Water Services Regulatory Authority of Kosovo (ARRU)

Consultation

Consultation on future water supply tariff policy

January 2024

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Context

Duties

We, the Water Services Regulatory Authority of Kosovo (ARRU) are the economic regulator for water supply and wastewater services in Kosovo. We regulate the charges applied by the seven regional water companies (RWCs) and the bulk water supply from Iber Lepenc. This consultation document is confined to the regulation of charges applied by the RWCs.

Our responsibilities are set out in Law No. 05/L-042 for Regulation of Water Services. Other relevant legislation includes:

- Law No. 04/L-147 on Water of Kosovo
- Law No. 03/L-087 on Publicly Owned Enterprises
- Water Drinking Quality Administrative Instruction 10/2021.

Our core principle in the application of our regulatory duties is to ensure that the RWCs can raise sufficient revenue to properly finance their activities in accordance with their level of service obligations balanced against ensuring consumers are paying no more than is necessary end that vulnerable consumers are adequately protected. In our decision making we also consider the impacts on wider economy, the environment and society.

History

The Law on the Regulation of Water Services requires us to develop tariff determination rules. Since 2009 we have been setting tariffs on a tri-annual basis the most recent of which was concluded in December 2021 for the period 2022 – 2024[1].

The first tri-annual review (2009 – 2011) was a relatively simple process from which a more robust model and process was developed for 2012 – 2014. This second model is the template for ARRU's subsequent tariff reviews. Although some small improvements have been made the most recent model is virtually unchanged from the original format.

The rationale for a three-year process was to encourage the RWCs to take a longer-term view of their future activities and to give them assurance that the tariffs should be sufficient to fund them. The submissions to the ARRU to support our determinations included a detailed business plan. This included specific operational and financial targets with respect to efficiency improvement expectations. The RWCs could boost their profitability if they could outperform these targets. By setting tariffs on a three-year basis the RWCs could enjoy their additional gains for a longer period before the costs and performance levels at the end of the review period became the baseline for the next tariff review period. A three-year review period provides added incentives for the RWCs to out-perform their targets. This is the fundamental concept of 'incentive regulation'.

The tri-annual model comprises a business plan template for the RWCs' regulatory teams to complete and includes projections of customer numbers, demands, water sales, wastewater generated, operational and commercial performance and efficiency improvement and investments. It then determines the tariff revenue necessary to meet these projected performance levels.

[1] Tariffs for 2021 were set on an inflation adjustment from previous years. A full tri-annual review during 2020 was not possible due to the disruptions resulting from Covid 19.

We are also responsible for performance monitoring. The initial performance monitoring system was inherited from the Kosovo Trust Agency (KTA) system that was set up prior to the establishment of the Water and Waste Regulatory Office (a former name of the ARRU). With the introduction of the tri-annual tariff process the performance monitoring framework was radically changed to reflect the measurement of RWC performance against their targets as set out in their business plan submissions.

As part of the performance reporting and as an aid to the tariff models we established a regulatory accounting framework, the regulatory accounting guidelines (RAG), which records financial transactions that can be compared to the tariff model. The RAG differs from conventional and statutory accounts through its treatment of asset values (the RAB), depreciation and other aspects necessary for proper tariff determinations.

Outcomes

Initially the RWCs found the business plan and tariff models complex and difficult to understand. Over the years we have provided extensive support to the RWCs in the completion of their submissions. After five review cycles the RWCs now have a much greater understanding of the framework although in some cases concepts such as regulatory asset base and infrastructure renewals accounting are still not fully understood by all.

Despite this, the tariff setting regime has proved to be reasonably robust and has maintained the financial integrity of the RWCs, particularly the return on the regulatory asset base (RAB) that has protected the cash flow of the RWCs, even when they take short term loans for investment.

Performance has improved in some areas but in many cases performance improvement has not met expectations, especially in areas such as operational efficiency and commercial activities (revenue collection). Most efficiency improvement targets as set out in the business plans have been consistently missed by nearly all RWCs.

Over the five three-year cycles the RAB has increased steadily in real terms for all the RWCs although not by as much as we would have hoped for, especially in the wastewater sector. The business plans have always included a significant element of capital investment but at the end of each three-year review very little of this investment materialised. Effectively the consumers have paid for investments that never happened and it can be argued that they should be entitled to their money back. Our analysis suggests that this unjustified revenue has been offset by a failure to deliver the expected operational efficiency gains.

The cause of this failure is a downward spiral of under-performance:

- The RWCs do not meet the commercial efficiency targets (revenue collection) leading to cash income less than planned.
- They also do not achieve the operational efficiency targets leading to costs higher than planned.
- The remaining cash is then insufficient to meet the planned investment expenditure.
- The RAB is then lower than planned which in turn reduces tariffs for the next three-year cycle from what they would otherwise be.

We have a duty to protect the financial integrity of the RWCs and despite our displeasure in their poor performance we have been cautious in how to respond. We could, in theory, clawback money that was provided for investment in the tariffs if that investment did not take place by reducing the revenue requirement in the following tariff review. This is the conventional regulatory approach when the utilities are owned by the private sector and such actions would result in diminished profits and dividends. For the state-owned RWCs where no dividends to shareholders are awarded, the clawing back of unspent provisions for investment could have an adverse impact on their financial integrity and make a bad situation worse.

This places us in a position of moral hazard. By not seeking to recover unspent investment allowances the RWCs are emboldened to continue to include investment in their plans with the objective of increasing tariffs but then not delivering such investments.

Consequently, the behaviour responses that were expected through this *'incentive regulation'* approach have not fully materialised. In some respects, it has had the opposite effect and rather than behaving as efficient commercial enterprises the RWCs display the characteristics of unrestrained monopolies and pay only limited heed to our decisions, instructions, and enforcement measures.

In our annual performance reports, we regularly admonish the RWCs over their failure to meet targets, and although they may not like what is written about their poor performances it is not enough to stimulate them into making significant improvements.

We need to strengthen our influence over the RWCs to deliver the level of performance, efficiency and investment that are included in the RWC business plans.

The poor performance also extends to the quality of the business plan submissions which is still below what we expect. We still spend considerable time and effort reporting back to the RWCs with many queries related to incomplete data, inconsistencies, and generally poorly designed plans.

The need for a major review

By the time the next review period is over (31 Dec 2024) the current system will have been in place for 16 years. Despite modifications and minor improvements, the framework is largely the same as it was 16 years ago. We consider that a significant review of the overall framework with a view to develop a significantly improved regulatory structure for the future is long overdue.

This review addresses the shortcomings described above, especially the need to ensure that the RWCs achieve the levels of performance, efficiency and investment that they say they can achieve in their business plans.

