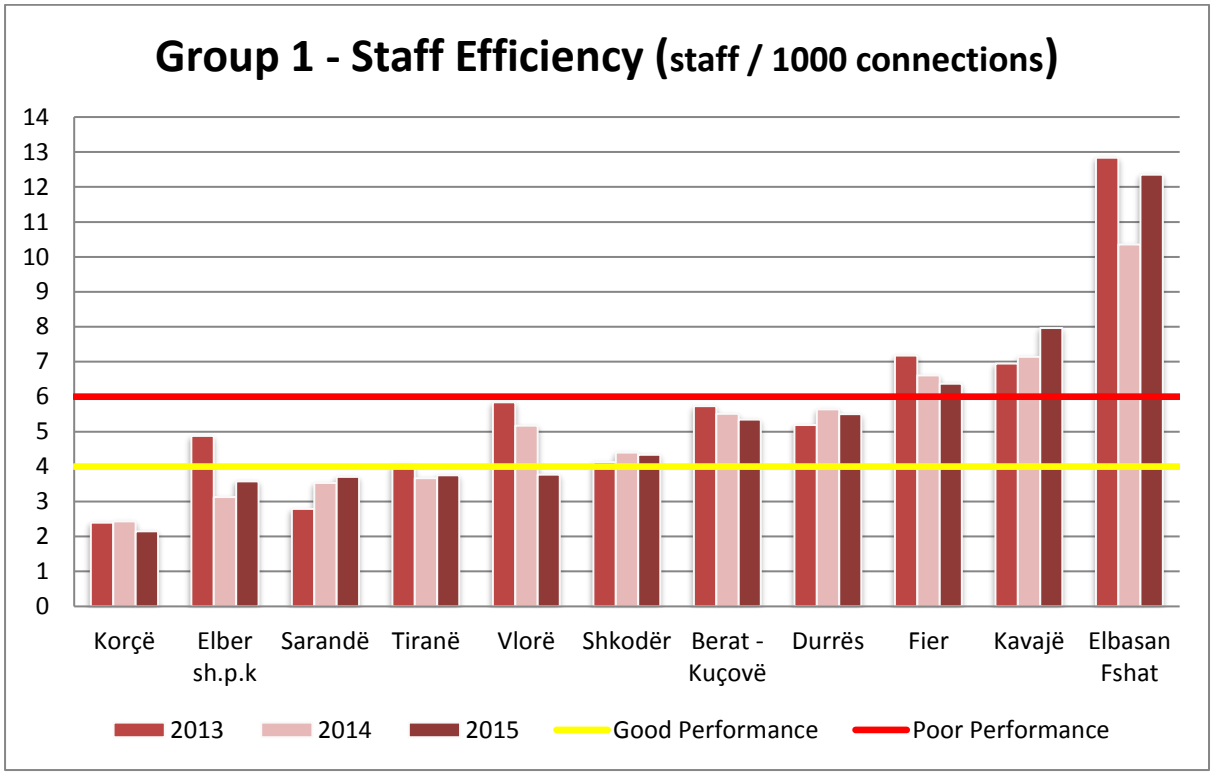
Given that personnel costs currently account for a high proportion of O&M costs of Albanian water and sewerage companies, this indicator has a special importance and therefore is included in the list of key performance indicators.
Taking into account the specifics of the operation and service of companies, WRA decided differentiated target level of good performance for the three groups of companies. In 2015, personnel costs account for about 43% of O & M cost of water supply and sewerage services. The average level of staff per 1,000 connections is 5.53 from 5.49 at the end of 2014.

First Group of Utilities

For the first group, WRA has defined as the level of poor performance over 6 per 1000 staff acceptable performance about 4-6 per 1000 staff, and very good performance up to 4 staff per 1000 connections.
In this group in the range of good performance for three consecutive years there are ranked four utilities: Korçë, Sarandë, Elbasan and Tiranë. In 2015 Vlora utility also had a good performance in this indicator with 3.77 staff per 1,000 connections.

In the range of acceptable performance are listed three companies: Shkodra (4.34), Berat Kucova (5.34) and Durres (5.50). These utilities also in the previous year had a positive trend. The utility with the best performance, which has led in this group, is Korçë utility with 2.15 staff per 1000 connections.
At the level of poor performance (over 6 employees per 1000 connections) are 3 utilities, Fier, Kavaja and Elbasan Fshat, the latter one remaining the utility with the poorest performance with 12.35 staff per 1000 connections. This company has made the most negative trend of this indicator in the first group. Compared with 2014 this company has increased this indicator (2 employees per 1000 connections).

Graph 13. Staff Efficiency for group 1 in 2015



During 2015, the trend of this indicator has been positive for the Vlora utility, where the number of employees per 1,000 connections decreased by (-1.4) employees per 1000 connections. Therefore, the company moved from the range of acceptable performance in the range of good performance. The improvement of this indicator is due to the increased number of connections to drinking water (about +1600) and the inclusion of 13250 new connections into the city sewer system, a service previously carried by the Municipality of Vlora.

Second Group of Utilities

For the second group, the level of acceptable performance target set by the WRA is about 6-10 per 1000 employees, for poor performance it is over 10 employees per 1000 connections, and for good performance is under 6 employees per 1000 connections.

In 2015, four utilities are performing in the good performance level set by the WRA. Although this indicator has deteriorated with (+0.69), Pogradec utility still remains the company with the best performance with 4 employees per 1,000 connections. At the level of good performance are also utilities of Lezha with (4.79), Rrogozhinë with (5.23) and Lushnje with (5.9) employees per 1000 connections.

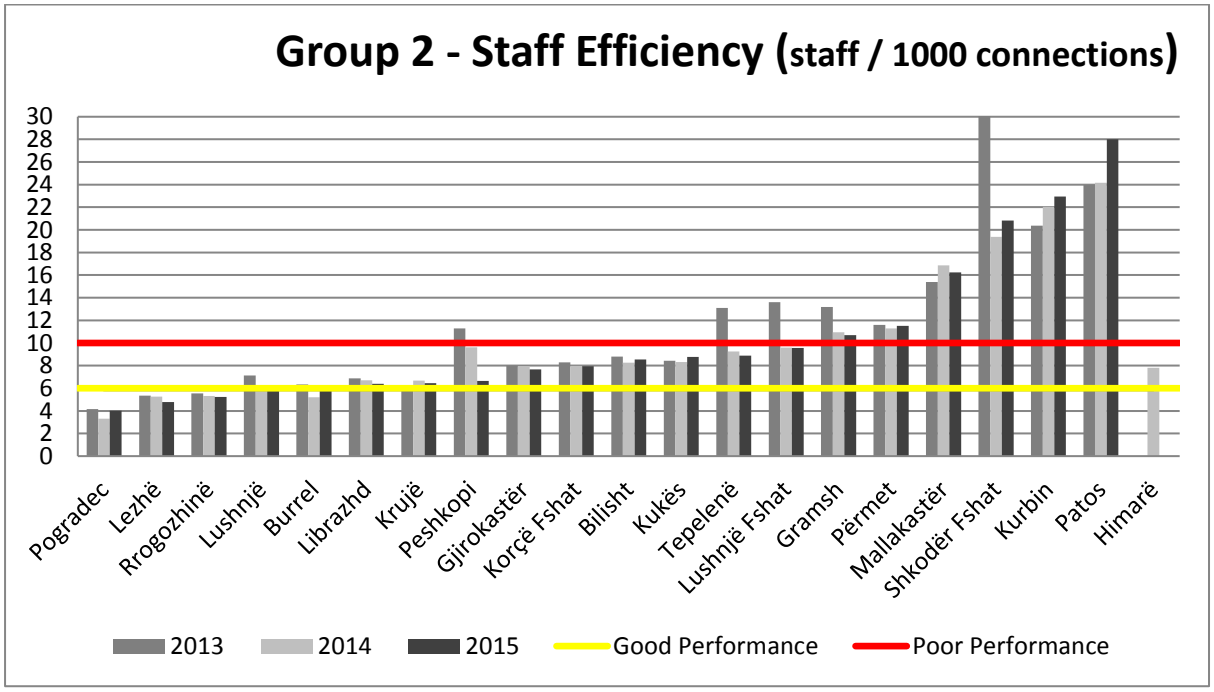
During 2015, nine utilities have an acceptable level for this indicator. The trend of these companies has had small fluctuations either positive or negative. The company of Peshkopi is the utility with the best positive trend with (-2.98) employees per 1000 connections. The utility of Burrel from a company with better performance has move outside the range of good

performance, has increased the number of employees by (+0.87) employees per 1,000 connections.

For 2015, in the range of poor performance (over 10 employees per 1000 connections) still remain the same companies. The poorest performers of the second group is the company of Patos with 28 employees per 1,000 connections, an indicator that has deteriorated as compared with 2014, the number of employees per 1,000 connections has increased by +3.86 employee per connections.

This is a result of poor performance in terms of staff management. In 2015, the company has operated with 21 employees more than a year ago while the number of connections increased by only 100 connections.

Graph 14. Staff Efficiency for group 2 in 2015



The trend of this indicator for this group has not been positive and has not brought significant changes in the performance of water supply and sewerage companies. It should be noted that positive and negative trend are at low levels except those mentioned on the analysis above.

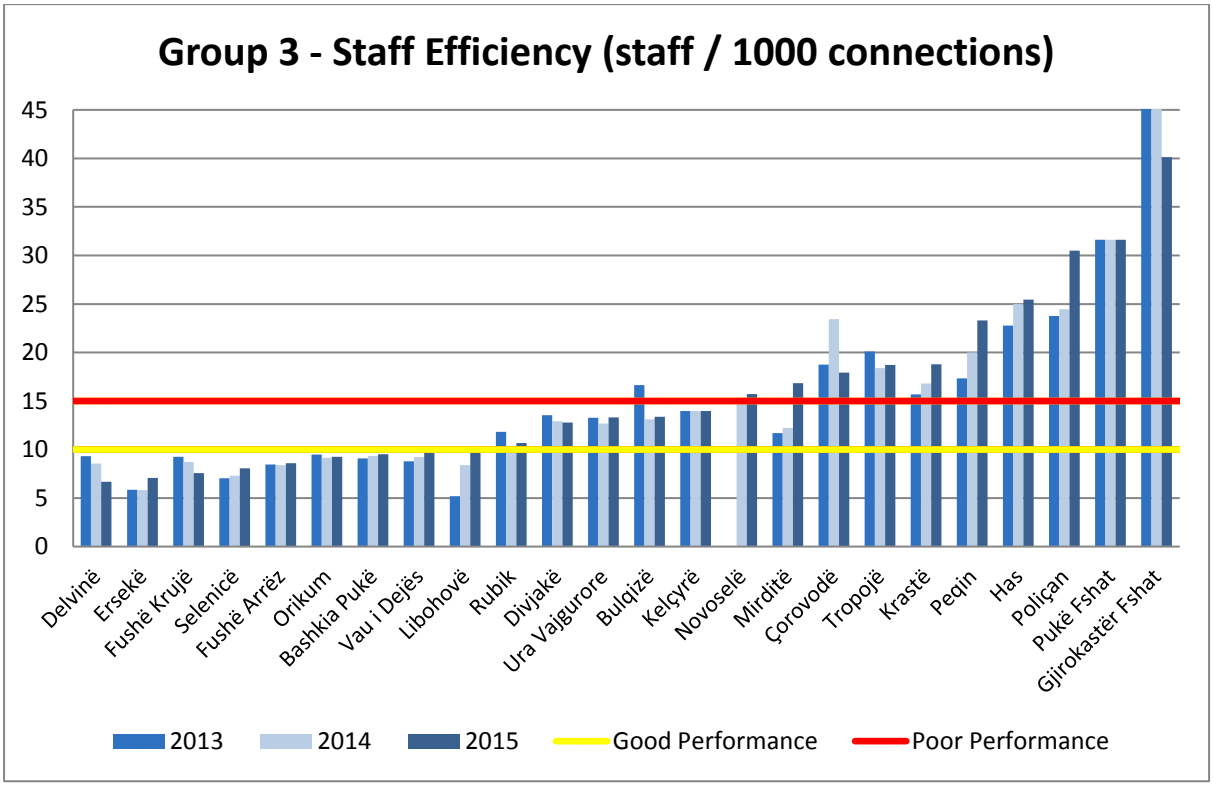
Third Group of Utilities

The target level set by WRA for acceptable performance for the third group is about 10-15 per 1000 employees, for poor performance over 15 employees per 1000 connections, and for very good performance under 10 employees per 1000 connections.
In the third group, 7 out of 24 companies have less than 10 employees per 1,000 connections. The best performer is JSC WS Delvina utility with (6.66) employees per 1000 connections. At the level of the good performance are ranked Ersekë, Fushë Krujë, Selenicë, Fushë Arrëz, Orikum and Pukë Municipality utilities.

In the range of poor performance there are ranked 10 companies. Although there is a significant improvement of this indicator from the Gjirokastra Fshat utility this year (the number of employees per 1000 connections decreased by -15.04 employees) it still remains the last of the rankings with 40.14 employees per 1,000 connections. In 2015 the number of connections has increased from 196 in 2014 to 384 at the end of 2015, but on the other hand, the number of employees has increased from 10 in 2014 to 15 at the end of 2015.

The utilities of Pukë Fshat, Poliçan, Has, and Peqin respectively 31.6, 30.5, 25.46 and 23.32 employees per 1000 connections are ranked in the group of companies with poor performance. Number of employees in these companies is several times higher than the best company in this group.

Graph 15. Staff Efficiency for group 3 in 2015



In this group, half of companies have made small improvement of this indicator, however these improvements are deemed important given the weight of personnel costs to total costs. Gjirokastra Fshat utility has most notable positive trend, followed by Çorovodë utility with (-5.5) employees. In contrast the greatest negative trend is reported by Poliçan with (+6.05) employees per 1000 connections.

The decrease of this indicator for utilities of Vau i Dejës, Libohovë and Rubik has made these companies ranked from the range of good performance to acceptable performance, displaying in range of acceptable performance three to six companies that were on the previous year.

Conclusions

In 2015, "Staff Efficiency" indicator for 1000 connections is the same as previous year. The ratio has not changed as there is increased of the number of connections to the WSS system as well as the number of employees. Compared with a year ago the number of connections has increased by about 66 000 connections. At a first glance it seems that this indicator will improve, but the situation has not changed because on the other hand, the number of employees for water and sewerage services increased by 400 employees.

While many companies need to increase significantly their efforts to improve the staff efficiency, almost one third of companies (16 from 55) have reached and even passed the good performance objective set for every group. Within the overall objective of the strategic sector to achieve financial stability through improvements in cost recovery, over-employment and /or low levels of employee productivity remains a serious concern for WRA. Improving the staff efficiency is not only an essential element of improving operational efficiency, but also affects the reduction of labor costs.

Labor costs have risen by about 11% compared with 2014 or in absolute value (+ 282 million) lekë. This increase in costs has contributed to the inability of companies to cover O&M costs and even total costs.

To encourage companies to increase the efficiency of their staff, the WRA will set individual targets for each of the water and sewerage companies, as this indicator has been selected as one of the KPIs for assessing the performance of water supply and sewerage companies in the process of changing tariffs. The key to success for achieving performance objectives associated with this indicator lies in optimizing the organizational structure, the selection of qualified, motivated and dedicated employees, determination of internal operational procedures, delegation of tasks and responsibilities and increasing the number of clients.

Big and urban companies reach high levels of staff efficiency more easily than smaller companies and rural ones. However, the above analysis shows that even small companies can perform properly when they have good management.

3.1.5 Non-Revenue Water

Non-revenue water (NRW) is defined as the percentage of the total quantity of water produced which is 'lost' in the sense that it is not billed to customers and hence does not generate revenues for the utility. This definition includes both 'real' or technical water losses (i.e. the physical leakages from the distribution system or storage overflows) and the 'apparent' or commercial losses, which refer to water supply that actually reaches users but generates no revenue as a result of unauthorized consumption, metering inaccuracies and data handling errors.
As technical losses increase operating costs, and at the same time commercial losses reduce income, NRW has a direct and significant impact on a utility's cost coverage and financial sustainability.

During 2015, the amount of water produced by 57 water companies is 277.094 thousand m^3, while the amount of water that does not generate income is 184, 816 thousand m^3, expressed as a percentage average of non-revenue water in the sector for this year is 67 %. Compared with the last three years, the level of this indicator decreased by 0.4%.

The high value of this indicator has been constant concern for WRA, since the objective set at 48% for 2015 (National Strategy 2011-2017) is far from real value losses in the WS Sector.

It should be noted that the analysis in this chapter is based on data calculated and evaluated by the companies and not on measured data.

