



ENERGY REGULATORS
REGIONAL ASSOCIATION

ERRA MEETING MEMO

Event: 4th ERRA Water Regulation Workshop

Location, date: November 28-29, 2016, Budapest, Hungary

ERRA Member Staff: Reka Timar, Program Manager

Participants were:

16 Representatives of water utility regulators from Albania, Estonia, Georgia, Hungary, Latvia, Lithuania, Macedonia and the Russian Federation were represented in Budapest.

Invited presenters were:

- Mr. András Kis, Chief Analyst, Water Economics Unit, Regional Center for Energy Policy Research, Hungary
- Mr. Srin Parthasarathy, Senior Consultant, Oxera, United Kingdom

Summary of the 4th Water Regulation Workshop

28th November, Monday

Moderator: Mr. Gábor Kisvárdai, Head of Secretariat (Secretariat of Vice-president for Public Utilities), Hungarian Energy and Public Utility Regulatory Authority, Hungary led the workshop and moderated the flow of presentations and discussions.

The Workshop was started with the **Welcoming remarks of Mr. Attila Nyikos, Vice-Chairman, ERRA; Vice-President for International Affairs, Hungarian Energy and Utility Regulatory Authority, Hungary.** In his speech, Mr. Nyikos stressed that water is a key issue for the world and reminded on the UN statement, according to which water is a human right. He supported that ERRA should continue having a water branch, as most utility regulators have the responsibility of water regulation and ERRA is the only utility association dealing with this issue. This meeting will, he said, tackle topics of utmost importance, such as benchmarking, strategic planning, tariff setting. He recalled the SDG 6 and its relation to the daily implementation of regulation. He highlighted that financing, capacity building, technology, innovation and monitoring are among the most important issues.

After the welcoming remarks, one participant from each country talked about the **recent updates and burning regulatory issues in their country in the field of water utility regulation.** A

summary of the updates is presented below, while the presentations can be downloaded from the Workshop website.

Albania:

The performance analysis of WSS utilities through the annual Performance Report 2015 shown a negative trend of performance for the financial indicators in terms of operative and total cost coverage, because of increase labour and energy costs, and further deterioration of the assets; NRW indicator remained in unacceptable levels; no improvement of the quality services for the customers; lack of a physical investment programs. Therefore there was a need for a strong water sector reform, which took place on 2015-2016 and assumes a new organization of the WSS services in the territory of the municipalities based on the principle: one municipality = one water utility. WRA played an active role in the process in the following ways: intensified the awareness of municipalities and utilities through sites visits; supported the water utilities to fulfil the WRA requirements; found and recommended how the utilities can draft the Business Plan as an indispensable instrument to measure and improve the management and performance; proposed amendments of the WRA law in order to reinforce and improve the role of WRA, as regulator and promoter for increasing the sector performance. Burning regulatory issues include: revision the tariff policy, and tariff setting methodology; redesigning performance indicators and the weight of each performance; more focus on utilities with poor performance; increasing the quality of company data assessment through online reports.

Georgia:

In Georgia a number of new legal acts have been introduced on electricity and natural gas, control and licensing rules, water consumption and supply and tariff methodology for the water supply sector. The tariff methodology is mainly cost plus, partially incentive based. In 2017 the development and implementation of a new Tariff Methodology for a Water supply sector and for calculating normative losses is expected. Implementation of new rules/procedures and fees for new consumer connections to the water supply network is also foreseen. Setting new tariffs, developing new Tariff Methodology are the burning issues for Georgia.