This consultation paper presents our proposals for a significant high-level review of the regulatory framework. It sets out several areas where believe change is required, our analysis of the problems, our proposals and their impacts where possible and, where appropriate, our 'minded to' position where several options are under consideration.

This consultation is to seek the views of various stakeholders to guide our future regulatory decision making. Our consultation reaches out to many stakeholders including but not limited to:

- Government.
- The RWCs.
- Domestic consumer groups.
- Non-domestic consumer groups.
- Investors, notably the international development partners.
- Academia.
- Other interested parties.

Consultation instructions

In this document, WSRA has listed the proposed changes to the tariff methodology, giving a reasonableness of the proposed changes, a description of the advantages and how the proposed change will be reflected in the tariff.

In order to make it easier for the audience (the public) this consultation document has parts of the receiving responses from interested parties, which are provided ready-made in the form of options to be selected by the respondents.

In order to be comprehensive, the document for consultation (and for obtaining opinions) will be sent to all stakeholders involved in the water sector. In addition, this document will be available to all those interested in contributing to this issue and can be downloaded from the WSRA and 7 (seven) RWC web pages. The document will be published on 24.01.2024, while everyone's answers and contributions are expected to reach WSRA (in either physical or electronic form) before 12.02.2024 at the end of the working hours of this day.

Associated documents

Legislation:

- Law No. 05/L-042 for Regulation of Water Services.

- Law No. 04/L-147 on Water of Kosovo
- Law No. 03/L-087 on Publicly Owned Enterprises
- Water Drinking Quality Administrative Instruction 10/2021

Regulatory instruments:

- ARRU Tariff Policy
- ARRU Tariff Determination Procedures
- ARRU Business plan and tariff model (including associated handbooks)
- ARRU regulatory accounting guidelines (RAG)
- ARRU performance monitoring reports.
- RWC licences.

Contents

1 Water supply and wastewater charging principles

1.1 Overarching principle

1.1 Article 4 (para 3.2) of the *Law for Regulation of Water Services* defines our role for tariff setting as:

3.2. tariff setting of service for service providers, ensuring the tariffs to be fair and reasonable and to enable financial sustainability of service providers;

1.2 We interpret this as balancing the needs of both consumers and service providers by ensuring that the RWCs have sufficient revenue to finance their activities in accordance with their statutory obligations but at the same time to encourage them to be as efficient as possible. This will ensure tariffs are as low as possible. We do not expect consumers to finance undue inefficiency.

1.3 We have interpreted his obligation to develop our tariff policy, procedures, and models based on projected costs, including reasonable and achievable expectations of efficiency improvements, and future capital investment, together with expectations of water consumption and wastewater generated.

1.4 We consider that this broad interpretation of our obligation remains valid and no change to this principle is required.

1.2 Cost recovery

Current approach and economic rationale

1.5 It is our statutory obligation to ensure that the service providers can finance their activities. This is often interpreted as meeting *'cost recovery'*. However, the term *'cost recovery'* in the water sector is subject to various definitions, each with their various drawbacks, e.g.

- **Simple accounting definition:** Profit and loss at break-even but to what accounting standards, tax accounting, commercial accounting, other? How is depreciation included, historic (based on original purchase price) or re-valued to consider inflation etc.?
- **Cash flow**: Cash flow positive or costs limited to income? How to account for the write-off of uncollected billings?
- **To meet investor expectations**: What are these expectations? What is the value of capital invested? What financial ratios are to be applied?
- **Actual costs or as they should be**: What should they be, and how to determine realistic expectations of improved efficiency?

1.6 Our guiding principle is that in the Kosovo water sector *'cost recovery'* means a revenue stream that is sufficient for the service providers to finance their activities, including investment, necessary for them to deliver services as set out in their legal and licence obligations, now and in the future.

1.7 This revenue stream can be made up of grants, subsidies and other sources with the balance coming from tariffs.

1.8 Currently, the required revenue is made up of three principal elements:

- Projected operational costs (including expectations of improved efficiency)
- Projected capital maintenance expenditure (made up from expected investment in infrastructure renewals and current cost depreciation)
- Return on the regulatory asset base.

1.9 Our model determines these costs based on a rigorous analysis of the RWCs' submissions. After allowing for revenues from other sources, the model then determines the tariffs necessary for meeting this revenue requirement.

1.10 In our scrutiny of the RWCs' submissions we challenge their proposals for improved efficiency with what we believe to be challenging but nonetheless achievable performance targets. This includes reductions in operational costs where we believe them to be higher than they should be. We do this through comparative performance analysis of all seven RWCs using the best performing as a yardstick for other to be able to achieve. We make allowances for specific characteristics of individual RWCs, e.g. energy costs which cannot be compared and used as a yardstick. Despite our efforts to promote improved operational efficiency the RWCs have missed these targets. We believe that the tariff framework needs to be amended to provide for incentives for the RWCs to meet and even out-perform the targets as set out in their business plans.

1.11 Our tariff determination process is forward looking and sets tariffs for three years. We allow the RWCs to retain the benefits of financial out-performance within the three-year cycle but thereafter such out-performance is reflected in future cost projections to the benefit of consumers. This provides a time-limited incentive to the RWCs to improve efficiency and to maintain such levels of efficiency or better thereafter. We recognise that this process can result in a perverse behaviour response in that the RWCs will be discouraged from initiating an efficiency improvement activity in the later period within the three-year cycle as they will enjoy the benefit for less than three years. They may choose to postpone the efficiency gain initiative until the beginning of the next regulatory cycle. Other regulators elsewhere in the world have been faced with the same issue and have addressed it by including in their models a feature that allows for efficiency gains to be enjoyed for a full regulatory cycle period regardless of when in the cycle the gains were first realised by rolling over the benefits as additional to the revenue requirement into the following cycle, e.g. if the service provider realises an efficiency gain at the beginning of year three then the annual gain will be added to the revenue requirement for years one and two of the following cycle. This encourages the RWCs to initiate efficiency gains as soon as they are first identified with the confidence that they will enjoy the benefits for three years. This will result in passing on efficiency gains to consumers earlier than they would otherwise appear.

1.12 Our tariff determination process considers capital investment in two broad categories:

- Capital maintenance: the major repair or replacement of assets at the end of their useful lives to maintain but not exceed base level service levels, and
- Capital enhancement: investment necessary to meet additional demand and/or improved service levels.

1.13 Although the business plans have included significant investment in capital maintenance and enhancement, some RWCs have persistently failed to deliver the investment they promised. In theory the consumers have paid for investment that did not happen and we consider that they should be entitled to their money back. On the other hand, we have a duty to protect the financial integrity of the RWCs and despite our displeasure in their poor performance we have been cautious in how to respond. We could, in theory, clawback money that was provided for investment in the tariffs if that investment did not take place by reducing the revenue requirement in the following tariff review. This is the conventional regulatory approach when the utilities are owned by the private sector and such actions would result in diminished profits and dividends. For the state-owned RWCs where no dividends to shareholders are awarded, the clawing back of unspent provisions for investment could have an adverse impact on their financial integrity and make a bad situation worse.