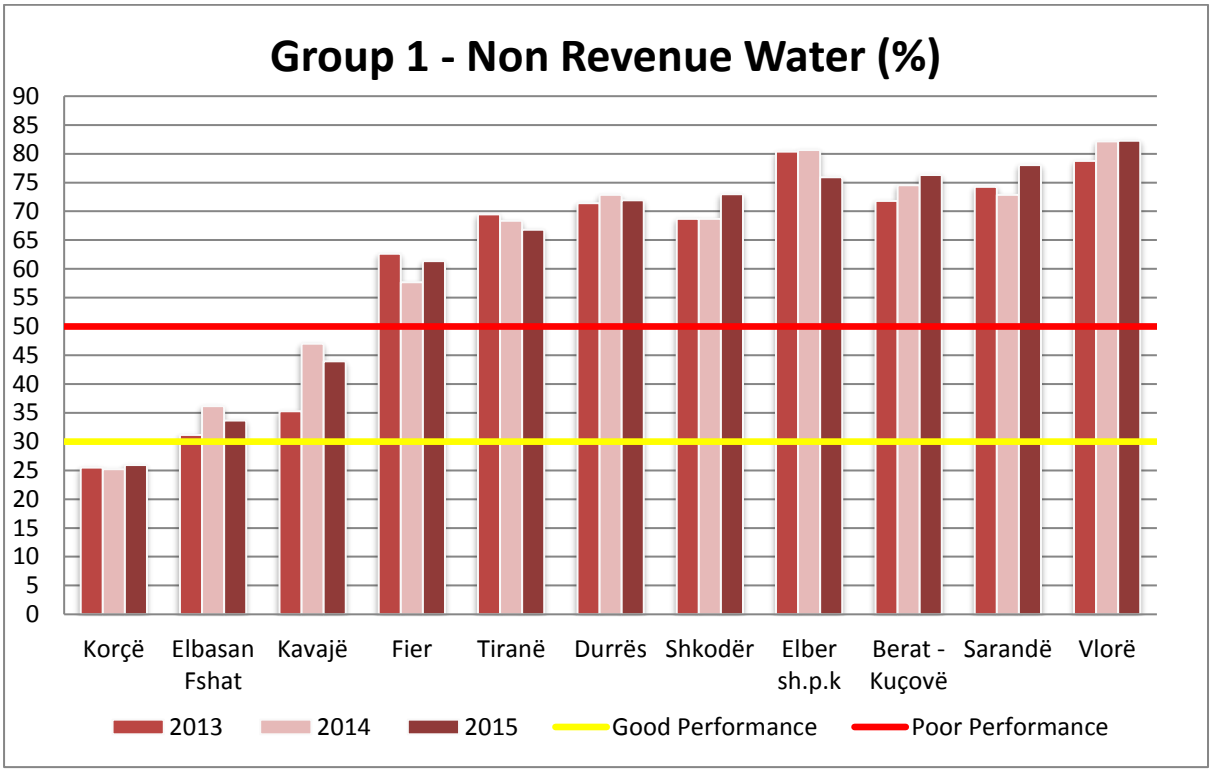
First Group of Utilities

Even this year, in the first group that includes 11 companies, 8 of them continue to perform poorly, level of NRW is 50% (limit established for poor performance). This situation indicates a low level of management of these companies and needs immediate improvement.

Utility of Korca is the company with the best performance for several years where the value of non-revenue water (25.94%) always lies within the boundary of good performance.
By comparison with 2014 values, deterioration in this indicator had utilities of Fier (+ 3.67%), Shkodra (+ 4.25%), Saranda (+ 5.14%) and Berat-Kucova (+ 1.75%). During this year efforts to improve this indicator made: Elbasan Fshat (- 2.5%), Kavaja (- 3,9%), Tirana (-1.57%), Durrës (-1.23%) and Elbasan (-4.72%) utilities.

During the past three years, utilities that have made efforts to reduce non-revenue water are Tirana (-2.64%) and Elbasan (- 4.46%). The most negative performance during this period has been observed in Kavaja (+ 8.66%), Shkodra (+ 4.28%), Elbasan Fshat (+ 2.47%), Berat-Kuçova (+ 4.49%), Saranda (+ 3.75%) and Vlora (+ 3.48%).

Graph 16: Non-Revenue Water for group 1 in 2015



Second Group of Utilities

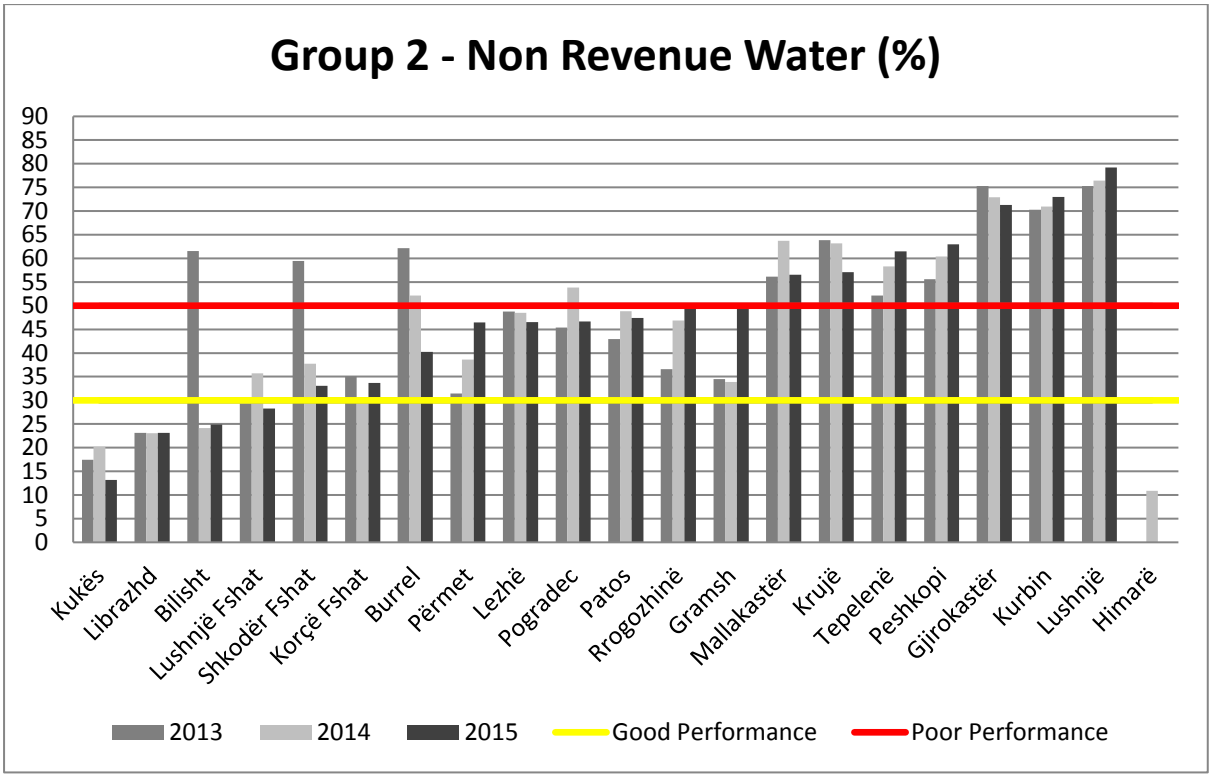
Most companies in the second group did not perform well; the level of non-revenue water in 16 of them is above the 30% of **benchmarking.** Utilities of Librazhd, Bilisht and Lushnje Fshat for the third year remain in the range of good performance. We can not say the same for the company of Kukës which is displayed in the second group graph with 13.15% of the value of non-revenue water, while the analysis of "Water Balance" for 2015 this indicator was 48%. This discrepancy of values is a difference of values in reporting at the WRA's and GDWSS Monitoring Unit (the volume of water produced reported in Water Balance-2015-WRA is 2,762,599 m^3 while the value reporting to GDWSS is 986 000 m^3). Same thing is recorded also by utilities of Gramsh, Tepelenë, Rrogozhinë etc., but in smaller differences.
In 2015, have shown poor performance, increasing value of non-revenue water, utilities of Gramsh (+ 15.96%), Përmet (+ 7.84%), Tepelenë (+ 3.16%), Korca Fshat (+ 3.07%) etc.

In this group, 7 out of 21 companies have the level of this indicator above 50%, the worst performers are Lushnje utility with 79.21%, followed by utilities of Kurbin with 73.01%, Gjirokastra with 71.27%, Peshkopi with 62.97%, Tepelenë with 61.49%, Krujë with 57.08% and Mallakastra with 56.52%.

Positive trend for the reduction of this indicator compared to 2014 was observed in utilities of Burrel (-11.9%), Lushnje Fshat (-7.44%), Pogradec (-7.18%), Mallakastër (-7.16%), Krujë (-6.09%) and Shkodra Fshat (-4.66%).

The investments made during 2013-2015, significantly impacted the improvement of this indicator for the utilities of Bilisht (-36.65%), Shkodra Fshat (-26.38%) and Burrel (-21.9%). The utility of Himarë is not in the analysis due to lack of data for 2015.

Graph 17: Non-Revenue Water for group 2 in 2015



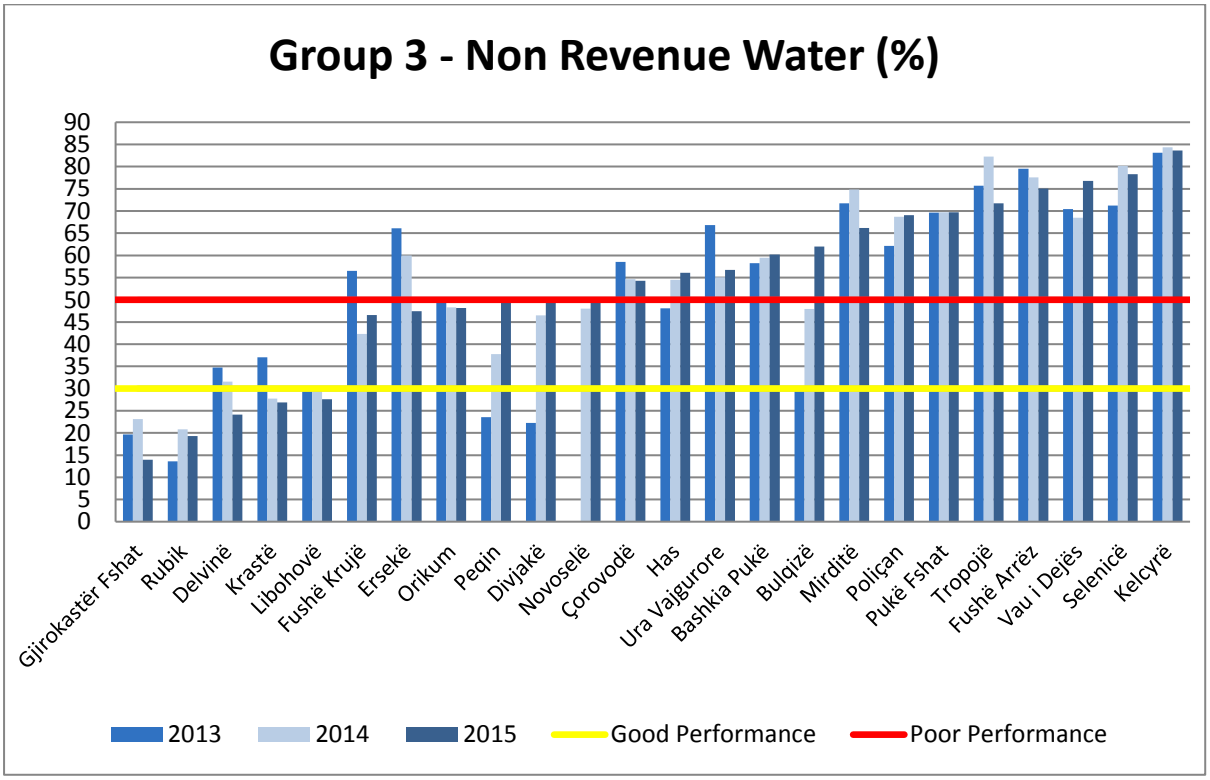
Third Group of Utilities

In the third group of 24 companies, the amount of non-revenue water occupies a significant portion of the volume of water produced. The analysis of data reported for the last three years, showed that companies of this group represent significant variations of non-revenue water. Water companies with NRW level below 30% of benchmarking, better performing

utilities are Gjirokastra Fshat (13.98%), Rubik (19.29%), Delvina (24.11%), Krastë (26.84%) and Libohovë (27.56%). Poor performance, where the index of non-revenue water is above 50% presented 13 utilities. Based on reported data, the poorest performer in the group since 2011 is Këlcyrë utility (83.66%) followed by Selenicë (78.3%), Vau Dejës (76.77%), Fushë Arrëz (75.08%) etc.

During 2015, efforts to improve the situation, showing a positive trend for the elimination of losses, are made by utilities of Gjirokastra Fshat (-9.13%), Delvinë (-7.48%), Ersekë (-12.48%), Mirdita (-8.68%), Tropojë (-10.55%).

Graph 18: Non-Revenue Water for group 2 in 2015



When the amount of water produced is not associated with increased billing, we have increased levels of non-revenue water, so happened with utilities of Bulqizë (+ 32.48%), Divjakë (+ 27.62%), Peqin (+ 26.30%) which represent a negative trend, worsening this indicator.

Data from Monitoring and Benchmarking Unit show improvements for utilities of Ersekë (-18.62%), Krastë (-10.21%), Delvinë (-10.64%) and Ura Vajgurore (-10.14%). the reduction of water produced, increased billing and metering levels have improved the situation of this indicator.

Conclusions

For 2015, the level of non-revenue water is 67%. Compared to last year this indicator has improved in value by 0.2%. From all water and sewerage companies that are performing in the sector, 10 have better performance, 16 have performed poorly and 31 performed badly.

Analysis showed that the level of performance of Non-Revenue Water indicator in most utilities is extremely high. This situation presents a risk for their financial sustainability. Although the control and reduction of losses can not be achieved immediately, there is a possibility for reducing them, because considerable parts are administrative losses.

Based on Water Balance, analysis of administrative losses is at almost the same levels as technical losses; this means that apart from a depreciated system, the high level of losses is a result of improper management of water supply service.

Analysis of "Water Balance" for this year has shown that the commercial losses arising as a result of illegal connections to the network, not measurement of water production and inaccuracy of measurement in the distribution are at greater values than technical losses (real).

WRA has advised the companies that this situation needs urgent action starting with the installment of meters in the production and then balance meters and in distribution. It should not be neglected the identification and elimination of illegal connections, increase of billing and collection rates. Also, WRA suggests all WSS through "Water Balance" to assess the current situation and develop action plans to achieve the reduction of non-revenue water, which, compared with the target of the National Strategy Sector is still lagging behind.

3.1.6 Metering Ratio

The metering ratio measures the proportion of metered connections as a percentage of the total number of customer connections. This indicator does not reflect the measurement level in the water supply system, since it only analyzes metering connections for customer categories.

In 2015, the sector average for this indicator is at the level of 63.5%, which means that it's far from 72% - the target set in the National Strategy of Water Supply and Sewerage 2011- 2017 for this year. The trend of this indicator for the sector was generally positive with a 2.3% increase compared with a year ago. If we take into account the progressive growth of previous years, which has increased from 59% in 2013 to 61.2% in 2014 and 63.52% in 2015, which means about 2% year on year, shows that companies are doing very insignificant work and not leading to implementation of the target set for this indicator.

This indicator is very important because it directly affects the quality of service to customers as well as the results of some other indicators such as non-revenue water. It's obvious that by increasing the level of measurement the accuracy on NRW indicator is increased.

Metering ratio should grow steadily and at higher values, to achieve the targets set in the National Strategy, i.e., 85% in 2017.This target corresponds to the objective of WRA for good performance of the companies, but looking at the performance progress in years, there is still much work to be done by the companies in this regard.

First Group of Utilities

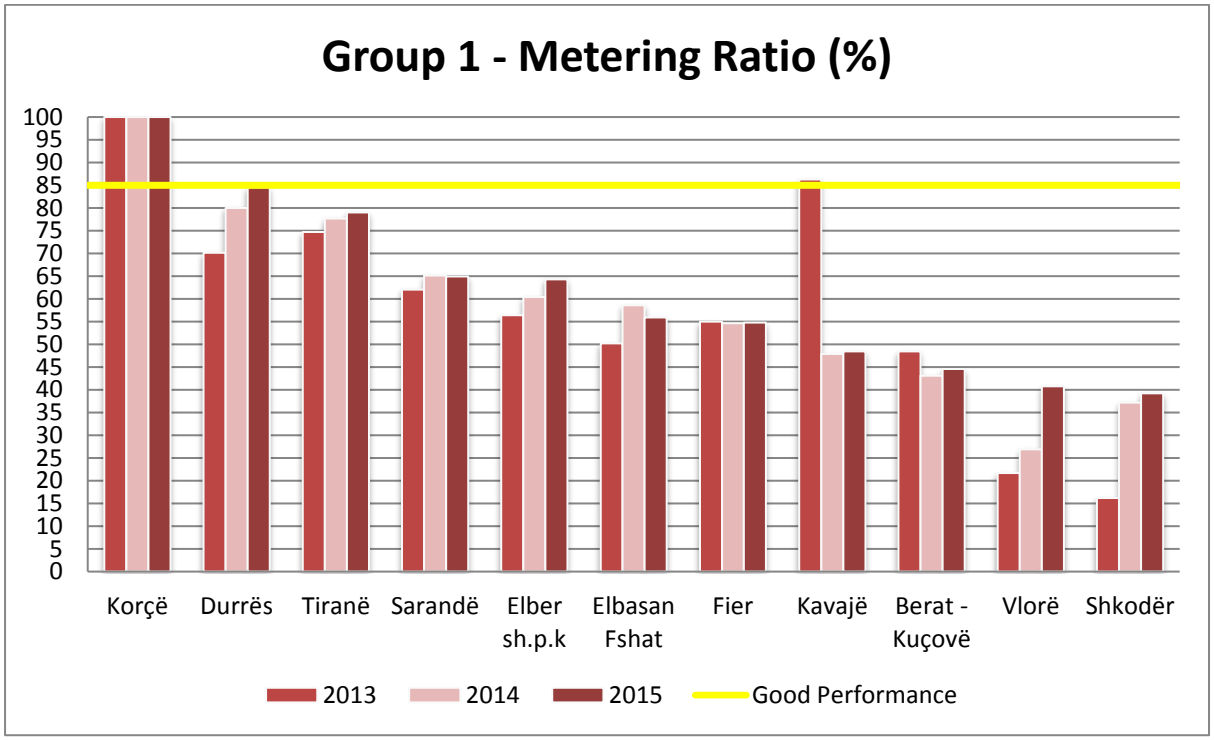
In this group there are included eleven (11) large companies, who, after completion of territorial reform procedures will remain large companies. Of all the companies of the group the top performer for years with a metering ratio of 100% is utility of Korca.