Hungary:

Hungary is in the middle of a regulatory reform. Amendment of licences is still ongoing. Overlooking and approving the „rolling development plans” (15 year long investment design plans) is a recent issue, these have to be submitted by each utility. A new public registry of water utility systems, water utility suppliers, and responsible entities is to be set up by the end of 2016. Among monitoring activities he mentioned separate accounting and that the prices are at a frozen level, but still under monitoring. Designation of operators of last resort is also among the issues that have taken place. Data have been gathered and HEA prepared a tariff setting proposal. HEA has been actively taking part in international activities. Expected developments in 2017 include the introduction of the new tariffs – depending on ministerial approval, and the launch of a new platform for operators and local governments for their annual/monthly/case-by-case data supply. Regarding burning issues he said that the Hungarian regulation has arrived to an important milestone: at the end of 2016, the grace period expires in licensing, resulting in that only the largest operators can stay in business.

Latvia:

There are 65 service providers regulated, regulation is based on the quantity of water consumed. The rest of the suppliers are controlled by the municipalities. The Law on Water Services and the regulations of the Cabinet of Ministers regarding provision and use of public water services entered into force in the beginning of 2016. New tariff calculation methodology is in place, based on price plus model. Implementation of an electronic information input and processing system has been made together with a more detailed analysis of technical and financial data.

PUC developed a service provider's data comparison system for draft tariff evaluation purposes. Practical application of the new law and regulations is foreseen in 2017, as well as the promotion of the use of the new electronic information system. Approval of tariffs for those service providers, who are still working with tariffs approved by regional regulators is another task for 2017.

Lithuania:

There are about 70 water utilities in Lithuania and evolutionary changes were seen in the water sector in 2014 when a new law entered into force. According to the law the basic prices of drinking water supply and waste water treatment services are set for 3 years and recalculated annually. All entities engaged in drinking water supply and (or) waste water treatment have to obtain licenses issued by the NCC. The NCC approved the Methodology on Rate of Return on Investments in 2015 WACC data will be applied to WWS management companies. Most WSS companies financial capacity was evaluated as sufficient. Main problems are that calculated prices are usually not endorsed by the municipal councils. NCC has to endorse the prices unilaterally. NCC expects to calculate more prices for regulated public water and waste water operators than last year; water and waste water operators are expected to endeavour to supply drinking water to not less than 95 % users in their serviced districts; water supply infrastructure in smaller towns is to be improved.

Macedonia:

Energy Regulatory Commission was entitled with new competences in the field of regulating prices of water services in 2016, i.e. setting up tariffs for the bulk water supply and drinking water supply, collection and disposal of urban wastewaters, as well as wastewater treatment. The main goal of this reform is to establish an efficient system of setting prices of water services. ERC is not in charge of issuing licensing, those are issued by the Ministry of Environment. The water utilities sector in Macedonia is diverse: some utilities operate as single purpose utilities; others provide multiple communal services including water supply and sewerage, as well as other municipal services. The service areas range widely in size with population ranging from a few thousands to more than half a million. Commercial challenges and water loss were mentioned among the main problems for some of these. ERC shall adopt a rulebook on the manner and procedures for determining water services tariff and regulatory tariff and a methodology for determining water services tariff. The tariffs for water services will be set by the Regulatory Commission on the basis of the submitted Tariff Adjustment Plan for the water services or of the Regulatory Tariff pursuant to the terms and procedure prescribed by the Law. Challenges include: high number of water service providers (around 70), huge losses (technical and commercial), setting tariffs taking into account the affordability threshold.

Russian Federation:

There is a separation of functions in Russian Federation between the Government, Ministry of Economic Development, Ministry of Energy, Ministry of Construction and the Federal Antimonopoly Service and local self-government authorities. The Government limits index charges of public utility services for citizens in the heat and water sector. The relevant ministries and FAS is responsible for the elaboration of forecast of the social and economic development, formulation of state policy, legal regulation (methods, rules, recommendations) through tariff-setting control, tariff policy and disputes. In Moscow region the federal executive authorities limit index charges of public utility services for citizens in the heat and water sector, they set the tariffs, connection fees, propose investment programs and standards. The municipalities approve investment programs and programs for integrated development. Limiting of charges for citizens for public services took place in 2016. The average index for the subject is about 4 %. The structure of average prices of public services for citizens was shown. A new tariff setting method

is to be introduced, resulting in tariff reduction and regulated organizations will receive incentives to improve efficiency and reduce cost with the same level of savings in a long-term period of regulation. Within 3-5 year period it will be possible to withdraw from direct regulation, ensuring change of tariff by index method.