1.14 This places us in a position of moral hazard. By not seeking to recover unspent investment allowances the RWCs are emboldened to continue to include investment in their plans with the objective of increasing tariffs but then not delivering such investments.

1.15 Despite the potential risk of imposing financial pressures on the RWCs we believe that this situation cannot continue indefinitely and needs to be redressed in future tariff reviews.

1.16 Our conclusion is that the RWCs business plan submissions are made based on limited intent in adhering to their stated commitments. We consider that the plans are designed to maximise revenue by including capital investment that has not been committed and the financial component of the revenue requirement for such expenditure is used to defer improvements in operational efficiency. We consider

that actions may be needed to incentivise the quality of business plan submissions to ensure that they are professionally developed and that we are confident will reflect the actual activities of the RWCs.

Proposed amendments

1.17 We are considering an amendment to the determination of the revenue requirement to include other aspects including:

- The inclusion of provisions for incentives to meet performance targets.
- An adjustment to the model to roll over efficiency gains from one regulatory cycle to the next and to encourage earlier adoption of efficiency improvements.
- An adjustment to recover some or all past provisions for capital investment where the planned investment was not undertaken (this includes infrastructure renewals expenditure, and depreciation plus return on capital for infrastructure enhancement and non-infrastructure investment).
- Financial incentives for improved quality of business plan submissions.

1.18 These aspects are described in more detail in Sections 2 to 5 of this consultation document.

1.3 Cost reflectivity

Current approach and economic rationale

1.19 Although the water supply and wastewater charges meet cost recovery objectives, we do not consider the charges to be cost reflective. Cost reflectivity has been partially achieved through the separation of costs between water supply and wastewater services but within these two basic services the charges are not cost reflective. The policy of charging non-domestic consumers substantially more than domestic consumers is not supported by any evidence that non-domestic consumers impose higher costs than domestic consumers on the RWCs. This is s long-standing legacy policy driven by perceptions of affordability constraints.

1.20 The provision for water is a uniform product for which a uniform price is rational. The same cannot be said for wastewater where the quality of wastewater can have a material impact on the costs of wastewater treatment. Our current policy is that non-domestic consumers pay substantially more than domestic consumers for wastewater services. Rather than gradually reducing the cross subsidy over time, as has been applied to water supply charges, the cross subsidy for wastewater charges is virtually unchanged over the past 15 years or more. This was predicated on the assumption that non-domestic wastewater may be more polluting than domestic wastewater. We now believe that this assumption may not be as robust as first thought. For most non-domestic consumers (shops, shopping malls, offices, educational establishments, and more) there is no reason to believe their wastewater will be any more polluting than domestic wastewater.

1.21 There are, however, some non-domestic consumers where the quality of their wastewater is materially more polluting than domestic wastewater. We believe that these consumers should not pay the same charges as their less polluting peers and charges based on wastewater quality as well as volume may be warranted.

1.22 Economic theory states that economic efficiency (optimal allocation of resources) is maximised when goods and services are priced at the cost of production. For water supply this means that if the service is priced above the cost of production for some consumers (non-domestic) the consumer consumes less than is economically viable and vice versa. For business consumers in particular these higher charges contribute to higher costs in their value chain which may adversely affect their competitiveness and be a drag on the wider economy. Non-domestic consumers may use less water than they would otherwise do. It has the same effect as a tax on their business. In the extreme some larger businesses may consider self-supply through boreholes at a lower cost than the RWC supply, a decision they may not reach if the charges were cost reflective. These behaviour responses result in a loss of revenue to the RWCS and to maintain recovery of the revenue requirement charges will need to increase for all other consumers. Conversely, water for domestic consumers is priced below the cost of production and

delivery (loss making). Domestic consumers may therefore use more than they would otherwise do exacerbating the losses to the service provider.

1.23 The losses to both consumers and service providers by deviating from cost reflective charges is referred to by economists as *'dead-weight losses'* (see Fig Figure 1 and Figure 2). Our policy has been to encourage the RWCs to reduce the degree of cross-subsidy over time to reduce such *'dead-weight losses'* to the benefit of consumers, the RWCs and the wider economy. Unfortunately progress in this area has been very slow.

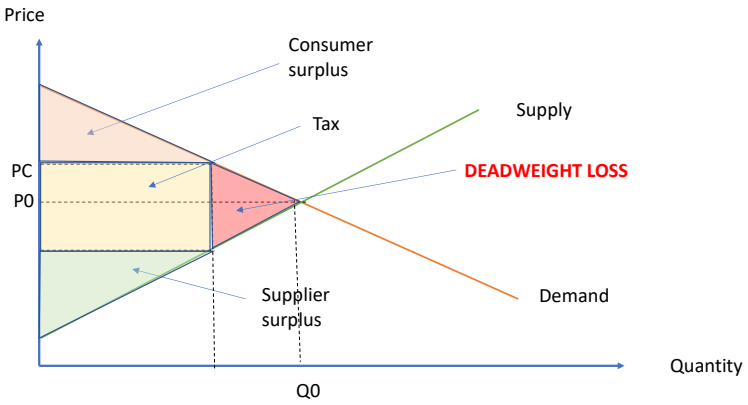

Figure 1 – Economic theory, deadweight loss for commercial consumers

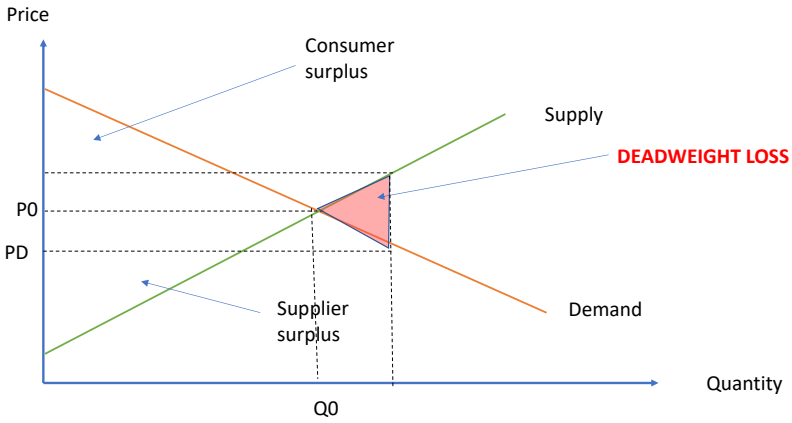

Figure 2 – Economic theory, deadweight loss for domestic consumers

1.24 The cross-subsidy extends to the fixed charges component. These fixed charges would normally beset to recover non-volume related costs including meter reading, billing, revenue collection, the replacement costs of meters and other sundry costs. The current fixed charges for non-domestic consumers are twice those of domestic consumers. We see no financial rationale to support such differences for consumers with similar size connections. We recognise that consumers with larger connections may have higher non-volume related costs largely due to the periodic replacement of the meter. We consider that it is neither cost reflective nor fair that a small business with a 15mm connection should pay the same fixed charge as a large industrial concern with, say, a 100 mm connection. We consider that the removal of the fixed charge cross subsidy and for it to be replaced with a fixed charge schedule based on connection or meter size would more cost reflective.