All other companies in this group have the metering ratio below the good performance level, of 85%. During the year, the most significant positive trend is observed for Durrës utility, which has increased this indicator by 4.47 % compared to 2014, but compared to 2013 the value of this indicator is increased by 14.39%, to a total of 84.5%, almost at the limit of good performance.

The utility of Shkodra had increased the levels of metering ratio for this year by 2.08% and by 23.03% since 2013, but still remains the company with the lowest level of this indicator for this group 39.22%.

Also, another company that has a significant increase compared to 2014 is Vlora utility, which improved the metering level with 13.82%, but still remains a utility of poor performance.

Graph 19: Metering Ratio for group 1 in 2015



The poorest performer is the utility of Kavaja, which compared with 2013, has a negative development with 37.85%, ranking from a company with a good performance level, in a utility with poor performance.

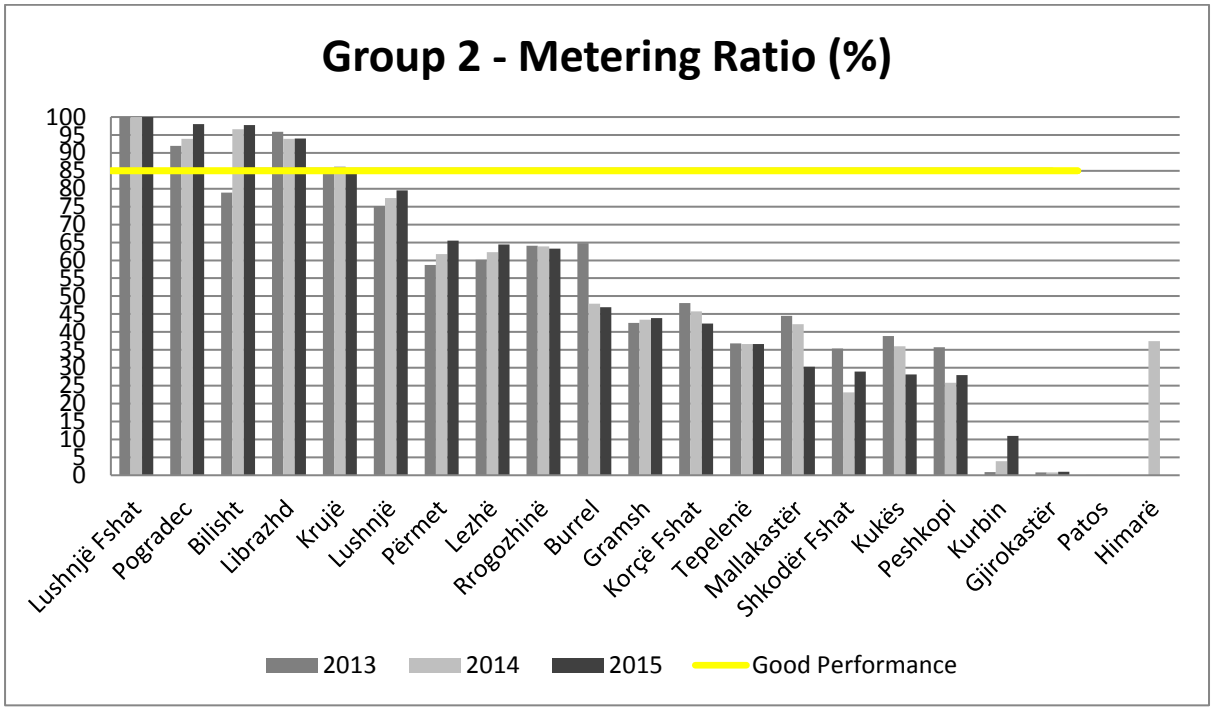
For 2015, 8 companies of this group have increased this indicator although this is a very small progress and 2 companies have slightly decreased it; Saranda by 0.2% and Elbasan Fshat 2.68%

Second Group of Utilities

In the second group, out of 21 companies the top performer and only utility with a metering ratio of 100% is utility of Lushnje Fshat. For 2015, only 5 companies in this group are above the benchmark line of good performance starting with Lushnje Fshat utility, followed by utilities of Pogradec (97.99%), Bilisht (77.6%), Librazhd (93.97%) and Krujë (85.56%).

Companies that have had significant improvements of this indicator are: Shkodra Fshat with 5.88% to a total of 28.98% and Kurbin with 7.1% which is the best improvement for this indicator throughout the group to a total 11.01%, but again these two companies remain at the level of poor performance. However, these companies should be encouraged by the efforts that have increased the metering ratio.

Graph 20: Metering Ratio for group 2 in 2015



The companies with significant decrease in this indicator have been utilities of Mallakastra with the highest decrease of this indicator for the second group with 11.92% and Kukës utility with 7.87%. As regards the utility of Burrel there was a decrease in this indicator with 0.99% this year compared with 2014, but compared with 2013 there was a very noticeable decrease by 17.87%.

In this group, poorest performers with almost negligible value are utilities of Gjirokastra with 1% and Patos with 0.04%. These companies continue not to make efforts to improve the situation.

Other companies in this group compared with 2014 remained almost at the same levels with marginal improvements of metering ratio.

Third Group of Utilities

This group includes the utilities with the lowest overall performance for this indicator. Five companies out of 24 from this group continue not to report data for the third consecutive year as Orikum, Skrapar, Tropojë, Libohovë and Krastë utilities.

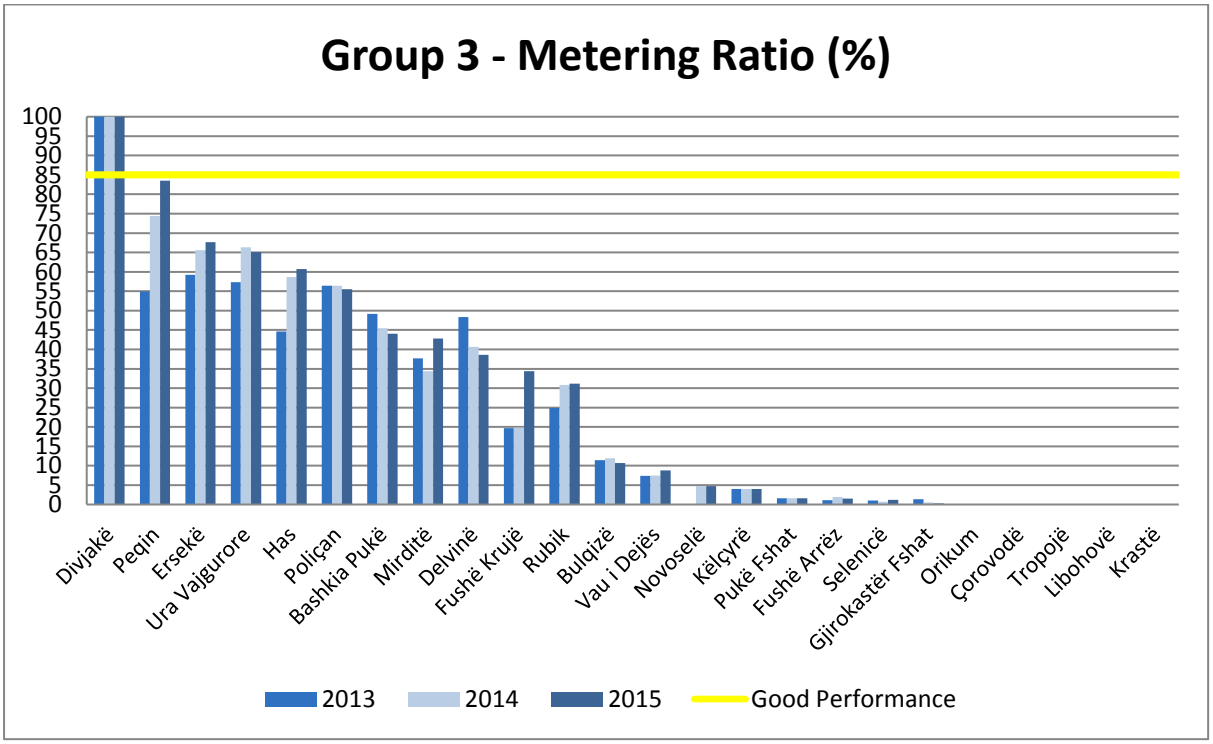
Of all the companies of the group the top performer for the third consecutive year with a metering ratio of 100% is utility of Divjakë. This utility is followed by Peqin utility, which

this year has made a significant improvement compared with the year 2014 9.08% reaching a total of 83.51%, but still remains below the 85% level of good performance.

A water supply and sewerage company that has made significant improvement in the metering ratio is Fushë Krujë utility which has had an increase of 14.6% compared with 2014, but despite this improvement, this company remains at the level of bad performance with 34.42%. This utility is followed by Mirdita utility with an increase of 8.41% compared with last year to a total of metering ratio of 42.81%.

In this group, there are water companies which for 3 consecutive years have not changed the metering level as Novoselë utility was 4.74%, Këlcyrë utility with 3.99% and Pukë Fshat utility with 1.58%.

Graph 21: Metering Ratio for group 3 in 2015



During this year, there have been water supply and sewerage companies that had negative trends in this indicator. We can mention 5 that had a loss of over 0.5% as utilities of Ura Vajgurore 0.97%, Bulqizë 1.21%, Poliçan 1,24%, Pukë Municipality 1,41% and Delvina 2%.

In total for the third group there are 6 companies with the metering ratio over 50%, 5 companies have metering ratio from 30 to 50%, 4 companies have metering ratio up to 10% and 4 companies stand at 2% level of metering ratio.

Conclusions

WSS companies have continued to work to supply customers with meters in their service area. Although the number of companies that have installed meters for all customers continue to be very few. Most of the companies provide metered and unmetered service, and there are a limited number of companies for which the metered service level is negligible.

Installation of meters for all non-household customers is a process which should be completed at the end of 2010 (based on two Council of Ministers decrees). Today the flat rate for customers remains high.

The performance of this indicator for the sector was generally positive, but this increase has been almost constant for three consecutive years and in a very small value. The average level of service measured in 2015 is 63.52% from 61.2% in 2014. Measuring water consumption reduces the level of water abuse which currently adds significantly to the financial losses of companies and also creates opportunities to companies in order they can adjust production to the demand for water.

For all three groups, 8 water companies operate at the good performance level in terms of service measured (2 in the first group, 5 in the second group and only one utility in the third group). In the second and the third group there are companies which have no measured service at all, mainly small companies, with one exception Gjirokastra utility which is not a small company but have the metering ratio at 1%.

The first group has an average metering ratio at 61.49%, with an increase from 2014 (the average of this group was 59.23%). The second group, has almost the same average level of metering at 51.38%, although comparing this value for 2015 is 49.77% and apparently shows a decrease, but in fact this comes from the missing data from utility of Himarë and negligible level in the metering ratio of Gjirokastra and Patos utilities. In the third group, the average level is 27.34% which increased from 2014 where the average of this group was 26.06%, almost half of the average of the first two groups.

WRA has continually monitored the situation regarding the installation of meters for WSS companies and has encouraged companies to set meters. Yet the sector average for this indicator is below the level of good performance and far from the target set in national strategy.

WRA considers that meters installation is an achievable target by WSS companies. WRA supports and encourages all companies to design and implement programs for the installation of meters. Eliminating the practice of " flat rate " and implement programs for the installation of individual meters in production and should be the focus of the companies.

3.1.7 Hours of Water Supply

Hours of Water Supply is the average availability of continuous water supply in hours per day for customers and is one of the main indicators of quality service of the company. Along with the water quality, providing continuous service to customers requires greater attention of the companies and must remain a priority, improvements in each of them reduce the need to find other sources more expensive for consumers.

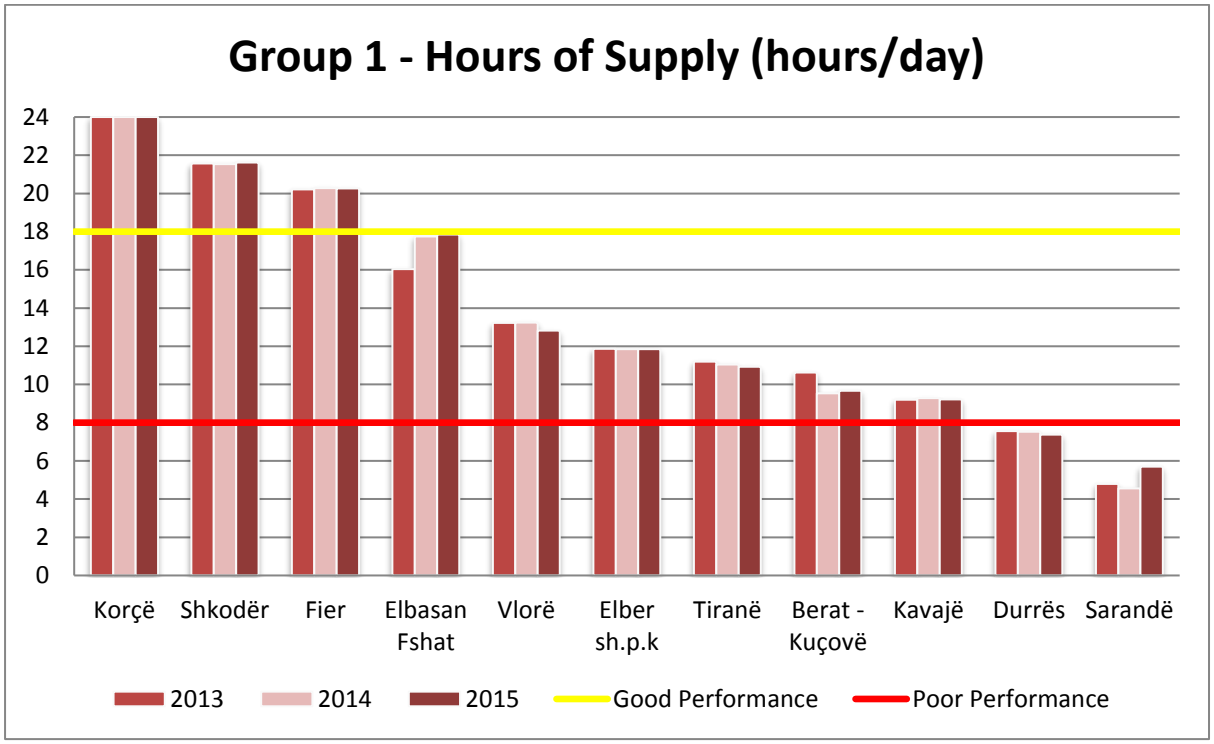
The indicator for 2015 is 12 hours / day, while for 2014 it was 12.1 hours / day, which means that there is no change or improvement on average duration of water supply. From the data, it is clear that the target defined in the National Strategy of Water Supply and Sewerage 2011-2017 of 16 hours / day until 2015 was not achieved and it is even farther from the good performance target set by the WRA 18 hours / day. Given the above situation, much work is still needed by the companies.

First group of Utilities

Analysis made in 2015 for the first group of utilities for this indicator shows that there has been a slight change in this indicator. Average of this group is 13.75 hours / day. Of all the companies of the group, Korca is the utility that has the best performance for 3 consecutive years with 24 hours/day, followed by Shkodra utility with 21.62 hours/day and Fier with 20.26 hours/day. These 3 (three) utilities have passed the good performance level.

In 2015, Saranda utility provides 5.69 hours/day and is the only utility in this group that improved this indicator with 1.14 hours/day compared with 2014, but even with that improvement it is still the utility with the poorest performance in the group.