Questions and comments related to the updates included:

- To Lithuania:
 - Rate of Return – was it NCC’ decision?
 - How do you regulate prices? Any comparisons made?
- To Albania:
 - 1 municipality= 1 supplier principle – are companies owned by the municipalities? If not, how do you intend to merge these suppliers?
 - What kind of data you request to be included in the Business Plans?
 - In UK it is required to submit Business Plans, looking more at how the future changes, instead of looking at the past.
- To Hungary:
 - Prices are constant for 3 years now, which is a compromise for utilities. How quality is monitored under these circumstances?
- To Georgia:
 - There are 3 private operators. Was it a result of privatization, or was it a political decision?
 - There is a conflict between the independence of the regulator and some political decisions. How do you solve this problem?
- To Latvia:
 - Is there any regulation in place for municipalities to set prices or they do that on their own.

Following the updates a session was dedicated to the topic of *Water utility benchmarking* in the framework of 3 presentations.

First **Mr. András Kis, Chief Analyst, Water Economics Unit, Regional Center for Energy Policy Research, Hungary** gave a general overview on benchmarking. After the historical introduction of benchmarking he said that it can be international, domestic and cross sectoral and it can be initiated by regulators, companies and international organizations as well. The two main types are metric and process benchmarking. Regulatory benchmarking is more metric, than process based, but understanding the drivers of performance is crucial. The benchmarking cycle consists of planning, collecting, analysing, implementing, measuring, while the most important element is identifying and learning from best practices and establishing performance targets. Planning is crucial in the process, through which the key issues should be identified in general (e.g.: eligible costs, sector strategy) and specific (e.g.: lack of cost recovery, high network loss, disproportionately large energy use, non-continuous service) context as well, and the participants shall be selected. Designing the program with the involvement / input of participants is key, with the following elements: indicators, data requirement, data confidentiality, in-house or external expert. Selected indicators should require data that can be generated across participating organisations with reasonable effort and should be comparable across organizations. He warned that too many and too few indicators can result in limited outcome or an unsuccessful project. Regarding the collection of data it is important to have supporting analysis using information which help to interpret the data; online forms are suggested and identical content is critical, using

commonly adopted definitions. He added that separate legal entities usually have better data, while municipal departments might have data problems. Data verification and correction is a bigger task than first expected and the attitude of the utility is key. He reminded that confidentiality of the data is an important question. In order to have a proper output it is reasonable to compare only big or only small companies, or those operating in good or bad circumstances. He concluded with the example of the sunshine regulation, which is based on the “naming and shaming” principle. He warned though that performance may be poor because of poor operating conditions or legacy. For some indicators, it may be risky to publish numbers without communicating the circumstances.