1.25 The application of cost-reflective charging for water supply and wastewater services should be balanced against practicalities. Setting charges based on averaging across consumers and consumer groups is often the most practicable approach, unless there is clear evidence that certain consumers or groups of consumers do, in fact, impose materially higher or lower costs on the systems, e.g. highly polluting industrial wastewater discharges.

1.26 Another area of concern is the rapid increase in housing stock in recent years. Although the localised infrastructure for a new development is paid for by developers such development imposes costs on the RWCs that are not directly related to the development site, e.g. upstream and downstream network reinforcement for water and wastewater respectively. Although these costs are imposed on the RWCs by the activities of developers they are borne by all consumers within the tariff. We are not convinced that existing consumers should bear the costs of network reinforcement driven additional demands from new consumers.

1.27 The current arrangement for wastewater charging is that the charge is based on a rate per unit of water supply provided. For the vast majority if consumers this is valid. However, it has come to our attention that there may be several industries that discharge wastewater into the wastewater networks, but such water is not provided by the RWCs, e.g. from own source wells etc. We consider that such consumers should pay for their wastewater services on an assessed or measured volume of wastewater discharge as opposed to RWC water input.

Proposed amendments

1.28 To improve cost reflectivity, and hence economic efficiency, we are considering changes to the tariff determination method to include:

- Acceleration of the reduction of the current cross-subsidy from non-domestic to domestic consumers (for both water supply and wastewater services).
- The removal of the cross-subsidy in fixed charges and to be replaced with a schedule of charges based on connection and meter size.
- The introduction of quality-based wastewater charges for specific consumers where there is a material difference in wastewater quality.
- The application of infrastructure development charges on developers as a contribution to the costs of off-site network reinforcement deemed necessary resulting from increased demand due to increased housing stock and commercial development.
- Wastewater charges for those users whose wastewater is sourced from non-RWC sources to be subject to assessed charges.

1.29 These aspects are described in more detail in Sections 6 to 10 of this consultation document.

1.4 Protection of vulnerable consumers

Current approach and economic rationale

1.4.1 Tariffs for non-household customers for water services are currently 1.5 times tariffs for household customers, whereby for wastewater services are 2.2 times tariffs for household customers. In accordance with the WSRA Tariff Policy and to promote greater economic efficiency we believe that it is necessary for a gradual reduction in this cross subsidy.

1.30 This cross-subsidy is a legacy mechanism within the tariff framework intended to protect poor and vulnerable consumers. This system, however, applies to all domestic consumers regardless of household income. Consequently, many consumers receive the benefit of the cross-subsidy even though they are not poor, known as errors of inclusion.

1.31 Our proposals to improve cost reflectivity include the reduction and eventual removal of these cross subsidies which will result in a marginal increase in water bills for household consumers. We recognise that this could place additional hardship on some families. A more targeted approach to assist the poorest families with their bills may be required.

Proposed amendments

1.32 We shall consider alternative targeted mechanisms to support the poorest and most vulnerable consumers where the reduction of the removal of the cross subsidy imposes additional hardship.

1.5 The environment

Current approach and economic rationale

1.33 For the water and wastewater industry there are two principal environmental issues; the protection of water resources against over-abstraction and the protection of water courses from wastewater pollution.

1.34 We have encouraged the RWCs to undertake their activities paying a high regard to the protection of the environment and we have allowed in the revenue requirements provisions for meeting such obligations, notably the construction of new wastewater treatment facilities.

1.35 However, we remain concerned that water resources may be suffering from over-abstraction attributable to the RWCs' persistent failure to tackle the losses in their networks. We are not convinced that the RWCs are doing enough to address their leakage problems. We are concerned that the RWCs have yet to undertake the first steps in identifying the scale of the problem, the economic levels of leakage and the measures needed to provide greater operational efficiency and protection against over-abstraction of water resources.

1.36 We are committed to the 'polluter pays' concept. In this regard we believe that charges based on wastewater quality as well as volume are necessary. This is in line with our proposals for improved cost reflectivity.

Proposed amendments

We do not consider setting arbitrary targets for loss reduction but rather ensuring that the RWCs are managing their losses at the most economic level. This falls outside the scope of this tariff review and is best reserved for direct dialogue between us and the RWCs.

The above proposal to improve cost reflectivity by setting wastewater charges according to wastewater discharge volume and quality will meet better the 'polluter pays' criterion.

1.6 Questions for consultation

1. **Do you agree with the general principles we have identified as being subject to review? If not, please provide your reasons.**

2. **Do you have any other general principles to add to this review?**

2 Cost recovery – incentives for improved operational efficiency

2.1 Issue

2.1 Since 2009 when we first set out our tri-annual tariff determination process most efficiency improvement targets as set out in the business plans have been consistently missed by nearly all RWCs.

2.2 Currently, our powers to enforce compliance with efficiency expectations are limited to the imposition of relatively weak sanctions when performance does not meet expectations, notably the publication of performance data in the annual reports. We do have the ultimate option of making recommendations to the Government to consider actions against the RWCs' boards of directors, but this has never been tested.

2.3 As well as providing disincentives against poor performance we are exploring options for incentives for good performance. We have identified two options as follows.

2.2 Option 1 - using financial out performance to fund bonuses to management and staff

Proposal

2.4 Should the RWCs out-perform the financial targets as set out in their business plans the additional revenue could be distributed to management and staff as bonuses. The distribution of bonuses should be contingent upon how well the RWCs satisfy the levels of service performance obligations, i.e. financial out-performance should not come at the price of falling levels of service. For this to function we would have to approve the awarding of such bonusses and such approval should only be granted if the RWCs can demonstrate that service levels have not been adversely affected. Where financial out-performance is accompanied by falling levels of service then the system should provide for some or all the additional revenues to be returned to consumers in subsequent tariff reviews.

2.5 For us to ensure that out-performance did not come at the cost of worsening levels of service we would need to employ resources for audit and verification beyond our current capacities. We would need to engage external suitably qualified engineering consulting firms to undertake this on our behalf. This is possible through a mechanism like the 'reporter' framework applied by OFWAT in the United Kingdom where 'reporters' are appointed by the water companies but report to the regulator. This is like the appointment of a financial auditor reporting to shareholders.