Graph 22. Hours of water supply for group 1 in 2015



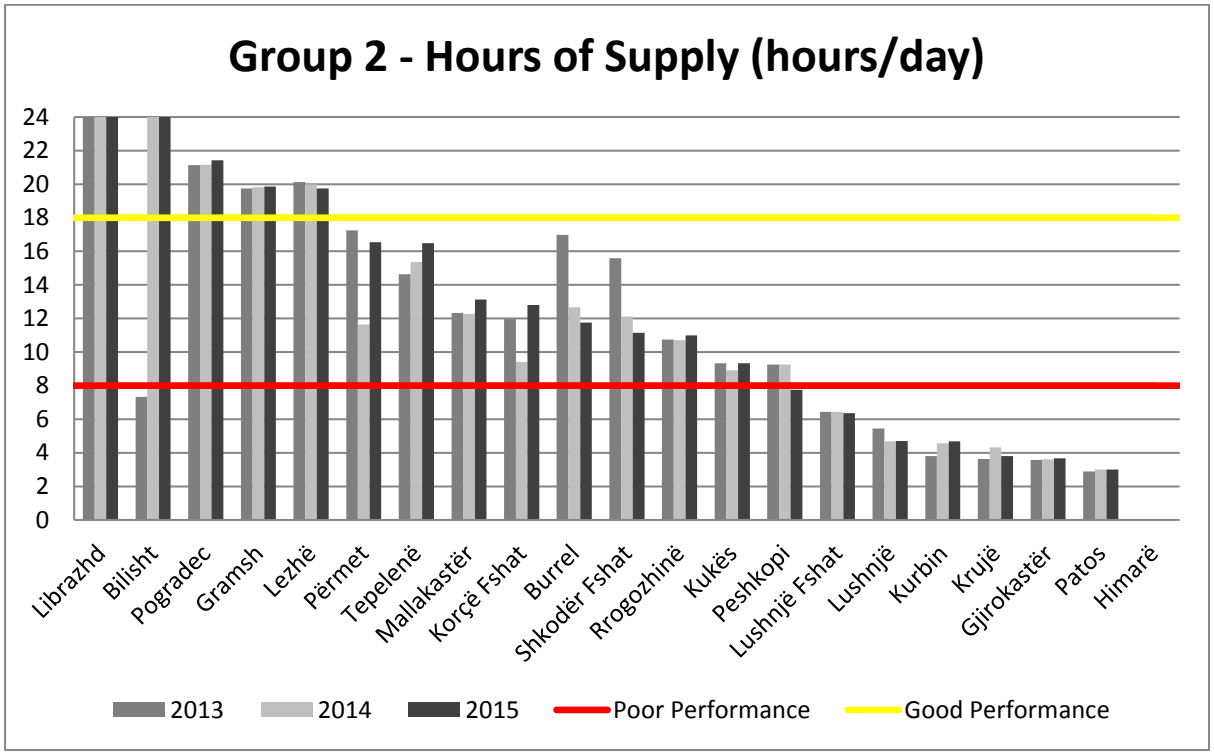
The other companies of this group compared with 2014, have small changes. It is only Vlora utility which has reported a greater reduction of hours of water supply with 0.42 hours / day. Below the poor performance level with less than 8 hours / day water supply remain again Durres utility with 7.37 hours /day and Saranda utility with 5.69 hours / day.

Second group of Utilities

The average of water supply of the second group for 2015 is 12.26 hours/day with a slight increase 0.36 hours / day compared with 2014. There are 5 companies in this group that operate above the level of good performance utilities as: Librazhd and Bilisht, which even this year continue to be the best companies of the group with 24 hours/day of water supply followed by Pogradec utility with 21.43 hours/day Gramsh with 19.86 hours/day and Lezha with 19.75 hours/day.

In 2015 there are utilities that have had improvements of this indicator compared to 2014 as Permet with 4.9 hours/day, Korca Fshat with 3.39 hours/day, Tepelena with 1.13 hours/day and Mallakastra utility with 0.85 hours/day. Their efforts done during this year should be appraised.

Graph 23. Hours of water supply group 2 in 2015



The utility that has decreased the hours of water supply compared with the last year is Peshkopi utility with 1.5 hour/day (from 9.25 to 7.75 hours/day) going to the group of companies operating below the poor performance level of 8 hours/day of water supply. Also Shkodra Fshat has decreased the hours of water supply with 0.97 hours/day compared with 2014, comparing with 2013 has decreased with 4.43 hours/day of water supply, which means that the the last 3 years the utility has done steps backward.

Also, Burrel utility has had not good progress; it has decreased of this indicator with 0.92 hours/day of water supply compared with 2014, comparing with 2013 a decrease with 5.23 hours/day of water supply. In this group, Kruje utility has reduced hours of water supply with 0.51 hours/day.

There are 7 companies this year in the second group, that have the value of the indicator below the poor performance level of 8 hours/day, comparing with 2014 where there were 6 companies: Lushnje Fshat , Kruje, Lushnje, Kurbin, Patos, Gjirokastra and Peshkopi has joint this group this year. Himare utility still does not report its data to the Monitoring and Benchmarking Unit.

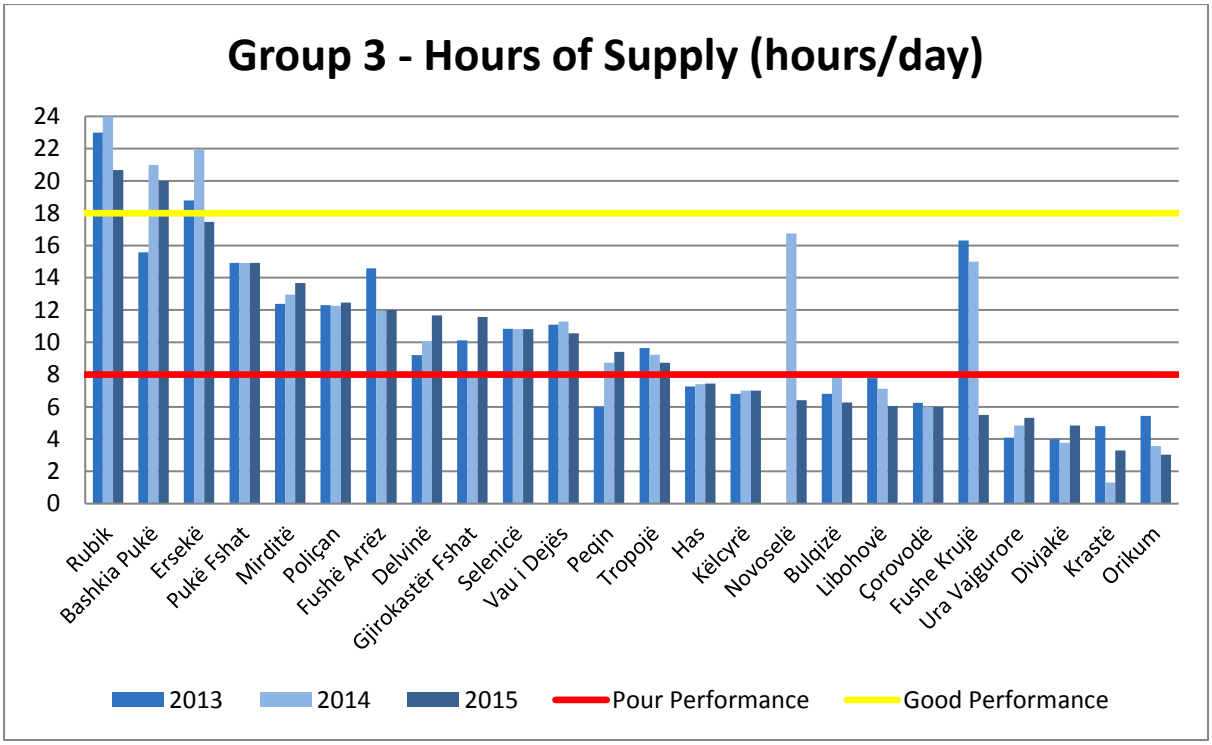
Third group of Utilities

Besides being the group providing the lowest quality of service, the third group, for the year 2015 has reduced the hours of water supply from 10.76 hours/day in 2014 to 9.8 hours/day.

Companies that provide water supply above the good performance level of 18 hours/day are: Rubik with 20.67 hours/day and Puka Municipality with 20 hours/day of water supply. These two companies regardless of being ranked in the range of good performance for 2015, they have decreased hours of water supply: respectively, Rubik with 3.33 hours/day and Puka Municipality with 1 hour / day in comparison with 2014.

In 2014, Erseka utility has been one of utilities above the good performance level with 21.97 hours/day of water supply, but during 2015, this indicator has decreased with 4.51 hours/day moving below the good performance level with 17.46 hours/day.

Graph 24. Hours of water supply in group 3 in 2015



Compared with 2014 performance, this indicator is improved from utilities of: Gjirokastra Fshat with 3.55 hours/day, Delvine with 1.58 hours/day which continuously remains in the range of acceptable performance level and Kraste with 1.98 hours/day, Divjaka utility with 1.07 hours/day. The latter ones remains at poor performance level and other companies have small differences in hours of water supply compare with the previous year.

In the limits of acceptable performance with water supply schedules between poor performance and good performance for 2015 are 11 companies out of 13 companies that have been in 2014. This situation is the result of poor performance of this indicator for three companies: Novoselë with 10.34 hours/day decrease the indicator from 16.75 hours/day to 6.41 hours/day of water supply, Fushë - Krujë with 9.5 hours / day, decrease the indicator from 15.00 hours/day to 5.5 hours/day of water supply and Bulqizë with 1.82 hours/day,

decrease the indicator in 6.28 hours/day ranking this utility at poor performance level. Erseka utility have joint this group.

This year, there are 9 companies, below the poor performance with less than 8 hours/day water supply, compared with 2014, where only 8 companies are below the poor performance level.

Conclusion

Quality customer service, as measured by continuity of service for this year is not at the appropriate levels. The average of hours of water supply has not changed or improved compared with 2014. The average of hours of water supply to customers is 12.1 hours / day, which is below the value of good performance level set by WRA for 18 hours / day and strategic target level for 2015.

Lack of continuous water supply, regardless of the causes as (periodic interruptions water supply, changes in water pressure, illegal connections, keeping water in tankers and suction pumps installed by customers etc.) also affects in the drinking water quality.

Companies provide water supply according to a schedule defined and the hours of water supply vary from 3 to 24 hours/day. Companies that provide uninterrupted water supply and proper pressure are: Korca , Pogradec and Librazhd utilities. This year Rubik utility has decreased this indicator from 24 to 20.67 hours/day of water supply.

This year , only 35 water companies exceed the poor performance level from 39 water companies in 2014, which means the decreasing of this indicator. From the experiences of good performance companies it is evident that achieving acceptable performance levels of hours of water supply depends not only from the investments, also accompanied with good management. Water companies have a lot of work toward achieving these levels.

3.1.8 Sewerage Coverage

Ratio of the population that provided the collection and removal of waste water services to the population in the jurisdiction area of a WSS company represents Sewerage Coverage indicator. In the water sector, not all companies perform both services, for this reason, the analysis on this indicator is focused only in 32 licensed companies for this service category.

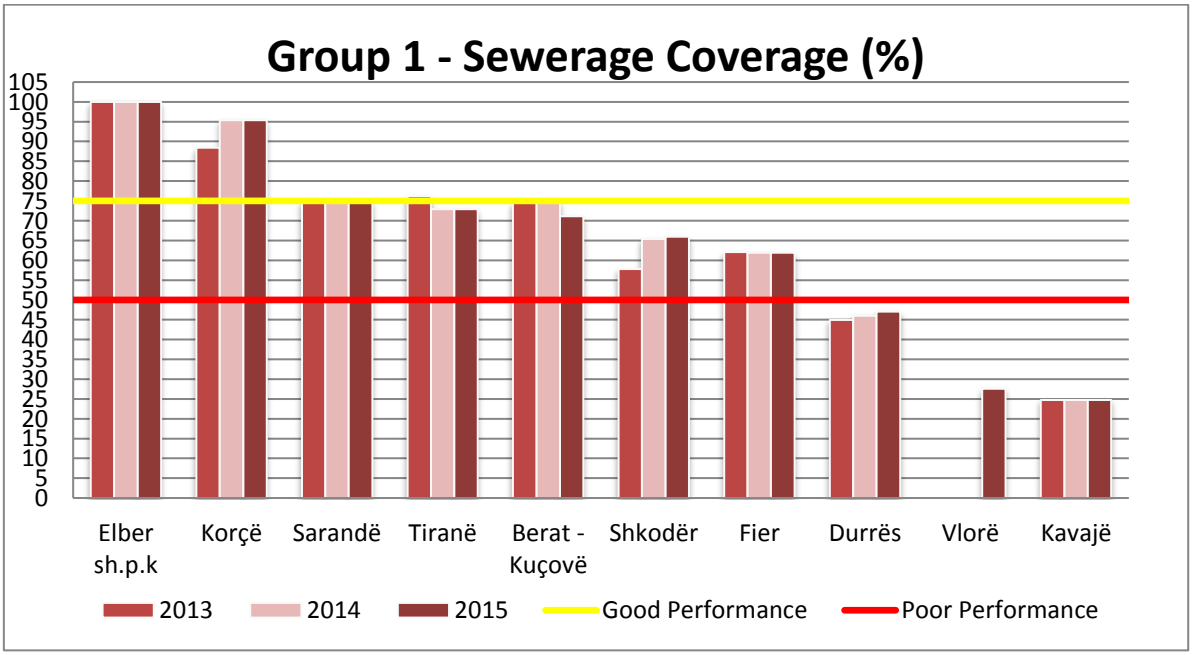
Waste water service is far away compared with the water supply service. The average value of the sector is still far from the range of good performance (75%) that the WRA has determined for this indicator. For 2015, the average value of this indicator at the national level is 50%, this value is far from the strategy target. Sewerage service is a major problem in rural areas, only 3.1% of the population has access to the service. The population in rural areas operates with septic tanks, which do not fulfill the required standards established by the government.

This service is done more qualitative through wastewater treatment plants. For 2015, only 5 wastewater treatment plants have been working. Putting into operation other wastewater treatment plants constructed, making possible the construction of new wastewater treatment plants and the idea to build small wastewater treatment plants to rural areas, will bring qualitative changes to this service at national level and also will contribute to a better environment protection.

First group Utilities

During 2015, the situation for sewerage service is almost the same for all utilities in the first group. It is Elbasan utility with the best performance for several years in a row, with the rate of 100% coverage. Korca utility (95.39%) has expanded its service area during the last three years with (+ 6.93%). Saranda continues to be in the range of the good performance with a value of this indicator (74.94%).

Graph 25. Sewerage coverage for the first group in 2015



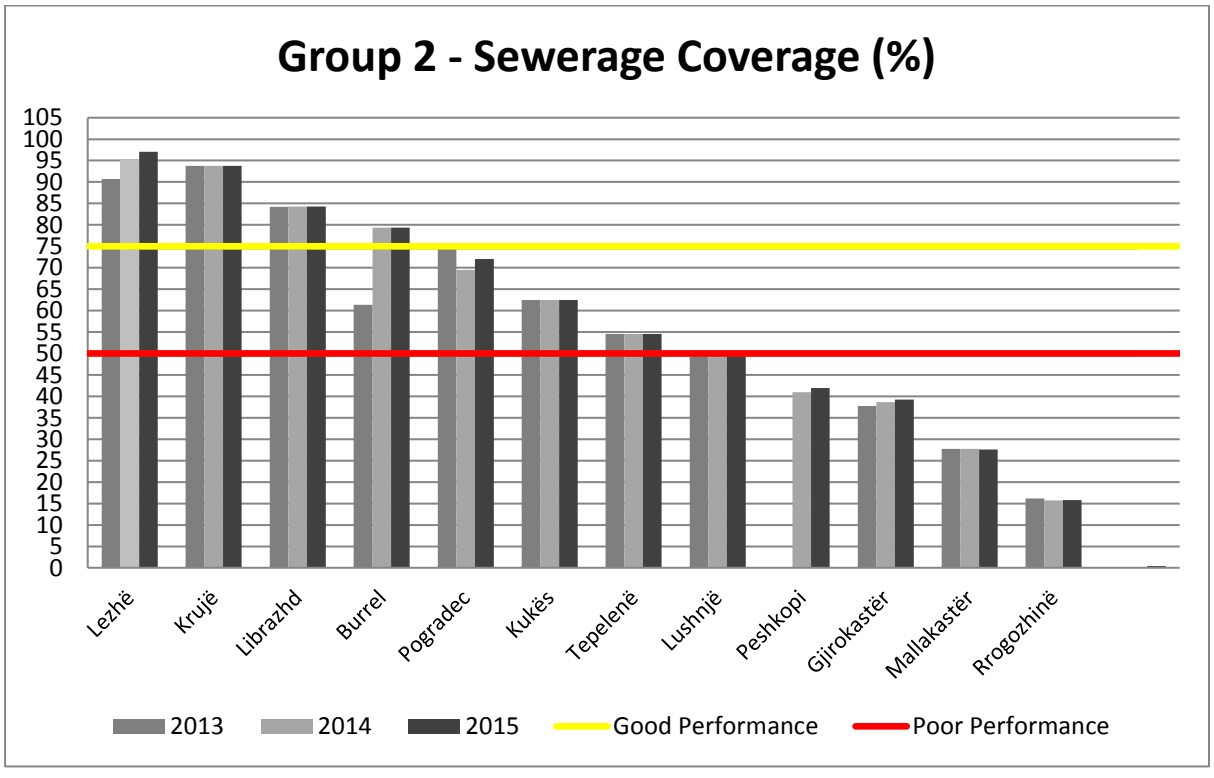
A poor performance is shown by Kavaja (24.78%), Durres (47.06%) and Vlora (27.5%),which has reported for the first time and there is no data to make comparison with the previous year.
Compared with the last three years Shkodra utility has expanded its service area (+ 8.17%) while negative trend showed utilities of Tirana (-3.38%) and Berat-Kucova (-3. 41%). In this group, only Elbasan Fshat utility doesn't offer sewerage service.