Then **Mr. Ndiriçim Shani, Chairman, Water Regulatory Authority of Albania** made a presentation about the Albanian practice. The Monitoring and Benchmarking System was installed and managed by Benchmarking Unit near General Directorate of Water Supply and Sanitation in the Ministry of Public Works and Transports, included only 57 licensed water utilities and was fully operational in 2006. The Objectives of the Benchmarking System include: provide the utilities with information that help them to improve their management and operations; allow local and central government to compare the performance of utilities; provide key policy and decision makers with information; increase the transparency towards the public by publishing the results of utilities performance. The responsibilities of Benchmarking Unit include: to collect data from all Water Supply and Sewerage utilities in Albania; to review and evaluate all data; to organize and conduct annual analysis; to monitor the progress of the utilities in improving. The number of data selected and collected is around 220. Provision of data to WRA, comparative analysis and monitoring of utility performance are the data functions. For data validation purposes data is reported from the utilities each three semester, Initial screening and correction is in place, follow up utilities showing big changes in indicators compared to the previous reporting cycle is made, including others. Mr. Shani explained that WRA only receives data from the above mentioned Benchmarking Unit, which belong under the Ministry, however it would be preferred that this function belongs under the responsibilities of WRA for better data validation. This is a recent challenge that WRA is trying to overcome. Then Mr. Shani introduced the main functions of WRA and highlighted the Water Sector Annual Performance Reports, which is made available for all sector stakeholders and the public. This report gives a picture of the performance of each regulated utility. He listed the KPIs selected to estimate the financial performance, managerial capacity and quality of the service provided. During its performance analysis WRA uses clusters among the WSS utilities based on the number of household connections in order to make distinction between big and small utilities for having realistic performance assessment. Then a performance analysis chart is graphed for every indicator to assess the level of the utility’s performance. Margins and limits defined for each KPI were shown as well. Analysis of each performance indicator per each group is made considering: sector performance based on the defined levels; sector progress/regress compared to previous years; group progress /regress compared to previous years; best performers within the group. Examples were showcased for O&M cost coverage, staff efficiency. The weight and given points for each KPI reflects the utility’s performance against the levels of objectives set by the WRA. The performance monitoring objective is to present the best performance utilities in the sector and to encourage utilities for their performance improvement through benchmarking within the group. WRA rewards two categories of utilities: best performer and best improver.

Finally, **Mr. Srini Parthasarathy, Senior Consultant, Oxera, United Kingdom** presented the experience of Oxera through some case studies. Mr. Parthasarathy started his presentation with

an brief introduction of efficiency benchmarking in general outlining the differences between bottom-up and top-down approaches. To identify which drivers may help to determine the most appropriate tool to use in a regulatory context he selected 4 case studies to demonstrate: WICS (water regulator of Scotland), OFWAT (water regulator of England and Wales), OFGEM (energy regulator of Great Britain) and DTe (tariff regulator for regional gas and electricity DSOs in the Netherlands). **WICS** can be characterised by external comparators, relatively simple approach and service KPIs. There are no comparators available to the regulator within its jurisdiction and compatibility issues arise when using external comparators. Another question is that how can quality of service (using KPIs) be integrated within the cost assessment framework. WICS overcame the lack of comparators by benchmarking Scottish Water's performance against English and Welsh companies. Important to ensure that the technical and accounting information about SW is consistent (e.g. allocation of expenditure items). OPEX efficiency was based on comparison to E&W companies; CAPEX efficiency had relevance of asset groups. A special factor process can be put in place to consider issues that are specific to the company and not accounted for by the model (e.g. bad debt collection practices in Scotland). Once the largest savings were achieved, WICS decided to hold its level of OPEX broadly flat after inflation. A similar challenge/requirement was proposed in the latest price review. WICS' approach is to examine SW's performance using KPIs against Ofwat's sample. WICS assessed the overall performance of SW by examining trends in both relative spend and relative service performance. **OFWAT** characteristics: several regional private regulated companies. Ofwat used data on 18 water and 10 wastewater companies over time. They used panel data (data across companies and over time), which increased the number of cost drivers. TOTEX (OPEX + average CAPEX) approach was in place. Mr. Parthasarathy explained the details of TOTEX cost assessment, level of aggregation and the different cost drivers. **OFGEM** was introduced as using a menu of bottom-up and top-down tools. Ofgem used the RIIO (Revenue=Incentives+Innovation+Outputs) model for setting the network companies' price controls. A proportionate approach was used to assess the network company plans, depending on the quality of the business plan submitted and the network company's performance in delivering outputs and value for money in previous periods. Different models were used to derive a catch-up efficiency challenge and a further efficiency challenge was applied to all operators. Ofgem's TOTEX cost assessment and their proportionate approach to cost assessment (RIIO toolkit) as well as the levels of aggregation and different cost drivers were shown. **DTe** was characterised as a single industry-wide efficiency target. DTe set an allowed income level at the end of the regulatory period equal to the sector-average cost level. An expected productivity growth was applied to the sector-average efficient cost level to determine the sector-average efficient cost. The appropriateness of the approach was explained. It was added that they were focusing only on 2 parameters instead of multiple models. Summarizing the different case studies, Mr. Parthasarathy said that some approaches do not provide separate estimates of catch-up/'static' and frontier shift/'dynamic efficiency' while some approaches are more robust at estimating (large) inefficiency gaps and thus providing challenging targets. He finally warned that 'one size fits all' does not appear possible or even desirable.