Impact assessment

2.6 If the gains of financial out-performance were distributed as bonuses the short-term impact on tariffs is neutral. In the longer term the impact could deliver tariffs marginally less than they would otherwise be due to the periodic resetting of the baseline costs in each tariff review.

2.7 The impact on future tariffs is difficult to estimate as the potential for out-performance is subjective. However, we believe that for a bonus to be significant enough to incentivise change it must be meaningful to the recipients, e.g. in the order of 5% to 10% uplift on remuneration. On the basis that salaries and other staff costs account for about 1/3 of the revenue requirement the financial value of out-performance against targets would need to be at least 3% of tariff revenue. In future tariff reviews this out-performance would result in tariffs that would be about 3% less than they would otherwise be.

Our position

2.8 Although the distribution of financial out-performance gains as bonuses is sound in principle it presents difficulties to apply in practice:

- We are not convinced that the RWCs are able to meet the current performance targets and it may be doubtful that out-performance to a meaningful level could be achieved.
- In the past revenue collection performance offered the best opportunity of out-performance that would provide material financial gains. This is one area where the RWCs have nearly met their

performance targets (now running at approximately 96% of billings). We suspect that the additional costs to deliver any further improvements in this area will result in a minimal net overall financial gain.

- Although we see the merits of adopting a reporting system for performance monitoring generally, such a system used solely for the purposes of validating performance bonuses may not be financially viable.
- The RWCs, as state owned enterprises, may not secure the support of government to allow bonuses to be awarded. We seek the opinion of government in this regard.

2.9 If we can be confident that this proposal is likely to deliver improved efficiency, now and in the future, we are open to its application. We welcome opinions on this proposal.

2.3 Option 2 - provision of a bonus pool in the business plans

Proposal

2.10 This is like the above proposal but rather than rely on financial out-performance to finance the bonuses the required revenue in the tariff review could include an allowance (bonus pool) for bonuses to be paid to management and staff contingent on satisfying or exceeding the level of service performance expectations. This should be reserved for those areas where improved performance is most important to consumers, e.g. interruptions to supply, sewer overflows, cost efficiency etc. This arrangement will also need robust audit and verification processes but only in specific performance improvement areas subject to improvement expectations. Should the RWCs fail to meet the performance expectations the unused element of the bonus pool would be returned to consumers in the subsequent tariff review.

Impact assessment

2.11 We consider that this proposal may have a greater chance of delivering performance improvements than relying on financial out-performance to fund bonuses as the funding is assured through the tariffs. This proposal is not without its drawbacks including:

- The tariff impact will be immediate as the bonus will be included in the required revenue. Con may not consider in increase in tariffs as an advance bonus on the expectation of improvements yet to be delivered as a fair mechanism.
- Should the RWCs fail to meet their performance targets then the withdrawal of the bonuses will be reflected as a reduction in the required revenue of the following tariff review, three years ahead. There is a risk that such a reduction in the required revenue in the future will be met by a reduction in expenditure in other areas such as capital investment.
- It will still require robust audit and verification to ensure any reported performance success is genuine.

Our position

2.12 We are not convinced that bonuses funded in advance in a bonus pool will be considered acceptable by consumers and other stakeholders. We, too, are also uncomfortable with this approach and consider that bonuses should be funded by improved efficiency without adversely affecting the quality of services demanded by the RWCs statutory and licence obligations. We welcome opinions on how to provide incentives to the RWCs to improve performance.

2.4 Questions for consultation

3. **Do you agree that we should include performance improvement incentives in the tariff review process? If not, please provide your reasons.**

4. **Do you agree with our position that bonuses should only be financed from financial out-performance or do you believe that an advance bonus pool approach may be more effective ?**

5. **If the bonus pool approach is the preferred option should money provided as bonuses be clawed back in future tariff reviews if expected improvements in performance is not achieved?**

6. **Do you have any other suggestions for improving operational performance, either incentives or sanctions?**

3 Cost recovery – current incentive to defer efficiency improvements

3.1 Issue

3.1 The current framework allows the RWCs to enjoy the efficiency gains for the period of the tariff review. If an RWC identifies and implements an efficiency gain at the beginning of year one of the review the RWC can enjoy the benefits for the full three years. If, however, the gain is identified at the end of year two the gains are only enjoyed for one year. This may create the unintended behaviour that RWCs would postpone the implementation of an efficiency gain until the beginning of the next review period.

3.2 This is illustrated in Figure 3 where the postponement of efficiency gains results in tariffs for the subsequent price control period higher than they would otherwise be.

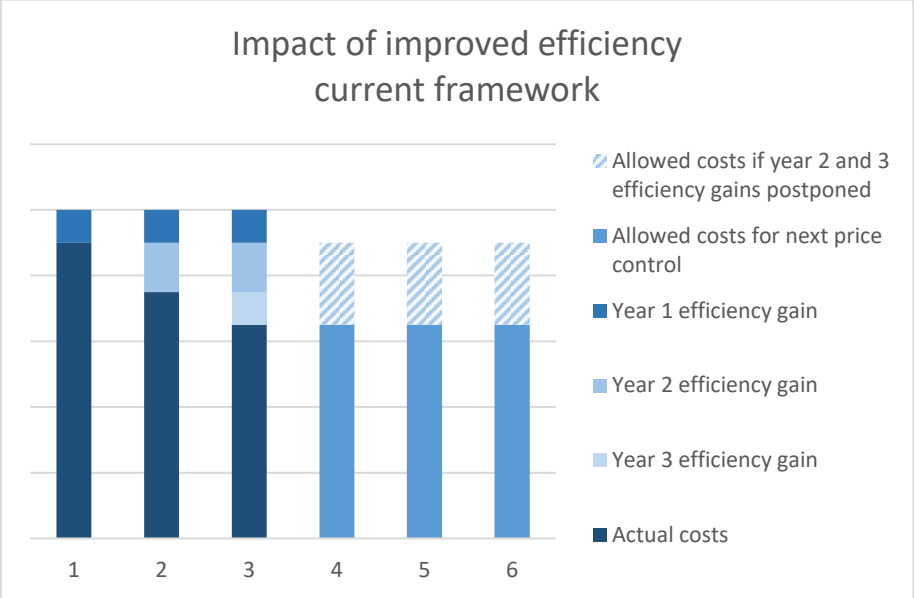

Figure 3 – Current framework of impact of improved efficiency on tariffs.

3.2 Option - rolling over efficiency gains in one regulatory cycle to the next.

Proposal

3.3 We propose to amend the model to allow efficiency gains to be enjoyed for at least three years regardless of when they were first identified and implemented. This would remove the incentive for RWCs to postpone any efficiency improvement initiatives.