Out of 11 utilities in this group, only 5 of them, perform qualitative service through wastewater treatment plants, taking care of environment protection at the same time.

Second group of Utilities

Based on benchmarking levels, out of 12 companies in the second group, only 4 of them have passed the yellow line of good performance. Sewerage coverage reaches the highest value in the service area of Lezha (97.03%) with an increase (+ 1.96%) for 2015, followed by Kruje (93.79%) and Librazhd (84.29%). Also Pogradec utility has improved the indicator for 2015 (+2.56). For the three years under the analysis Burrel utility has increased sewerage coverage (+ 17.98%).

Graph 26. Sewerage covered for group 2 in 2015



The utilities which continue to perform poorly, remaining below the 50% level, are Peshkopi (41.92%), Gjirokastra (39.24%), Mallakastër (27.59%) and Rrogozhinë (15.76%), the last one have the lowest value

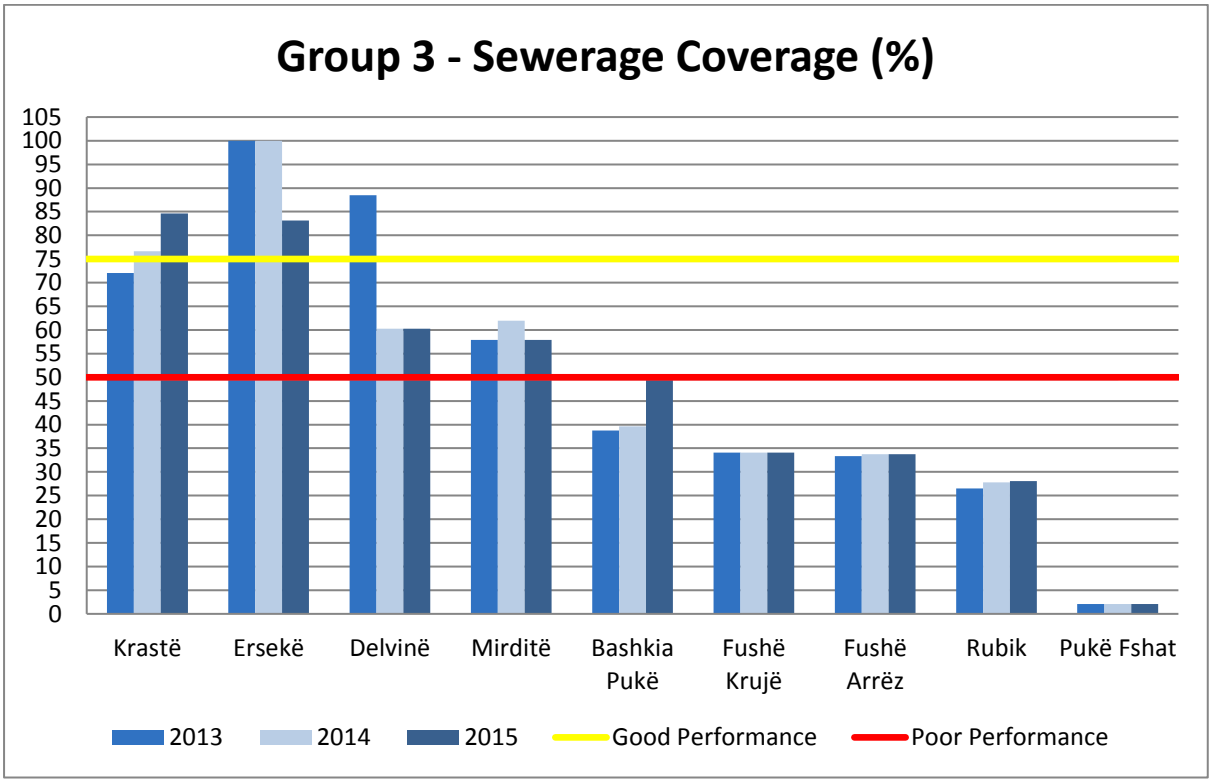
of this indicator. Wastewater treatment is done only from Pogradec utility. Lezha utility is soon expected to join companies that offer this service.

Third group of Utilities

In the third group of companies, only 9 utilities provide the sewerage service. The indicator level in this group is lower than in the other two groups. The situation of this group is almost the same as previous years, 7 out of 9 water companies perform poorly, there are not seen tendencies for improvements. The positive trend in Krastë utility (+ 7.94%) and Puka Municipality (+ 10.08%), does not come as result of investments made, but is a consequence of migration from the respective service areas.

In the graph below, Erseka utility, even though stands above the yellow line has decreased significantly the indicators in value (-16.83%). Utility has not reduced the service area; the difference comes because in the previous data the population in rural areas is not reported. Even this year, Puka Fshat utility is the utility with poor performance; it offers the service only for 2.1% of the population in its administrative area. None of the third group companies offer wastewater treatment service.

Graph 27. Sewerage coverage for group 3 in 2105



Conclusions

The sewerage service in Albania is provided by 32 companies, but only 8 of them cover with service over 75% of the population, 11 perform poorly and the remaining companies provide service to a small number of the population. Service coverage for the sector is not increased this year compare with the previous year the sewerage coverage indicator is 50%.

Neglecting this service and lack of investment is most evident in rural areas, the population in villages operates with septic tanks, operating outside the technical standards. Urban service coverage provided for 72.57% of the population and for only 3.1% of population in rural areas. These figures are very low and far behind the objectives set for 2015.

Above figures call for emergent intervention and changes in the sector; companies should increase their efforts in order to extend the service to the entire jurisdiction population in both urban and rural areas. This should be supported by the development of business plans which will help in identifying investment needs and determine realistic targets.

Wastewater treatment has helped improving the sewerage service for only those utilities that are licensed by WRA for this category of service as Durres, Kavaja, Korca, Pogradec and Shkodra utilities.

Commitment and priority of the government to reform WSS sector and the new territorial reform will bring significant changes in the sector. WRA, as WSS sector regulator, will support companies in their work for a sustainable and quality development to achieve compliance with the main directives of the EU relating to the environment and to meet certain strategically objectives on the right time.

3.1.9 Regulatory Perception

According to Law 8102 dated 28.03.1996, as amended, on the "Regulatory framework of the water supply and wastewater disposal and treatment sector" WRA is intended to guarantee public interests protection and create a transparent regulatory environment. Regulator's Perception is a performance indicator that evaluates the extent to which the water supply and sewerage companies comply with and support the WRA achieving the objectives of regulatory mission.

To make the evaluation of this indicator, there are taken into consideration four main aspects that show how water supply and sewerage companies have met the obligations set out in laws and regulations and how they were active participants in this process. The overall rating is 100 points maximum. Each of the following aspects is estimated at a maximum of 25 points:

Licensing: Whether or not a utility holds a valid license by the WRA (a maximum of 25 points, with a share of the points awarded depending on the developed licensing process).

WRA-approved tariff: Whether or not a utility operates with a WRA-approved tariff (25 points, if yes).

Regulatory fees: Whether a utility has paid the regulatory fees, which are due to the WRA, on time and in full (a maximum of 25 points, with a share of the points awarded if payments are not received in full).

Communication with the WRA: Whether a utility responds in a satisfactory way to the various WRA information requests and notices (a maximum of 25 points for timely and complete replies).

The following table (Table 7) reflects the evaluation of companies for each of these aspects, ranking them in appropriate groups according to the total score obtained for this indicator.

Table 7. Regulatory perception: Points of performance achieved by groups

Utilities			License	Tariff	Regulatory fees	Comunication	Total
Group 1	WSS	Elbasan Qytet	25	25	25	15	90
	WSS	Korçë	25	25	25	15	90
	WSS	Shkodër	25	25	25	10	85
	WSS	Berat – Kuçovë	25	25	15	15	80
	WSS	Durrës	25	25	15	15	80
	WSS	Sarandë	25	25	25	5	80
	WS	Elbasan Fshat	25	25	25	5	80
	WSS	Tiranë	25	25	5	15	70
	WSS	Vlorë	0	25	25	10	60
	WSS	Fier	25	25	0	5	55
	WSS	Kavajë	15	25	0	15	55
Group 2	WSS	Lezhë	25	25	25	20	95
	WS	Korçë Fshat	25	25	25	15	90
	WSS	Gjirokastër	25	25	25	5	80
	WS	Bilisht	25	25	25	5	80
	WSS	Librazhd	25	25	15	15	80
	WSS	Burrel	25	25	10	20	80
	WSS	Lushnje	25	25	15	10	75
	WS	Peshkopi	25	25	10	15	75
	WSS	Tepelenë	25	25	10	15	75
	WSS	Pogradec	25	25	10	15	75
	WSS	Krujë	25	25	5	15	70
	WS	Lushnje Fshat	25	25	15	5	70
	WSS	Gramsh	25	25	5	10	65
	WS	Kurbin	25	25	5	10	65
	WS	Përmet	25	25	0	10	60
	WSS	Kukës	25	15	0	20	60
	WSS	Rrogozhinë	25	25	0	5	55
	WS	Shkodër Fshat	25	25	0	5	55
	WSS	Patos	25	–	–	20	45
	WSS	Himarë	25	0	–	0	25
	WS	Mallakastër	5	–	–	10	15

Group 3	WS	Bulqizë	25	25	25	10	85
	WSS	Rubik	25	25	25	10	85
	WS	Ura Vajgurore	25	25	10	20	80
	WSS	Mirditë	25	25	25	5	80
	WS	Orikum	25	25	20	5	75
	WSS	Ersekë	25	25	10	15	75
	WS	Selenicë	25	25	0	20	70
	WSS	Bashkia Pukë	25	25	0	15	65
	WSS	Krastë	0	25	25	15	65
	WSS	Delvinë	25	15	0	15	55
	WS	Poliçan	25	25	0	5	55
	WS	Tropojë	25	25	0	5	55
	WSS	Fushë Krujë	25	15	–	10	50
	WS	Gjirokastër Fshat	0	25	0	20	45
	WSS	Libohovë	25	–	–	20	45
	WS	Divjakë	25	–	–	15	40
	WS	Çorovodë	5	25	0	5	35
	WS	Vau i Dejës	25	–	–	10	35
	WS	Novoselë	0	25	0	5	30
	WSS	Peqin	0	25	0	5	30
	WS	Has	0	15	–	5	20
	WSS	Pukë Fshat	0	–	–	15	15
	WSS	Fushë Arrëz	10	–	–	5	15
	WS	Këlcyrë	0	–	–	10	10
	WS	Bradashesh					

Licensing

Based on Law 8102, any company that provides water supply, disposal and treatment of wastewater service must be provided with the relevant license by WRA. The license is the main instrument that guarantees customers that the company has the ability to provide service according to approved standards. The utility is obliged to comply with license conditions, which are subject to WRA monitoring. For this reason, WRA has made continuous efforts to encourage local governments so that they provide services through licensed companies. The results show that the sector is performing well in this regard.

Companies that have a valid license for the water and wastewater services as well as those who have renewed it in time were awarded with maximum of points. Companies were evaluated with only a part of points depending on the efforts they made to have a valid license to perform the services they provide.

In 2015, utilities of Këlcyra and Puka Fshat are companies that still operate without a license, and therefore did not receive any points. Also, Vlora, Peqin and Gjirokastra Fshat

are utilities which have problems for the license renewal. With a minimum of points (5 points) were evaluated Skrapar and Mallakastra utilities, because they have made efforts to start the procedures for renewing their license.

At Fushe Arrez utility is given 10 points, as it is in process to get the license due to lack of legal documents. Likewise, Kavaja is estimated with 15 points, because the utility has a license for the water supply and disposal of wastewater, while the process of getting the wastewater treatment category is not yet completed.

In the future WRA will intensify the monitoring of the licensed operators for applying and fulfill the licensing conditions. In terms of noncompliance with license conditions, the regulator will take necessary measures within its authority to protect the interests of consumers.

Approved tariffs by WRA

In 2015, Korca Fshat utility which apply for the first time for tariff approval, joined the list of companies that operates with tariff approval by WRA. All these companies are estimated with 25 points.

With 15 points were assessed those companies which apply tariffs approved by WRA, but outside of the approved timeframe, such as Kukes, Fushe Kruje and Has. Utilities of Patos, Mallakastra, Vau Dejës, Malësia e Madhe, Libohova, Divjaka, Fushe Arrëz, Këlcyrë, Puka Fshat and Himare operate with tariffs not approved by WRA, therefore, have not been awarded with any point.

Delvina utility does not have tariffs approved by WRA for wastewater disposal although it is licensed for both service categories: water supply and wastewater disposal in 2013.

Two utilities, namely Këlcyra and Puka Fshat, are not eligible to apply for tariff adjustment as they do not have a license. All other companies should have submitted to WRA the application for tariff approval.

As result of the WSS sector reform, this situation will be overcoming, because based on the DCM No. 63 dated 01.27.2016 "On the reorganization of companies that provide drinking water supply, collection, disposal and wastewater treatment " the newly organized utilities should be licensed and have to apply for tariff review within three months from the reorganization.

Regulatory Fees

Regulatory fees are mandatory for the companies operating in the WSS sector to be paid to WRA as determined by Law no. 8102, dated 28.03.1996 and also agreed by the parties (Utility on one side and WRA on the other) in the contract for the service application tariffs. They are, one of the main funding source for WRA, which are approved by the Council of Ministers. The situation of the payment of regulatory fees in 2015 is not good, compared with 2014; they are decreased with 20%.

In 2015, companies that have paid regulatory fee in full compliance with the contract are : Korce, Gjirokastra, Shkodra, Saranda, Vlora, Lezha, Bilisht, Bulqiza, Elbasan Qytet, Rubik, Mirdita and Elbasan Fshat utilities, awarded with the maximum points. Some companies are awarded with a part of points, depending on the contractual payment obligations for regulatory fees.

During 2015, some utilities as Durres, Berat Kuçovë, Librazhd, Burrel, Lushnje Qytet, Ura Vajgurore, Orikum and Erseka paid their regulatory fees to WRA. Nevertheless, they are still in debt towards WRA, as it's been many years they have not paid regularly. There are also a group of utilities such as Delvina, Fier, Kavaja, Peqin, Novoselë, Rrogozhinë and Shkodra Fshat which have never paid any regulatory fee.

WRA has repeatedly requested timely liquidation of regulatory fees in fulfillment of contractual obligations. Annual regulatory fees represent only 0.6 percent of the company's annual revenue, as such it is quite affordable for any utility. Non timely liquidation of annual regulatory fees and their accumulation year after year makes it an additional financial "burden" for the utility.

Communication with WRA

Through its policy of cooperation and consultation on further development of regulatory instruments, WRA has made it possible to evaluate its role in sector regulation. Most of the companies have been active participants in this process. During 2015, WRA has been in continuous communication with all the companies through requests for information, consultation meetings to discuss various issues, etc. The communication with WRA is assessed based upon the mutual cooperation and prompt response towards WRA demands and requests for information.

In this context, not all companies have had very good communication. Not to every utility is given the maximum of points. Lezha, Kukes, Burrel, Ura Vajgurore and Patos are companies awarded with 20 out of 25 possible points.
The above table shows that many companies in 2015 are estimated only 5 points, as they have not showed any interest or cooperation with the regulator.

Conclusion

The results of the above analysis show that water supply and sewerage sector is increasingly operating within the regulatory framework, even though there is need for improvement related to licensing and tariffs applications. There is also possibility for a better performance in relation to two other aspects, as these aspects have not had the same assessment from all utilities. WRA appreciates the utilities' willing and their efforts to have a better cooperation.

For those companies that for objective reasons do not meet formal licensing requirements and have not had tariff approval as well as they are not well estimated regarding the regulatory perception indicator, improvement of this indicator can come through the increase of communication and collaboration with WRA. WSS companies should be more aware about the responsibilities that they have in respect of the obligations and answering in time and quality requirements of the WRA.

The best performer in 2015 in terms of indicators "Regulatory Perception" is Lezha utility with 95 points followed by Korca and Elbasan Qytet utilities with 90 points.

3.2. Performance Ranking of the Water Supply and Sewerage Utilities in 2015.

WSS utilities are ranked according to their performance which represents the total of scores of each key performance indicator for each utility (who are examined separately in each of the previous chapters). This way allows WRA determine good and poor performance and better progress utilities. Publication of the results serves as an incentive for performance improvement of companies. Also, this approach enables the possibility to communicate with a wider audience where WSS utilities performance can be understood without any in-depth knowledge of the water sector.

Performance analysis is based on data reported by the companies where the quality of the reported data plays an important role in the evaluation results. WRA will continue working to increase the quality and reliability of the data, clarify and correct inaccuracies or inconsistencies in the data reported.

Ranking utilities overall performance

Utilities are ranked according to the total points calculated on the basis performance rating 8 out of 10 KPIs. To each of the key performance indicators is assigned a specific weight that indicates its relative importance. The scoring system is presented in Table 8. The maximum number of points that can be achieved is 100 points. Each KPI is evaluated with a maximum score of 5 to 20 points, depending on the specific weight assigned, and has his minimum and maximum performance limits.