Questions and comments related to the above topic included:

- Defining the meaning of indicators is important – it might be different in different countries (some indicators are not even measured in some countries).

- There are very different realities and different legislative frameworks. For example in the UK no one can be disconnected due to non payment, while in Portugal it is possible.
- Rewarding best performers – does it really work? Do they start to compete?
- No one wants to be at the bottom, naming and shaming has worked in many other sectors.
- The situation that the Ministry collects data, and the regulator uses the data, while it can also ask for additional data from utilities must make benchmarking much easier.
- Complaint resolution – are there specific issues in which you are mediators?
- The Performance Report of 2015 does not show really great improvements. Is there any specific reason behind?
- Do regulators implement benchmarking case by case? Doing it for all enterprises seems to be too complicated.

After lunch **Mr. Soma Besenyei, Head of General Regulation Unit, Hungarian Energy and Public Utility Regulatory Authority, Hungary** presented the topic: *Metering and metering related regulations in Hungary*. Mr. Besenyei first introduced the legal background, then the 3 types of metering in place in Hungary: water meters serving one property with an additional sprinkle meter; sub-metered and fully sub-metered systems serving groups of flats in one building, with one main water meter for all the sub-meters. The fully sub-metered system is new, where all sub-meters are authenticated and all users are contracted. In this system in case of a leakage, which is not controlled and it is above 5%, the owner of the water meter will be charged. Mr. Besenyei showed a list of the different types of meters. He informed participants that meter reading is mandatory once a year, which is tried twice followed by a notice in case of no cooperation. The 2nd unsuccessful reading is followed by an estimation (previous 12 months). Notice shall be given if the average consumption is higher. Meter calibration, replacement, authentication is a responsibility of the owner, which is the responsible entity or water utility supplier in case of a water meter, and the consumer in case of a sub-meter. Authentication of meters is made by the Hungarian Trade Licensing Office. The consumer has the right to dispute the amount of the invoice. The payment can be suspended if the consumption is at least 150 % more as the previous 12 months average usage. In case of a failure on the domestic drinking water network the basis is the amount on the water meter (sub-meter). Payment in case of failure of the meter is based on a calculated price. The rules regarding the meter reading and the meters are set in the Code of Conduct of the Water Utility Supplier, approved by HEA. Regulations are supervised by HEA and the National Consumer Protection Authority (shared competence). Regarding smart metering he said that the legal background is fresh and not detailed yet.

Questions and comments related to the above topic included:

- Who owns the water meter in a block of flats?
- Who installs the meters?
- Do you have unmetered consumers in Hungary? If so, do you have a special tariff for these consumers?
- Who pays for the sub-meter?
- 5% difference is very small – both meters have to be very precise!
- When you build a big building with many flats, are you obliged to install sub-meters in each flat?
- How do you incentives installing sub-meters?
- Is classification for authentication based on the quality of water?