3.4 This is illustrated in Figure 4.

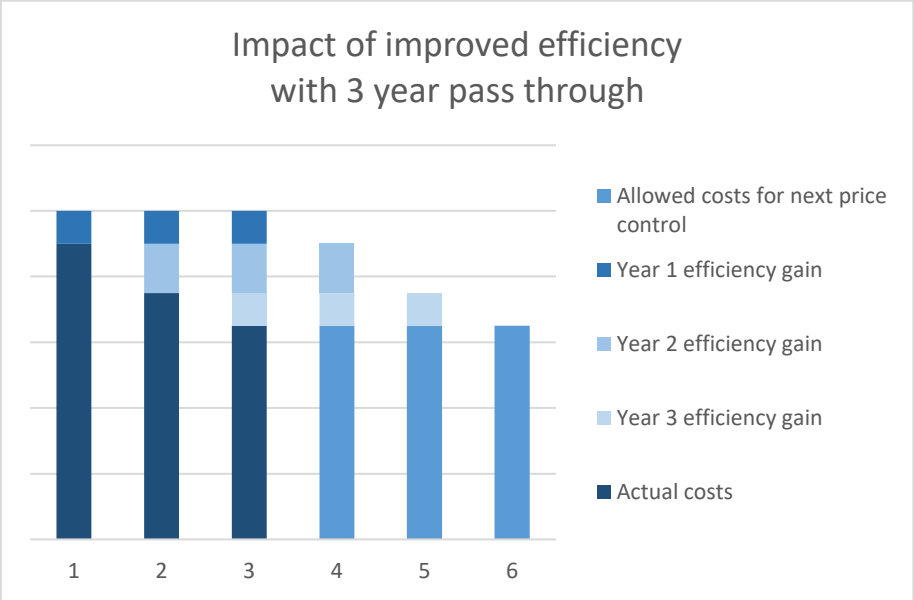

Figure 4 – Proposed framework allowing the pass-through of efficiency gains into subsequent price control periods

Impact assessment

3.5 We consider the tariff impact of this change to be positive as it will advance the timing of the efficiency improvement initiatives. For example, if an RWC identified an efficiency gain that reduced the required revenue at the end of year two of review period one and was postponed until the start of year one of the review period two consumers would only realise the benefit of the improvement in year one of review period three, i.e. four years after it was identified. By removing the incentive to postpone the efficiency improvement consumers will realise the benefit in year three of the review period two, a year earlier than the current system permits.

3.6 There are, however, some practical limitations in that detailed information relating to efficiency improvements in the last year of a review period will not be available during the assessment of business plans for the subsequent review. We do not consider this to be a major drawback and there are tried and tested methods used by other regulators to overcome this.

Our position

3.7 We consider that the move to allowing the benefits of efficiency improvements in one regulatory cycle to roll over to the next cycle is a net benefit and should be adopted.

3.3 Questions

7. Do you agree with the proposal to allow the benefits of efficiency gains to be realised for three years regardless of when they were identified and implemented? If not state your reasons.

4 Cost recovery – capital investment

4.1 Issue

4.1 Over the five three-year cycles since 2009 the RWCs business plans have included a significant element of capital investment for capital maintenance and service enhancement, see Table 1 below.

Table 1 – How capital investment is reflected in the revenue requirement[2]

Investment type	Definition	How reflected in the revenue requirement
Infrastructure (network) renewals	Major repair or replacement of infrastructure network assets to maintain base service levels.	Direct pass through to revenue requirement.
Infrastructure (network) enhancement	Expansion of network assets and investment to improve the performance of the network.	Investment added to regulatory asset base and subject to a return on capital in perpetuity which is included in the revenue requirement
Non-infrastructure (non-network assets such as pumping stations and treatment works) assets capital maintenance	Major repair or replacement of non-infrastructure assets to maintain base service levels.	Added to regulatory asset base and subject to depreciation and return on capital which are included in the revenue requirement.
Non-infrastructure assets enhancement	Expansion of non-infrastructure assets and investment to improve the performance of the network.	Added to regulatory asset base and subject to depreciation and return on capital which are included in the revenue requirement.

4.2 We have rarely challenged the need for this investment as we believe that it has been necessary to maintain and improve service levels and we have allowed the cost of this investment to be reflected in the tariffs.

4.3 At the end of each regulatory cycle, we have found that much of this investment never materialised. The money provided in the tariffs for capital investment was neither saved nor taken as additional profit but was used to offset the failure to meet expected inefficiency improvements. They consider the inclusion of such investment in their plans in the full knowledge that such commitments will not be met as a legitimate means of increasing tariffs and avoiding their obligations to improve efficiency. We have tried to encourage the RWCs to desist from this practice, but our pleas have been largely ignored.

4.4 Consumers have been paying the price of this failure by financing investment that never materialised, the resulting decline in levels of service and by not enjoying the fruits of efficiency improvements that could have been delivered over the last 15 years.

4.5 Consumers should, quite legitimately, expect to get their money back or at least be assured that the money they pay for investment is used for that purpose and not to finance inefficiency. We have identified two potential solutions as follows.

4.2 Option 1 – Create a specific bank account set aside for investment that can only be used for that purpose

Proposal

4.6 We now believe that we need to take much firmer action to stop this perpetual downward spiral of using investment commitments to offset a failure to deliver expected efficiency improvements.

4.7 One potential solution to this is to ring-fence the provisions for capital investment into a separate account that the RWCs can only access for that purpose. This means that the portion of tariff revenue that relates to investment (infrastructure renewals and current cost depreciation) is set aside into a

[2] Grant funded investment is not included in the revenue requirement as, in accordance with conventional regulatory practice, investors should not enjoy a return on assets they did not finance.

secure account. This could also include the return on capital component of the revenue requirement. This money can only be drawn from the account for the purposes of capital investment and repayment of principal loans (and interest if return on capital is included).

Impact assessment

4.8 Although simple in principle closer analysis reveals several problems with his approach.

- The issue of return on capital is a matter of debate. Should the secure account include for the return on capital provisions? We consider that the access to return on capital to pay for loan interest, dividends or reinvestment should not be unduly restricted. However, by excluding return on capital from these restrictions will mean that this mechanism will have no impact on the spending commitments for infrastructure enhancement and only limited impact on non-infrastructure enhancement.
- Including return on capital in this arrangement would mean granting a degree of latitude to the RWCs with respect to how return on equity (profit after interest) is used. If this is confined to re-investment only, then this system would work but if used for financing bonuses where appropriate or even taken as dividends the system becomes more opaque and harder to control.
- Investment in non-infrastructure assets is generally sporadic and can, in the short run, exceed annual depreciation provisions, e.g. a new water treatment plant to replace an ageing plant. The provisions in the secure account will not be sufficient to finance the investment without loans. It will be difficult to hold the RWCs to their spending commitments if it exceeds what is in the secure account.
- The administration of such a system will be challenging. The RWCs have already demonstrated that by their persistent failure to meet their investment commitments, self-regulation of such an account is unlikely to succeed. It is probable that they may be tempted to access the account to finance operational inefficiency. We also do not believe that the administration of such an account should be our responsibility as a regulator and we certainly do not believe that government would be willing to take on this role.