The good performance of the company is considered achievements at the level of the objectives of the WRA. Generally, if performance is below the target, the assessment is only an available percentage points in order to encourage and evaluate step by step performance improvements. For some indicators, such as staff efficiency, non-revenue water and collection efficiency, the performance level equal or below the minimum of acceptable targets set by WRA is evaluated with zero points.

Table 8. Ranking utilities system; Key Performance Indicators, Objectives, Specific weight and points for each KPIs

Key Performance Indicators		Performance Objectives		Specific weight	Maximum points
		Full points	0 points	Total 100%	
1 – O&M cost Coverage		≥ 100%	0%	15%	15
2 – Total cost Coverage		Is not included in setting points			
3 – Collection Efficency		≥ 82%	≤ 60%	20%	20
4- Staff Efficiency (Staff for 1000 connections)	Group 1	≤ 4	≥ 6	5%	5
	Group 2	≤ 6	≥ 10		
	Group 3	≤ 10	≥ 15		
5 – Non Revenue Water		≤ 30%	≥ 50%	20%	20
6 – Metering Ratio		≥ 85%	0%	15%	15
7 – Hours of Water Supply		≥ 18 hours/day	0%	15%	15
8 – Water Quality		Is not included in setting points			
9 – Sewerage Coverage		≥ 75%	0%	5%	5
10 – Regulatory Perception		100 points	0 points	5%	5

Ranking results in 2015.

The performance results are calculated for 55 companies taken in analysis. In the following table (Table 9),the analyzed companies are ranked by total points of performance evaluation.

Table 9. RANKING OF BEST PERFORMER UTILITIES IN 2015

Ranking	Type of service	Utilities	Ranking points	Ranking	Type of service	Utilities	Ranking points
1	WSS	Korçë	99.5	30	WSS	Durrës	54.76
2	WSS	Librazhd	98.5	31	WS	Peqin	53.84
3	WS	Bilisht	94.0	32	WSS	Rrogozhinë	52.65
4	WSS	Rubik	84.1	33	WS	Ura-Vajgurore	52.19
5	WSS	Pogradec	81.9	34	WS	Divjakë	51.04
6	WSS	Lezhë	79.6	35	WSS	Peshkopi	50.39
7	WSS	Ersekë	77.8	36	WSS	Kavajë	48.00
8	WSS	Burrel	76.7	37	WSS	Gjirokastër Qytet	47.79
9	WS	Lushnje Fshat	74.7	38	WSS	Fushë-Krujë	46.94
10	WSS	Tiranë	73.6	39	WS	Libohovë	46.13
11	WS	Korçë Fshat	71.8	40	WS	Poliçan	44.64
12	WS	Elbasan Fshat	71.4	41	WS	Shkodër Fshat	42.47
13	WSS	Elbasan Qytet	70.7	42	WSS	Mallakastër	42.15
14	WSS	Delvinë	68.2	43	WS	Bulqizë	42.15
15	WSS	Shkodër	67.8	44	WS	Selenicë	39.34
16	WSS	Sarandë	65.2	45	WSS	FushëArrëz	38.20
17	WSS	Kukës	64.2	46	WS	Këlcyrë	36.77
18	WSS	Lushnje Qytet	64.0	47	WS	Kurbin	35.28
19	WSS	Krastë	63.4	48	WS	Has	33.83
20	WS	Përmet	63.2	49	WS	Vau Dejës	31.56
21	WSS	Krujë	62.6	50	WS	Orikum	30.42
22	WSS	Bashkia Pukë	61.6	51	WS	Patos	29.45
23	WSS	Fier	61.6	52	WS	Tropojë	23.86
24	WSS	Berat-Kuçovë	61.3	53	WSS	Pukë Fshat	22.36
25	WS	Gramsh	61.2	54	WS	Çorovodë	20.70
26	WSS	Vlorë	57.2	55	WS	Novoselë	16.99
27	WSS	Tepelenë	57.0	56	WSS	Himarë	
28	WS	Gjirokastër	56.7	57	WS	Bradashesh	
29	WS	Mirditë	55.3				

The top performers

For 2015, the best performers in the group will be awarded. Regardless of the result the award can be given only to utilities that operate in accordance with the regulatory framework, so they have a valid license and approved tariffs from WRA.

Table 10. Top performers in the utility ranking in 2015

Ranking	Group 1		Group 2		Group 3	
	Utility	Ranking points	Utility	Ranking points	Utility	Ranking points
1	Korça	99.50	Librazhd	98.50	Rubik	83.90

For 2015, in the first group, Korca is the utility with the best performance. This utility lead the best performance list companies. Companies with the best performance for the second group is Librazhd utility and Rubik utility in the third group.

The performance over time- the top improvers

Ranking of companies in 2015 according to their overall performance reflects the actual achievements of the companies compared with each other. During this year, although many companies are not listed on the first places have made efforts to improve their service and management. The good progress of their work has been awarded with more points compared with the last year.

WRA, taking into account the fact that some utilities have more difficulties than others to be ranked in the first places due to external factors as well as the organization and their water supply and sewerage system situation, has evaluated "top improvers" the utilities that make progress in their performance for 2015.

Table 11. Utilities with best performance for 2015

Utility		Rank in group	Ranking score 2014	Ranking score 2015	Change in ranking score
Group 1	Shkodër	4	56.10	67.80	+ 11.72
Group 2	Lezha	4	69.13	79.61	+ 10.49
Group 3	Mirdita	7	41.57	55.32	+ 13.74

The company with the best performance in the first group is Shkodra utility with 11.72 points more than the previous year. During 2015, this company has improved collection efficiency and operation & maintenance costs indicators.

In the second group, Lezha is the utility that has made more progress with 10.49 points more than its previous result. Improvements have consisted mainly in terms of collection revenue, management staff and non- revenue water.

In the third group, Mirdita utility although is ranked seventh in this group has managed to increase its performance in 2015 with 13.74 points compared with 2014. This utility has made progress for collection efficiency, non-revenue water and metering ratio indicators.

4.Special Topic 2015: Water Balance

General

The Balance of Water modeled according the International Water Association (IWA) in water supply systems represents a methodology to estimate the amount of water that entered and is consumed within the system, respectively in the part of consumers billed also in their actual, and administrative losses. Table 12 provides the elements of Balance of Water according IWA and represent the basic elements of drafting of the 5 Years Business Plan of WSS companies.

The Water Balance describes and analyzes the current situation of non-revenue water in all its elements, which serve as the basis for the design of strategic objectives and action plans for improving the performance of the company. This is the main reason that the requests of the companies at WRA for new tariffs water supply and sewerage services must necessarily be accompanied by the presentation of a 5-years business plan.

The example presented of the drafting of the water balance for the Durres utility (Durres Water Supply and Sanitation) corresponds to a society that water supply systems from production to customer is partially equipped with measurement, a situation which is almost overall in all water sector in our country.

The example presented for the Durres utility (Durres Water Supply and Sanitation) is one of the most complicated and therefore the methodology used to compile it can serve as an opportunity for companies and other generalists water utilities.

Table 12. Balance of Water by the International Water Supply Association(IWA)

<table>
<tr><td rowspan="8">Oun sources</td><td rowspan="9">System Input</td><td rowspan="2">Water Exported</td><td rowspan="5">Authorized consumption</td><td rowspan="3">Billed Authorized Consumption,</td><td>Billed Water Exported to other Systems</td><td rowspan="3">Revenue Water</td></tr>
<tr><td>Billed Metered consumption by registered costumers</td></tr>
<tr><td>Billed Unmetered consumption by registered costumers</td></tr>
<tr><td rowspan="8">Water Supplied</td><td rowspan="2">Unbilled Authorized Consumption,</td><td>Metered</td><td rowspan="7">Non-Revenue Water</td></tr>
<tr><td>Unmetered</td></tr>
<tr><td rowspan="6">Water Losses</td><td rowspan="3">Administrative losses</td><td>Unauthorized consumption</td></tr>
<tr><td>Inaccuracy in metered</td></tr>
<tr><td>Systematic errors in data handling</td></tr>
<tr><td rowspan="3">Technical losses</td><td>Leakage on Mains</td></tr>
<tr><td>Leakage and Overflows at service Reservoirs</td></tr>
<tr><td>Leakage on service connections up to the street/property boundary</td></tr>
<tr><td>Water Imported (wholesale purchase)</td></tr>
</table>

Methods of Drawing Water Balance

Develop Balance Water to water supply systems without / with measurement partially realized through the method of "top-down". This method is used in systems in which it is impossible to calculate technical losses on all subcomponents their ingredients. Technical losses in this method are calculated as the difference between the amount of water that enters in system with the amount of Authorized Consumption Billed and unbilled and administrative losses.

The method of calculating technical losses with the "bottom-up" requires water supply systems that have individual and regional measures, and conducting regular field measurements.

In water supply systems without / with measurements for the design part of the Water Balance Authorized Consumption Billed or Unbilled can be calculated. Unable to calculate components of Technical losses, the only area to design the water balance in these systems remains to be assessed or accounted Administrative losses possibly with all of it's constituent elements. Administrative losses consist:

I. **Unauthorized consumption**

- Illegal connections
- Under billing the customers with water meters
- Manipulator of water meters and 'bypass'
- Under billing the consumers without water meters

II. **Inaccuracy in water meters**

Companies really do not have full and sufficient details to determine all the subcomponents of the Administrative Loss mentioned above. Therefore, the data necessary for the determination of all subcomponents of them will be gathered using all possibilities, since records (records), different questionnaires, data from a feasibility study conducted earlier, or data from systems water supplies and similar conditions that can transplanted in this case.

Water Balance of Durrës utility

Durrës utility performance (year 2013)

Performance Indicator/Data	Value
Population in Service Area	**330,000**
Water Coverage	**81%**
Total number of Clients (connections) Registered	**70,936**
Metered device (% of total)	**80%**
Nonrevenue Water (%)	**71.4%**
Collection percentage (% of total bills issued)	**68%**
Continuity of service (hour/day)	**7.5**
Coverage of Operation and Maintenance Cost from cash	**44.8%**
Water billed for the three categories of customers (m3/day)	**21,438**
Water volume produced (m3/day)	**73,988**
Water volume produced per person (liter/f/day)	**217**
Water Volume Imported (buy) wholesale (m3/day)	**951**
Water billed for metered households (liter/day)	**51.4**
Invoiced amount for families with and without measurement (liter/day)	**80**

System Input

- Our sources: 27,005,519 m^3/year
- Water imported (buy)wholesale from outside service area: 347,115 m^3/year
- Total Water inputted on system: 27,352,634 m^3/year

Authorized Consumption:

1) Billed:
   a) Metered (client with water meters): 4,463,000 m^3/year
   b) Unmetered (client without water meters): 3,362,000 m^3/year

2) Unbilled (irrigation of parks of the city, firefights, internal needs of society, emergency ext.):

a) Metered 0m^3/year
b) Unmetered 0 m^3/year
Total: 7,825,000 m^3/year

Total Water Losses (Administrative Losses + Technical Losses)

1. Administrative Losses:

a) Unauthorized Consumption

- Illegal Connections including by-pass, the information source for this data include:
  - Balance for Shijaku City is (773 l/d/b). Water supply conditions for Shijak city is deteriorated, so this unrealistic data shows that on transmission line from the pumping station in Fushë Krujë until to warehouse has enough illegal connections.
  - The verifications on site especially in the beach areas.
  - On study COWI in 2011, where at night 6% of the amount of water just "disappears"
  - From Database OSHEE.

  There are an estimated 16,000 illegal connections to a volume of 6.445 m^3, or 8.6% of total water produced

- **Under billing of the domestic consumers with water meters**
  Domestic consumers with water meters of Durres utility represent about 80% of total connections in the service area of Durres utility and of 88% of the total for the Durres City. Referring the sales experience in Albania will be the rate on average 80 l / p / b. The Part of metered connections is billed on an average of 51.2 l / p / d.

It is estimated that the volume of under billing for domestic consumers with water meters is 16,112m^3 / day or approximately 21.5% of the total water produced.

Table **13** provides in detail for each municipality and municipalities in the service area undercharged the volume of water to domestic consumers with water meters. The data in this table will serve to orient society priority action plans for a real customer billing to gauge where these percentages constitute the main share (see marked in yellow) The amount high enough volume under billed for water metered customers it shows that the system of reading their meters and has big problems to be examined with particular attention.

It is very difficult to assess under billed to domestic consumers without water meters. This category of customers billed given an average consumption rate throughout the year 150 liters / capita / day, which in fact is nearly double the demand for water (rate) that domestic consumers actually consume around 80 liters / capita / day. Realistically for this consumers category can happen as billing and under bill, respectively overbilling for apartments and private houses and rural areas that mainly overuse water for irrigation. Therefore, considering a compensation of two cases this under bill factor for unmetered consumers can consider zero

Table 13. Administrative Losses from under billed consumers with water meters

Local Government Units	Difference between assuming rate and amount billed (l/f/d)	Losses Volume (m^3/day)	Percentage of losses to average daily output	Weight in percentage 21.5%
Municipality Fushë Kuqe from SP in F. Kuqe in Sukth.	800	2,638	3.5%	16%
Municipality Durrës	57	10,038	9.7%	45%
Municipality Ishëm	47	426	0.6%	3%
Municipality Manëz	64	751	1.0%	5%
Municipality Sukth	56	1,546	2.1%	10%
Municipality Katund i Ri	40	661	0.9%	4%
Municipality Xhafzotaj 1	64	961	1.3%	6%
Municipality Rrashbull	41	813	1.1%	5%
All other local government units in Fushë Kruja system	31	959	1.3%	6%
		Total	**21.5%**	**100%**

b) **Inaccuracy in registration of the amount of water passing through the water meter.**

Related to inaccuracy of measurement of the water meter in general the experience shows that it is in the range of 2-3% of the total amount. In case of installed water meters in JSC Durres utility are very old and greater range of their types.

A study made by a foreign expert estimates that the losses from the inaccuracy of reading water meters can be 5.75% of the total losses. In fact, the estimated percentage is part of assessed total value of 21.5% shown in Table 13, above. The rest of the 21.5% share of the under billed volume of water shows that many customers have double bonds, or the water meter is not read correctly from their readers.

The utility must make investigations and draft the action plans in both directions in order to reduce the volume of water billed to customers with water meters. However, the inaccuracy of registration of the water of meter 5.75% is included (not collected) to the volume of water undercharged for domestic consumer with water meters.

c) Systematic errors in treatment of data's

Regarding to systematic errors in data processing those will be taken as zero value since there is no practical possibility of their assessment.

Finally, the administrative losses in total volume of percentage assessed as 30.1% of the total amount of water that enter in the system, or 8,233,143 m^3 / year.

2. Technical Losses:

a) Leakage on transmission and distribution lines
b) Leakages and emissions from storage tanks to the company and individual family members
c) Leakage on service connections to the point of measurement to consumers

As emphasized above, the drafting of the Water Balance in a top-down manner, is used when the technical losses and its subcomponents are impossible to be defined directly. JSC Durres utility is managing water supply systems quite outdated and in many cases, are built by failing to respect the technical requirements, established the technical standards for this purpose. This is especially evidence in the distribution networks of the areas which in recent decades have been subject of uncontrolled immigration, as Këneta's areas, Plazhi, hill area and Spitalla, and in many cases in rural distribution networks.

In these sense the Technical Losses should be taken for granted in total as the inability to assess or calculate the subcomponents as cited above.

In conclusion, the Technical losses making the difference of total losses from administrative ones, are estimated in total as volume percentage 41.3% of the total amount of water entering in the system, or 11,296,638 m^3 / year.

In detailed manner for each municipality and commune, the Total Losses (Administrative Loss + Technical Loss) are given in percentages in Table 14. This table is compiled in close collaboration of the Technical Department to assess the amount of water supplied every municipal and commune in service area, with Department of Sales to calculate the amount of water billed to these local government in the same service area.

It emphasized that the branches that supply one or a part of a municipality in the service area, the amount of water supplied is easily calculated in cases when branching is metered at the exit from the main transmission. In case there are no water meters, the amount of water supplied is considered in analogy of the branches with equal diameter to those measurements and referring to the time in the real time that this branch takes water from the main transmission.

Table 14. Percentage distribution of Non-Revenue Water in Municipalities in the service area of Durrës Utility.