The day continued with a presentation held by **Mr. Mart Ots, General Director, Estonian Competition Authority, Estonia** with the following title: *Price regulation and tariff setting in Estonia*. Mr. Ots first introduced the structure of the water sector in Estonia, the main characteristics are the following: large number of small size utilities; most utilities are municipal owned, trend for consolidation of municipal owned utilities; small number of private utilities. Then described the different types of price regulation, out of which the incentive type of (RoR) was highlighted. The company is free to apply for a new tariff at any time, no restriction. Separate accounting is in place for regulated activities; service provided for independent water utility; non-core business; connection fees paid by the customers and grants. He added that investments are financed from grants. In water sector the proportion of grants is very high in assets: 80% in average. There is an ongoing discussion whether the company can sustain if the grants are not included to the tariff. The company is able to control and to save on controllable cost elements, while unable to save on uncontrollable costs. Cost pass-through system is in use in Estonia. It is the company's responsibility to monitor the costs, if the costs are not covered then to apply for new tariff. The share of uncontrollable costs is not significant. Sales volume is essential by tariff calculation, most costs are fixed and not dependent on sales volume. Then he went into details regarding the analysis of cost efficiency and benchmarking. He showed the calculation of the RAB, WACC and cost of equity. Mr. Ots called the attention on the extremely long lifetime of assets. Finally, talking about social tariffs he said that there are no subsidies on water tariffs, each of customer shall pay for the service.

Questions and comments related to the above topic included:

- Are the grants from EU and depreciation cost included in the tariffs?
- What is the general rule applied for metered customers: pay as you go?
- How water utilities can plan their OPEX as there is no regulation of tariffs applied?
- OPEX is benchmarked. How companies report on that?

Lastly *Strategic planning of water utilities was introduced by Mr. Gábor Kisvárdai, Head of Secretariat (Secretariat of Vice-president for Public Utilities), Hungarian Energy and Public Utility Regulatory Authority, Hungary*. Mr. Kisvárdai described the strategic planning as an organizational management activity with the aim to strengthen operations, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment. Strategic planning can be applied for public policies, and it is the task of the government. In the water sector countries tend to try and invent something new every time, when the solutions already exist. In order to set up a sound public policy on water and wastewater services, the following should be applied, among others: constant dialogue between all stakeholders in the sector, access to information and data sharing, multi-level planning, defining governance models, constant evaluation, promote tariff policies that enable (at least gradual) cost-recovery. Regulators in this context have a role in: ensuring that all stages are carried out in compliance with legislation, supervising tariff schemes, providing incentives for improvement of the services. He summarized his presentation with saying that strategic planning is the best tool to facilitate the desired changes of the water sector, while the lack of political will is the greatest obstacle. He concluded his presentation with the following set of questions:

- Do you think that you have a sound public policy in water in your country?
- Is strategic planning applied in your country?

- What do you think about the relation between regulatory independence and the implementation of water public policies?

Questions and comments related to the above topic included:

- Independency is very fragile on PM office.
- Macedonia has one of the most independent regulators.
- Regulators regulate companies, but who regulates the regulators?

In the end of the meeting **Ms. Réka Timár, Program Manager, ERRA Secretariat** gave and overview on the **Recent and Future ERRA Activities, including Water Utility Regulatory programs.**

The 1st day of the Workshop was concluded.

All sections were followed by a vivid discussion and questions by the participants.

29th November, Tuesday

The Workshop was an associated event of the Budapest Water Summit, which was held on 28-30 November in Budapest. On the second day of the ERRA Workshop, participants joined first the plenary sessions and panel discussions of the Budapest Water Summit:

How to achieve increased water use efficiency? How to manage every drop?

Following this, participants were invited to the parallel Water Expo to join a presentation of Mr. Károly Kovács, President, European Water Association (EWA); President, Hungarian Wastewater Association on *Water utility asset management serving sustainable operation*, which was followed by a presentation of *Ms. Ildikó Czeglédi, Coordinator of EWA Working Group on Water Economics* about: *Life-cycle costing for efficient water investments*.

For all presentations please visit:

<http://www.erraconference.org/single-event/4th-workshop-water-regulation/>

Please feel free to share with us your comments, ideas regarding the memo **by 21 December** the latest.

Prepared by ERRA Secretariat