Our position

4.9 Although we conclude that the concept of ring-fencing a portion of the tariff revenue for investment purposes may be difficult or even impracticable we have not disregarded this altogether. We welcome opinions on this proposal and suggestions as to how to overcome the problems we have identified.

4.3 Option 2 – 'clawback' of funds provided through tariffs for unspent investment provisions

Proposal

4.10 The conventional regulatory response as developed by Ofwat, the water sector regulator in the UK, is that at the end of each regulatory cycle there is a reconciliation of planned investment against actual investment and any net differences are carried over into the next review period. This reconciliation includes for all elements of the revenue requirement related to the planned and actual investment (infrastructure renewals, current cost depreciation and return on capital) and adjusted for inflation to the following price control base year.

4.11 Should the RWCs invest less than the plan provided for, then the reconciliation will result in a reduction to the revenue requirement in the next review period from what it would otherwise be. Conversely, should the actual investment exceed what was planned, and considered by us to be necessary expenditure, then the revenue requirement could experience an uplift. This will effectively reward the RWCs for advancing investment provided the investment is justified. For example, the RWC may identify an investment, not included in the business plan, as being urgent and essential. We would allow the RWC to proceed with the investment and included in the reconciliation process. It would not cover needless and non-urgent expenditure not included in the business plan.

4.12 We accept that a sudden change in the framework to clawback unspent investment provisions could result in significant price shocks to the RWCs. We also recognise that consumers cannot be taken advantage of as they have been until now. Our proposal for clawback could be phased in by giving the RWCs fair opportunity to change their approach.

4.13 We therefore propose the following implementation options for the timing of the clawback process:

A. The implementation of the clawback mechanism to apply to the investment plans in the current 2022-2024 tariff review period to be reconciled against actual investment to be reflected in tariffs for the forthcoming 2025-2027 review period.

B. The implementation of the clawback mechanism to apply to the investment plans in the forthcoming 2025-2027 tariff review period which will be reconciled against actual investment to be reflected in tariffs for the 2028-2030 review period.

4.14 Option A is effectively a retrospective application of the mechanism and the RWCs may have already 'lost' the benefits of underinvestment through foregone efficiency improvements and waste. It will be difficult for them to recover the losses after the event. We therefore consider that giving advance notice of the future approach to give them time to adapt to the change is fairer on the RWCs but will postpone the benefits for consumers. We welcome your opinions on this policy proposal.

4.15 Furthermore, we are also considering a partial clawback (say 50%) in the first review to effectively share the costs consumers and RWCs, and a full clawback 100% thereafter. Our considered position is that a partial clawback should be considered if we were to adopt a short-term implementation as per option A above. If option B above is selected, we see no reason why we could not implement a full clawback in the 2028-2030 review period.

Impact assessment

4.16 The reduction in tariffs resulting from a clawback process will impose stresses on the RWCs and we expect resistance from this quarter. We do not consider the additional stresses on the RWCS to be a legitimate complaint. We have set targets that we believe to be challenging but nonetheless achievable. We will continue to do this but in future we will ensure that consumers should not be expected to finance investment that is not delivered.

4.17 The administration of this process is confined to the regulatory tariff determination process and does not require any additional regulatory or supervisory components. We consider this process to be simpler and more practicable than Option 1 above.

4.4 Questions

8. **Do you agree that regulatory action is needed to ensure that planned investment is delivered? If not state your reasons.**

9. **What is your opinion with respect to Option 1, the introduction of a special account for investment activities only? Do you agree with our assessment of the limitations and practicalities of this approach? If not state your reasons.**

10. **Do you have any suggestions as to overcome some or all of the limitations to Option 1 that we have identified?**

11. **What is your opinion with respect to Option 2, the clawback of the benefits enjoyed by the RWCs for undelivered investment and returned to consumers in the subsequent tariff review period? Do you agree with our assessment of this process as the preferred option?**

12. **Do you agree with our 'minded to' position that the clawback process should commence with a reconciliation of investment over the period 2025-2027 to be reflected in tariffs for 2028-2030? If not state your reasons.**

13. **Do you agree that if we implement according to the above timetable, we should seek a full clawback in tariffs for 2028-2030? If not state your reasons.**

14. **Do you agree that if we implement three years earlier, i.e. reconciliation of investment over the period 2022-2024 to be reflected in tariffs for 2025-2027 the clawback should be reduced, say 50%? If not state your reasons**

15. **Do you have any further thoughts or suggestions to resolve the dilemma of the RWCs persistently including investment in their business plans, upon which tariffs are determined, but then not delivering the promised investment?**

5 Cost recovery - poor quality business plan submissions

5.1 Issue

5.1 The quality of the business plan submissions every three years is still below ARRU expectations. We do not believe that this is attributable to a lack of understanding of the business plan and tariff determination models on the part of the RWC as they have been using the same templates for many years. We consider that the failure appears to be that the RWCs do not take their regulatory responsibilities seriously enough. We consider that they submit their plans with the intention of maximising revenue through the inclusion of activities (investment in the main) with no real intent to fulfil them. We have proposed solutions to the capital investment dilemma in our earlier proposals above through clawing back the proceeds of unspent investment, but we believe we can improve the situation further by introducing a financial incentive for the RWCs to provide high quality business plans supported by strong evidence giving us the confidence that they are well thought through, properly designed and reflective of actual performance.

5.2 Option – to provide a financial incentive to provide high quality business plans.

Proposal

5.2 The UK regulatory framework for both water and energy has sought high quality business plans. This was achieved by what is referred to as the 'fast-track' and 'slow-track' plans. Where a submitted plan is considered by the regulator to be of high quality in terms of: design, completeness and serving consumers well through realistic but challenging projections of efficiency improvements and costs, it is given the status of 'fast-track'. Such plans will not be subject to the same degree of scrutiny as the remaining 'slow-track' plans. To provide an incentive for qualifying as 'fast-track' the regulator applies a slightly higher return on capital to their plans, thereby providing a financial reward for high quality tariff submissions. Such a process could be considered in Kosovo to provide incentives for the submitted plans to be of a much higher quality than they have been to date. The financial incentive would encourage the RWCs to take their business planning more seriously than they do. It may also encourage them to employ highly qualified external expertise to assist them the development of their business plans which we will support.