Local Government Unit	Population Served	Water Supplied (l/f/d)	Water Billed (l/f/d)	Water Supplied (m3/d)	Water Billed (m3/d)	% e UPA According to Supplied Amount	% e UPA to the Produced Amount
WATER SUPPLY SYSTEM from FUSHE KUQE							
Municipality Durrës	192,708	165	65	35,144	14,475	59%	28%
Municipality Fushë Kuqe	2,032	946	47	3,120	155	95%	4%
Municipality Ishëm	6,108	216	53	1,956	376	81%	2.1%
Municipality Manez	8,900	154	36	1,808	425	76%	2%
Municipality Sukth	15,500	213	44	5,880	1,002	83%	6.5%
Municipality Katund i Ri	7,408	205	60	3,387	890	74%	3.4%
Municipality Xhafzotaj 1	7,688	305	36	4,581	535	88%	5.4%
Municipality Rrashbull	7,536	206	59	4,087	1,108	73%	4%
Subtotal	**247,880**			**59,963**	**18,966**		**55.4%**
WATER SUPPLY SYSTEM from FUSHE KRUJA							
Municipality Shijak	9,928	773	69	10,594	809	92%	13.2%
Municipality Preza & Bubq	1,716	139	76	329	1,315	61%	2.8%
Municipality Maminas	1,828	138		1,017			
Municipality Xhafzotaj 2	3,580	387		1,284			
Municipality Gjepalaj	920	185		777			
Subtotal	**17,972**			**14,000**	**2,124**		**16%**
Total both Systems	**265,852**			**73,693**	**21,090**		**71.4%**

Table 15. Water Balance summary for Durrës Utility according to International Water supply Association (IWA)

Table 15. Durrës Utility - Water Balance -2013 (IWA)

<table>
<tr><td rowspan="4">Water produced from oun sources 27,005,519 m³/year</td><td rowspan="6">System Input (100%) 27,352,634 m³/year</td><td rowspan="3">Authorized Consumption (28.6%) 7,825,000 m³/year</td><td rowspan="2">Billed Authorized Consumption (28.6%) 7,825,000 m³/year</td><td>Billed Metered Consumption by registered costumers (16.3%) 4,463,000 m³/year</td><td rowspan="2">Revenue Water (28.6%) 7,825,000 m³/year</td></tr>
<tr><td>Billed Unmetered Consumption by registered costumers (12.3%) 3,362,000 m³/year</td></tr>
<tr><td rowspan="2">Unbilled Authorized Consumption (%) 0 m³/year</td><td>Metered (0%) 0 m³/year</td><td rowspan="4">Non-Revenue Water (71.4%) 19,527,634 m³/year</td></tr>
<tr><td>Unmetered (0%) 0 m³/year</td></tr>
<tr><td rowspan="3">Water Losses (71.4%) 19,527,634 m³/year</td><td rowspan="2">Administrative Losses) (30.1%) 8,233,143 m³/year</td><td>Unauthorized Consumption (30.1%)
• From consumers measured underbilled (21.5%)
• Illegal connections (8.6%)
8,233,143 m³/year</td></tr>
<tr><td>• Inaccuracy in water meters
• From long use (5.75%)
1,572,776 m³/year</td></tr>
<tr><td>Water Imported 347,115 m³/year</td><td>Technical Losses (41.3%) 11,296,638 m³/year</td><td>Real Losses (35.55%)
• Leakages in main and distribution network
• Leakages from deviations in reservoirs and retail
• Leakages in the lines from the individual connections to the customer's water meter
11,296,638 m³/vit</td></tr>
</table>

Figures 28 and 29 schematically shows the complexity of water supply systems of Fushë Kuqe and Fushë Kruja under Durrës Utility administration.

Figure 28
Water Supply System from Fushë Kuqe

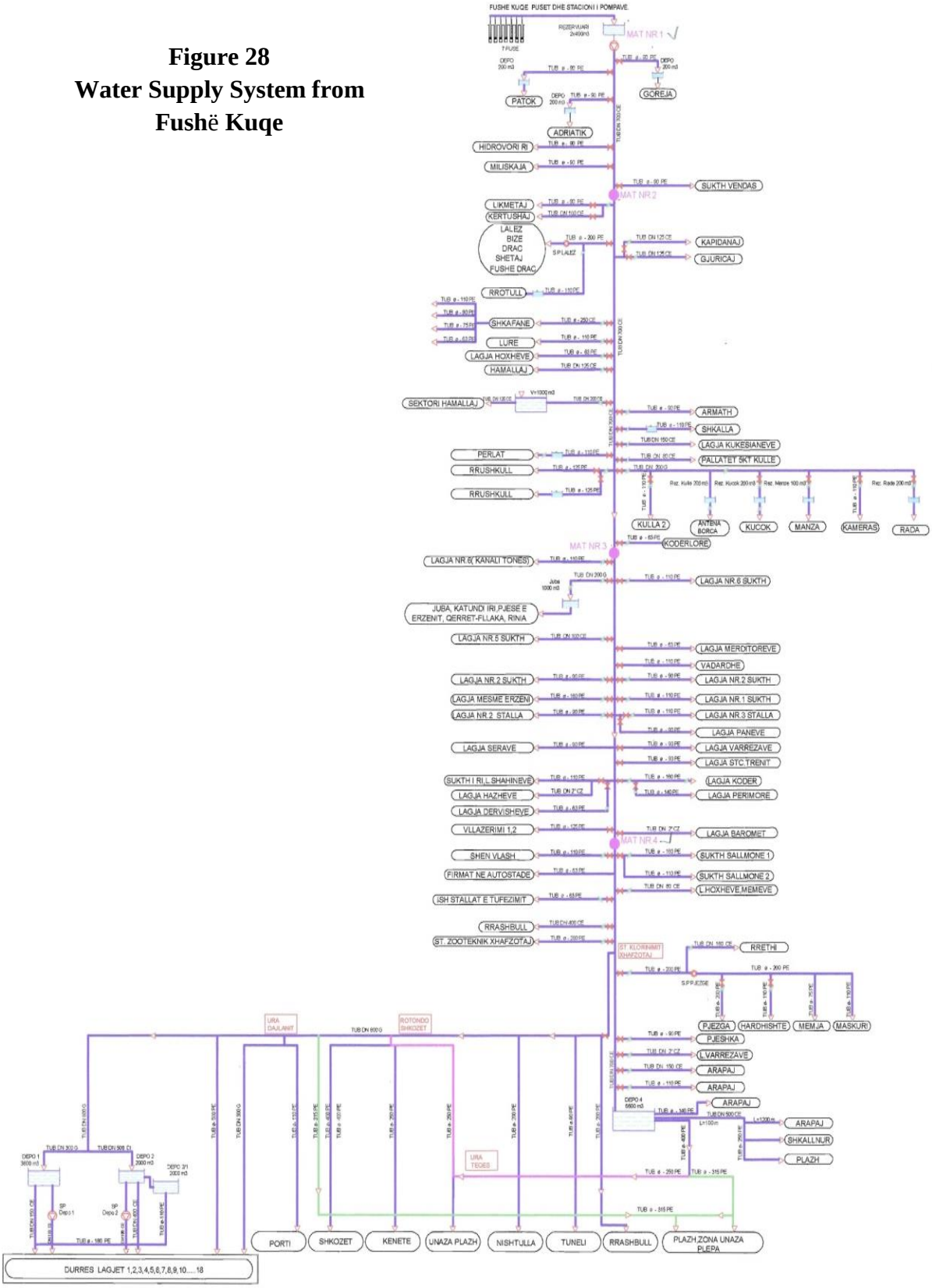
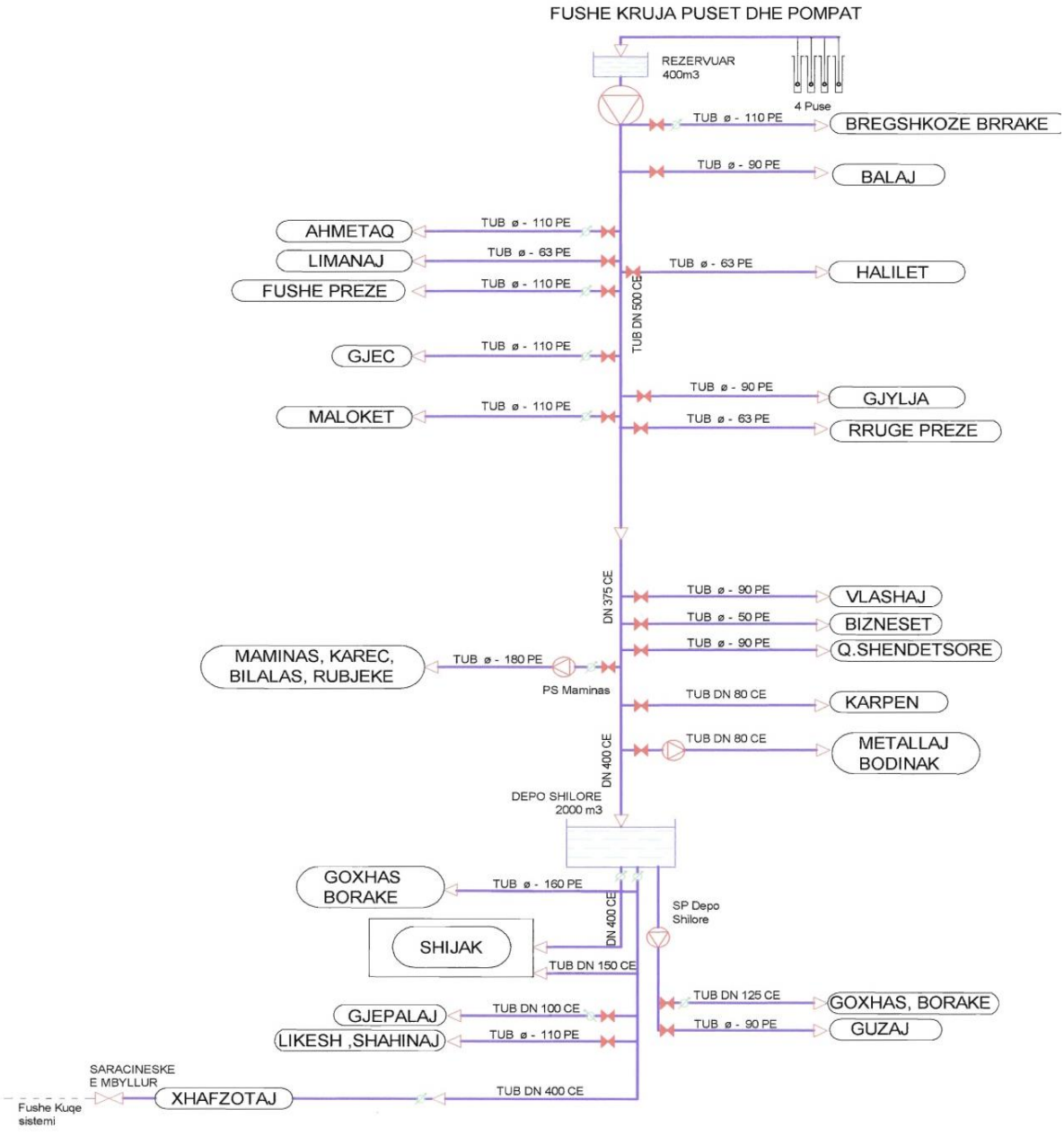


Figure 29
Water Supply System from Fushë Kruja



5.Conclusions and Prospects for the Future

Conclusions

In 2015, the sector has developed steadily, although performance indicators are not at the appropriate level compared to the sector strategy objectives and the good performance set by WRA.

The main source of revenue for utilities are the incomes generated by their principal activity and other services they perform for customers. This year the government has allocated subsidies, since most companies are unable to finance even their main operational activities. Albanian utilities do not have a 5-years business plan or they have only short-term business plans. Lack of business plan affects directly on possibility of the utilities for improving their performance, that during 2015is far away from strategy objectives of the sector.

The average coverage of O&M costs with the income derived from primary activity in 2015 is 102%, compared with the previous year, this indicator had negative trend and has decreased by around 20%. Only nineteen utilities cover the operation and maintenance costs over 100%. These results do not show a good performance of the sector, in terms of coverage of O&M costs and the same situation is regarding to the total cost coverage. The average of total costs coverage for the sector is 79%, compared with 2014 the level of this indicator decreased approximately with 8% in 2015. Only three utilities have managed to cover their expenses with the incomes from services they provide. This shows that utilities are still depending on central and local government subsidies. Analysis of incomes and expenses shows that the cost coverage level from activity incomes had no progress. Billing collections is increased by about 4% and costs about 14% compared with 2014. The level of expenses is increased in almost all items of costs. Labor costs increased 11%, electricity costs 30%, repair and maintenance costs 50%, costs of contracted services 38%. The change of electricity price in February 2015 has influenced the cost of electricity where it is noted that tariff for low-voltage consumption is risen about 16%, while consumption for medium voltage, which occupies 3 / 4 energy consumption of sector, the tariff has risen about 53%. In total electricity costs in the sector have increased by 558 million compared with 2014. Utilities must make more effort in terms of policy improvement for energy efficiency because in general they have water supply and sewage systems with pumping stations, including utilities that have wastewater treatment plants.

Generally, companies have shown attention towards collection as a key element of achieving their financial sustainability where the average of collection rate in the sector for 2015 is 92%. Increasing the financial sustainability requires that utilities realize in time the process of collection and strengthening efforts for the collection of bad debts. Metering ratio in general has had a positive performance in terms of service to customers but not related to the measure of the produced water which in many utilities it is unmetered. The average level of metering ratio in 2015 is 64% with an increase of about 3% compared with the past two years. Despite that utilities have continued installing meters to customers on their service area, the level of flat rate to the costumers remains still high level. For a small number of utilities, the metering level is on a inconsiderable level that does not exceed 2%. Increased levels of metering normally should be accompanied by a reduction of non-revenue water, which at least in the past three years remains 67% and this is the main concern in the sector because most of the water produced belongs to non-revenue water. The main elements of non-revenue water are total losses that consist on administrative and technical losses.

The high number of employees cover a large percentage of the operation and maintenance costs of utilities and represents a key element of increasing their financial sustainability. Only a small number of utilities approximates to the level of countries in the region where the average number of employees is not more than 4-5 employees / 1000 connections. Regarding the quality of service to customers, as measured by continuity of service and quality of drinking water sector performance is not the appropriate one. For 2015 the average of hours of water supply has been the same as in 2014 with 12.1 hours / day. Water quality remains a major concern because the companies can not guarantee the quality of water to customers for many reasons such as water supply interruptions, changes in water pressure, drilling pipe illegal connections, keeping water in tankers and pumps installed by consumers etc. Although the number of household consumers that have access to the service of water supply in 2015 is increased by about 27600 customers and those that have access to sewerage service to about 31000 customers compared with 2014, coverage of the service of water supply and sanitation has not achieved the sector strategic objective. Companies provides water supply services to 81% of the population in their service areas and sewerage service is provided only to 50% of the population.

Prospects for the Future

2015 is the year of the Territorial Administrative Reform. This reform brings new challenges for the water sector in terms of a new reorganization of water supply and sewerage services throughout the new municipalities. The expected change of vertical and managerial organization structure of water supply and sewerage companies, as well as their service area, necessarily includes WRA on applications of companies for new licenses and tariffs.

WRA will increase efforts for cooperation with all stakeholders and institutions in the country to play an active role on supporting the reform.

WRA will continue to monitor the performance of the sector as a whole as well as specific aspects of the service, the results of which will be public and will be subject to discussion with stakeholders in order to improve sustainability of services offered to customers. Especially, WRA will work with poor performance utilities, for which will seek to achieve a more detailed analysis to identify the causes and ways how to improve them.

In particular, WRA will continue to work for increasing the data accuracy. Inspections, control and verification on site of the data reported by the service providers will continue to be a priority of the regulatory work.

WRA notes that a good part of water utilities does not have a 5 Year Business Plan in accordance with the approved model by the government. The business plan of the companies is a necessity, as a basic document which gives a detail and professional analyze of all performance indicators. The business plan sets strategic objectives of utility separated in years and shows ways to achieve them accompanied by the relevant tariffs that the company must set to the customers.

WRA will use all the powers given by the law to meet this prerogative by water utilities as a condition that they must fulfill when they apply for new tariffs to the consumers.

Improvement of financial performance indicators which have had a negative trend in 2015, WRA will emphasize that companies reduce costs mainly by increasing energy efficiency and reduction of unjustified staff (overstaffing).

Regarding energy efficiency the emphasis will be primarily on the twenty-two (22) water utilities that are included in a study program of a GIZ, that determine the ways and opportunities to reduce energy costs.

To reduce labor cost from overstaffing, WRA will increase the demand to companies which will apply for new tariffs to present organizational chart structure and the relevant job descriptions to justify positions and the total number of staff.

Improvement of non-revenue water indicators remains a priority for WRA. Emphasis will continue to be in reducing the general losses and administrative ones in particular. Regarding administrative losses ,the emphasis will be on eliminating illegal connections, as well as customer under billings with and without water meters. For this WRA among a 5 Year

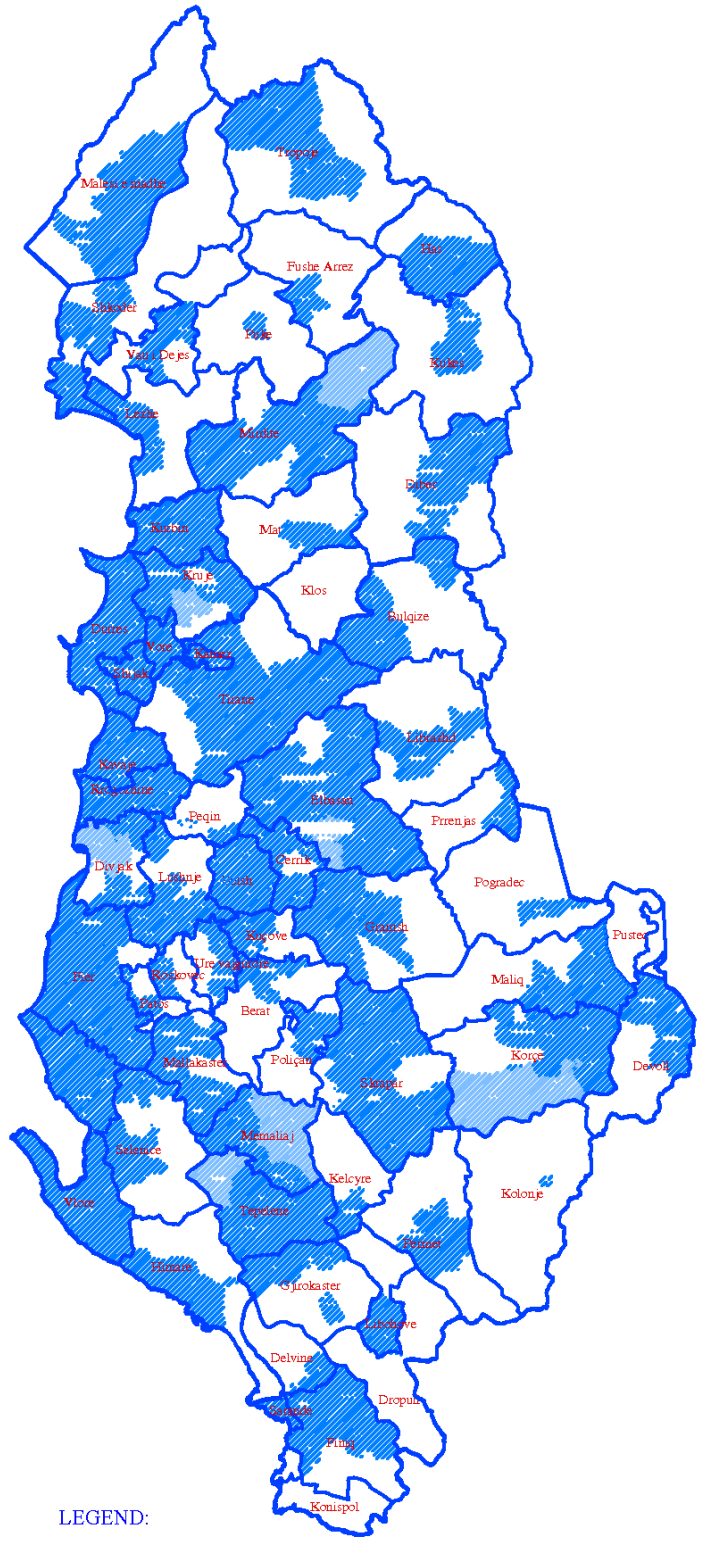
Business Plan request, will reinforce its demand that companies develop and present WRA Water Balance every six (6) months and in accordance with the format of the International Association of Water Supply (IWA).

In the process of performance monitoring of utilities WRA will increase its demand to improve the quality of service in terms of increasing the hours of water supply with the proper pressure.

Finally, WRA will play an active role in fulfilling its obligations in response to justified customers complaints. Strengthening the awareness and communication with customers and all stakeholders related to the water sector, WRA will improve in the future its official website in order to transmit maximum relevant information for this purpose.

WRA will work to enhance and strength the independence, transparency, professionalism and inter-institutional cooperation to create the right balance between service providers, policy makers and consumers.

6. Annexes



LEGEND:

- Areas covered with service by the utilities that are in DCoM
- Areas not covered with service by the utilities that are in DCoM
- Areas that are not in DCoM and are not covered with service by the utilities
- Areas that are not in DCoM and are covered with service by the utilities

Utility Group	Service	Utility	Drinking water tariff (lek/m3)			Service tariff (lek/connection/month)			Sewerage tariff (lek/m3)		
			Household / domestic	Public / institutions	Private / commercial	Household / domestic	Public / institutions	Private / commercial	Household / domestic	Public / institutions	Private / commercial
Group 1	WSS	Tirane	45	120	135	100	100	100	11	30	35
	WSS	Durres	58	110	120	100	100	100	35	50	50
	WSS	Vlore	30	60	80	80	80	80	11	13	13
	WSS	Elbasan (Qytet)	38	115	130				8	25	30
	WSS	Fier	52	105	125	200	200	200	13	18	20
	WSS	Shkoder	40	110	110	100	100	100	15	20	20
	WSS	Berat - Kucove	44	125	125	100	200	200	12	20	20
	WSS	Kavaje	38	80	100	100	100	100	15	20	20
	WSS	Korce	65	110	140	120	120	120	34	56	56
	WS	Elbasan fshat	38	120	120	120	120	120			
	WSS	Sarande	52	138	138	150	150	150	20	31	31
Group 2	WSS	Pogradec	22/62	37/111	37/111	200+100	400+100	400+150	11./33	12./36	12./36
	WSS	Lushnje	54	125	135	100	200	200	15	20	22
	WSS	Gjirokaster	39	112	124	80	80	80	9	14	14
	WSS	Lezhe	58	135	145	200	200	200	18	22	27
	WS	Korce fshat	38	90	95	50	50	50			
	WS	Lushnje fshat	60	70	100						
	WS	Kurbin	30	80	120	50	50	50			
	WSS	Librazhd	38	100	100				13	22	23
	WSS	Kukes	25	60	80				7	15	20
	WS	Shkoder fshat	50	120	120						
	WSS	Patos									
	WSS	Burrel	23	60	80				2	4	6
	WSS	Rrogozhine	48	90	100	50	100	100	10	12	12
	WS	Mallakaster									
	WSS	Gramsh	32	90	90						
	WSS	Kruje	33	80	80				8	12	12
	WSS	Tepelene	33	100	120	90	400	250	12	20	20
	WS	Peshkopi	27	65	85				10	15	18
	WS	Permet	40	110	120	100	100	200			
	WSS	Himare									
	WS	Bilisht	38	100	110	50	50	50			
Group 3	WS	Divjake									
	WSS	Delvine	48	100	100						
	WS	Ura Vajgurore	40	90	100						
	WSS	Peqin	30	90	100	50	50	50			
	WS	Bulqize	17	55	75	100	100	100			
	WSS	Novosele	33	50	70						
	WSS	Fushe Kruje	28	60	80				6	10	12
	WS	Orikum	25	70	75	100	100	100			
	WSS	Erseke	38	100	110	100	100	100	10	13	18
	WS	Polican	37	80	95						
	WS	Tropoje	19	60	80						
	WS	Selenice	30	80	100						
	WS	Corovode	27	80	95						
	WS	Has	25	60	80						
	WSS	Mirdite	30	100	115				10	15	15
	WSS	Bashkia Puke	35	130	140	100	100	100	8	16	16
	WS	Kelcyre									
	WS	Vau i Dejes									
	WSS	Libohove									
	WSS	Rubik	30	70	100				7	10	15
	WSS	Fushe Arrez									
	WSS	Puke fshat									
	WSS	Kraste	30	80	100				7	10	15
	WS	Gjirokaster fshat	25	60	60						
	WS	Bradashesh									

Utility Group	Utility	No. of consumers connection (water)	No. of consumers connection (sewerage)	No of staff	Production (m3/year)	Sold water (m3/year)	Total billed (water) (000/Lek)	Total collection (sewerage) (000/Lek)
		nr	nr	nr	000/m3	000/m3	000/leke	000/leke
Group 1	Tirane	197,722	169,190	1,376	102,874	34,147	2,066,753	389,327
	Durres	75,508	43,506	655	27,101	7,685	596,520	150,908
	Vlore	44,436	13,250	218	29,863	5,300	300,880	24,871
	Elber sh.p k	31,249	31,249	224	13,254	3,190	255,890	51,237
	Fier	30,034	24,534	348	12,345	4,774	363,040	43,636
	Shkoder	27,708	25,345	230	12,908	3,491	203,289	50,750
	Berat - Kucove	25,025	20,729	245	11,736	2,782	171,623	30,386
	Kavaje	24,220	6,078	241	2,720	1,525	85,420	5,344
	Korce	22,446	22,006	96	3,249	2,406	215,741	89,156
	Elbasan fshat	17,586	-	217	3,204	2,126	105,228	-
	Sarande	15,069	11,699	99	5,155	1,134	95,114	16,082
Group 2	Pogradec	14,346	10,565	100	2,424	1,293	79,678	25,402
	Lushnje Qytet	11,193	7,448	110	5,717	1,189	82,885	12,478
	Gjirokaster (Q)	9,462	3,449	99	5,093	1,463	70,411	8,558
	Lezhe	8,787	8,785	84	2,230	1,193	106,957	22,209
	Kamez	8,563	5,026	90	2,097	1,781	126,235	2,321
	Korce	6,991	-	56	1,040	690	19,686	-
	Lushnje (F)	6,488	-	62	699	502	37,201	-
	Kurbin	6,054	-	139	4,438	1,198	53,432	-
	Shkoder (F)	5,841	259	127	1,699	1,137	48,519	-
	Librazhd	5,192	4,801	64	720	554	26,941	7,624
	Kukes	5,027	3,486	75	986	856	26,702	5,769
	Patos	4,747	-	133	2,530	1,331	36,808	-
	Mallakaster	4,339	1,722	98	99	513	39,226	2,453
	Burrel	4,327	3,567	48	1,272	760	40,208	1,382
	Gramsh	4,047	-	43	1,425	715	28,846	-
	Rrogozhine	4,015	1,533	29	561	283	9,460	537
	Kruje	3,668	3,124	44	1,047	449	19,374	3,308
	Tepelene	3,550	3,360	61	1,017	392	21,824	5,111
	Peshkopi	3,497	2,841	42	1,951	722	25,004	6,030
	Permet	3,426	-	39	582	312	20,289	-
	Bilish	3,244	-	28	501	376	18,648	-
Group 3	Delvine	2,832	1,669	30	311	236	18,322	1,799
	Divjake	2,798	-	36	417	209	11,443	-
	Bulqize	2,746	-	37	1,592	605	22,714	-
	Fush-Kruje	2,536	1,905	34	468	250	11,285	1,601
	Peqin	2,473	-	58	953	478	32,892	-
	Ura-Vajgurore	2,405	-	32	864	374	20,050	-
	Novosele	2,300	-	36	895	443	16,623	-
	Orikum	1,948	-	18	403	209	8,590	-
	Corovode	1,884	-	34	542	248	9,356	-
	Erseke	1,654	1,654	23	383	201	10,692	2,089
	Polican	1,579	-	48	685	212	10,913	-
	Selenice	1,509	-	12	620	135	5,378	-
	Tropoje	1,496	-	28	1,488	421	14,280	-
	Mirdite	1,360	1,200	43	718	243	11,878	2,431
	Has	1,352	-	34	629	276	9,085	-
	Bashkia Puke UK	1,105	1,105	21	347	138	8,713	1,320
	Kelcyre	1,002	-	14	636	104	5,464	-
	Vau Dejes	942	-	10	695	161	4,420	-
	Libohove	783	-	8	234	170	4,406	-
	Fush Arrez	604	569	10	461	115	3,151	643
	Rubik	578	546	12	128	104	3,514	735
	Puke fshat	523	78	19	420	127	2,269	231
	Kraste	420	352	15	178	130	3,875	588
	Gjirokaster	384	-	15	490	422	2,735	-

Utility Group	Utility	Total collection (000/Lek)	Other Operative Revenues (Utility) (000 Lek)	Total revenue collected from the main activity WWS (000 Lek)	Direct Cost of Operation (KDO)- WS (000 Lek)	Direct Cost of Operation (KDO)- Sewerage (000 Lek)	O&M Cost (water + sewerage)	Total Operational Cost - WS (000 Lek)	Total Operational Cost - Sewerage (000 Lek)	Total Cost (water + sewerage)
		000/leke	000/leke	000/leke	000/leke	000/leke	000/leke	000/leke	000/leke	000/leke
Group 1	Tirane	2,456,080	53,892	2,636,281	1,640,971	42,878	1,683,849	2,110,739	62,078	2,172,817
	Durres	747,428	40,443	574,684	1,039,234	145,937	1,185,171	1,298,867	210,788	1,509,655
	Vlore	325,751	-	253,792	340,112	28,621	368,733	485,945	28,621	514,566
	Elber sh.p k	307,127	8,562	253,352	261,594	4,992	266,586	429,864	15,264	445,128
	Fier	406,676	-	311,327	321,113	13,297	334,410	408,305	30,097	438,402
	Shkoder	254,039	-	202,941	178,992	56,108	235,101	229,583	100,970	330,553
	Berat - Kucove	202,009	2,670	180,718	136,137	14,991	151,128	196,163	20,415	216,578
	Kavaje	90,764	6,205	64,764	121,864	10,581	132,445	185,096	15,141	200,237
	Korce	304,898	4,540	289,712	99,570	60,745	160,314	168,652	182,941	351,593
	Elbasan fshat	105,228	9,328	113,485	201,269	-	201,269	216,782	-	216,782
	Sarande	111,197	-	92,403	78,056	5,844	83,900	114,324	16,961	131,285
Group 2	Pogradec	105,080	7,846	118,769	59,151	24,549	83,700	90,508	44,618	135,126
	Lushnje Qytet	95,363	2,096	86,189	97,037	7,799	104,836	139,209	11,141	150,350
	Gjirokaster (Q)	78,969	4,058	75,111	67,381	5,348	72,729	71,797	5,972	77,769
	Lezhe	129,166	5,332	106,615	102,032	14,860	116,892	144,380	39,508	183,888
	Kamez	128,556	2,330	90,943	102,068	12,047	114,115	102,068	12,047	114,115
	Korce	19,686	442	16,288	38,608	-	38,608	46,657	-	46,657
	Lushnje (F)	37,201	200	33,951	53,905	-	53,905	77,905	-	77,905
	Kurbin	53,432	149	46,480	129,809	-	129,809	136,843	-	136,843
	Shkoder (F)	48,519	5	29,520	92,833	2,727	95,560	130,976	2,727	133,703
	Librazhd	34,565	1,593	35,119	29,930	5,498	35,428	34,403	6,575	40,978
	Kukes	32,471	454	23,187	36,216	3,789	40,005	55,378	4,766	60,144
	Patos	36,808	301	29,907	203,763	3,489	207,252	212,017	3,489	215,506
	Mallakaster	41,679	1,158	31,172	63,697	1,591	65,288	66,317	2,239	68,556
	Burrel	41,590	-	39,845	16,285	996	17,281	19,045	1,116	20,161
	Gramsh	28,846	-	24,237	24,672	-	24,672	30,400	-	30,400
	Rrogozhine	9,997	-	7,792	19,287	2,764	22,051	23,808	3,488	27,296
	Kruje	22,682	567	17,731	20,521	882	21,403	44,383	6,594	50,977
	Tepelene	26,935	-	24,192	48,263	2,550	50,813	60,479	2,550	63,029
	Peshkopi	31,034	131	23,145	23,864	3,294	27,158	30,578	3,294	33,872
	Permet	20,289	553	20,470	27,602	-	27,602	29,874	-	29,874
	Bilish	18,648	844	19,385	18,739	-	18,739	31,951	-	31,951
Grupi 3	Delvine	20,120	-	13,691	20,783	3,281	24,064	23,510	3,281	26,791
	Divjake	11,443	390	9,873	23,204	-	23,204	24,980	-	24,980
	Bulqize	22,714	291	17,165	22,395	-	22,395	28,076	-	28,076
	Fush-Kruje	12,886	547	9,812	24,107	3,088	27,195	34,174	3,459	37,633
	Peqin	32,892	-	27,880	51,378	-	51,378	55,327	-	55,327
	Ura-Vajgurore	20,050	142	18,380	28,625	-	28,625	30,190	-	30,190
	Novosele	16,623	46	10,468	37,835	-	37,835	46,335	-	46,335
	Orikum	8,590	298	6,290	25,340	-	25,340	27,091	-	27,091
	Corovode	9,356	132	6,498	26,576	-	26,576	32,216	-	32,216
	Erseke	12,780	79	13,023	8,743	3,026	11,769	11,714	3,521	15,235
	Polican	10,913	45	8,565	33,463	-	33,463	36,790	-	36,790
	Selenice	5,378	74	4,160	14,051	-	14,051	20,051	-	20,051
	Tropoje	14,280	32	7,267	15,526	-	15,526	22,548	-	22,548
	Mirdite	14,309	888	16,034	22,808	3,972	26,780	23,360	3,972	27,332
	Has	9,085	-	6,419	21,883	-	21,883	26,407	-	26,407
	Bashkia Puke UK	10,034	-	7,525	9,699	1,331	11,030	10,879	2,299	13,178
	Kelcyre	5,464	10	4,792	9,432	-	9,432	10,077	-	10,077
	Vau Dejes	4,420	-	3,172	16,805	-	16,805	17,765	-	17,765
	Libohove	4,406	-	3,022	10,610	-	10,610	12,290	57	12,347
	Fush Arrez	3,794	-	2,814	5,249	2,810	8,059	7,047	3,020	10,067
	Rubik	4,249	-	3,986	3,966	894	4,860	5,920	1,709	7,629
	Puke fshat	2,500	-	1,625	7,239	1,658	8,897	9,759	2,378	12,137
	Kraste	4,463	1,500	4,030	6,684	528	7,212	9,846	888	10,734
	Gjirokaster	2,735	-	2,578	8,524	-	8,524	9,991	-	9,991

To ensure for all Albanians
That water and sewerage
service producers deliver
the highest achievable quality
at a fair price and in a financially
sustainable manner