Impact assessment

5.3 To illustrate the scale of the incentive RWC Pristina's RAB is approximately EUR 77 million. If, by qualifying as 'fast-track', the return on the RAB was to increase by 0.25% the additional revenue per year for RWC Pristina would amount EUR 192,500 per year or EUR 577,500 over the three-year period. Although this may suggest that tariffs would be higher the counter argument is that a well-developed business plan with more ambitious targets for improved operational and commercial efficiency could result in a net effect of tariffs being lower than they would be for a poorer quality 'slow-track' submission.

Our position

5.4 We consider that the financial impact of implementation of an incentive scheme to encourage improved business plan submissions will hardly be felt by consumers. We consider that the benefits of improved business plans will benefit RWCs and consumers alike.

5.5 Should this process be taken to implementation we will need to set out clear guidance as to what we expect from a 'fast-track' business plan including the level of detail necessary for us to properly evaluate the plan, justification for expenditure, realistic projections of efficiency improvements, evidence to support investment commitments including loan agreements etc.

5.3 Questions

16. **Do you agree that providing an incentive for the RWCs to provide high quality business plans will produce a net benefit to RWCs and consumers alike? If not state your reasons.**

17. **Should the incentive be in the form of a marginally increased return on capital or through another mechanism?**

18. **Do you have any other suggestions that will improve the quality of the submitted business plans?**

6 Cost reflectivity – phasing out the current cross-subsidy

6.1 Issue

6.1 The tariff current tariff structure includes a legacy arrangement where the unit tariffs for domestic consumers are substantially less than those of non-domestic consumers. Cost recovery is satisfied by the weighted average tariffs being equal to what the tariffs would be if it was unsubsidised.

6.2 The tariff policy, since 2012, has been to phase out the cross subsidy which has been followed in the price control process, but only very slowly. Non-domestic charges for water and wastewater were approximately 2.5 times domestic charges in 2012 but today, over 10 years later, that difference has fallen to approximately 1.5 for water and 2.2 for wastewater.

6.3 Some non-domestic consumers have expressed their concerns that this price discrimination is having an adverse impact on their businesses. Some have even suggested that they may consider disconnecting themselves from the RWC service and self-source their water from boreholes.

6.4 This subsidy is economically inefficient. It provides a subsidy to all domestic consumers regardless of household income, it is an unjustified cost on business that can affect its competitiveness and it encourages excessive water consumption from domestic consumers at a price that is below costs. We see no financial or economic justification for retaining this subsidy that can offset these dead-weight losses.

6.5 The cross subsidy for wastewater charges is generally greater for wastewater than for water supply. This was based on an initial assumption that wastewater from non-domestic consumers was more polluting than that from domestic consumers. We now believe that this assumption may not be as robust as first thought. For most non-domestic consumers (shops, shopping malls, offices, educational establishments, and more) there is no reason to believe their wastewater will be any more polluting than domestic wastewater. We therefore conclude that the arguments for removing the cross subsidy for water apply equally as well to wastewater and are considered together in this proposal.

6.6 We recognise, however, that there are some larger industrial consumers whose wastewater is materially different from domestic wastewater. This issue is addressed in another proposal in this consultation where we consider quality based charging for selected industrial users.

6.2 Option 1 – remove the cross subsidy in the course of a single tariff review period

Proposal

6.7 We propose to remove the cross subsidy with either immediate effect or, phased out completely in the period of a single tariff review period of three years.

Impact assessment

6.8 Our analysis suggests that the removal of the cross subsidy will marginally increase tariffs for domestic consumers by approximately 6% over and above other increases due to inflation and other effects. Tariffs for non-domestic consumers will fall by approximately 29%. We are confident that, over time, the net economic benefits of the removal of the cross subsidy (increased economic output from non-domestic consumers and reduced long term costs of water supply and wastewater services) will more than offset the short-term impacts of the removal of the cross subsidy.

6.9 We have considered the impact on vulnerable households. Recent analysis provides detailed information on household poverty in Kosovo that can guide our decision making[3] [and 4]. This research tells us that[5]:

- Average urban household income is EUR 7,165 pa (EUR 6,230 pa in 2018 adjusted for wage inflation).
- The 20 percentile household income level is about EUR 2,800 pa (see Figure 5).
- About 16% of urban households are considered poor and 5% considered extremely poor.
- Poverty is significantly more prevalent in high occupancy households (95% of the poor are in households where occupancy is four or more persons (90% of all households).

6.10 We have therefore concluded that any financial pressures relating to water bills are, in all probability, going to be related to larger households where water consumption is likely to be high, but incomes may be low.

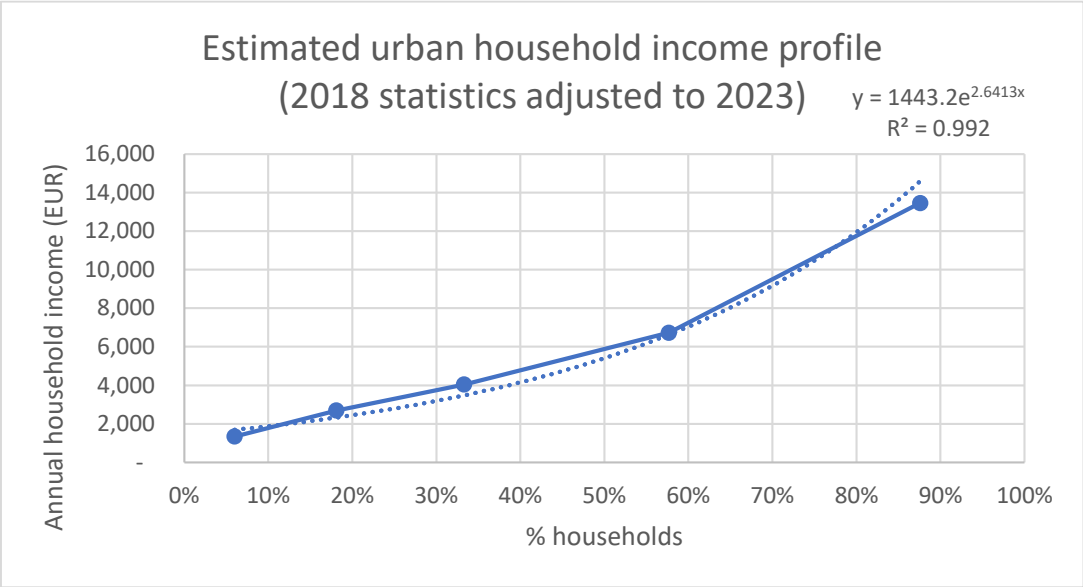

Figure 5 - Estimated urban income profile for Kosovo (2017)

6.11 We have considered water consumption based on a minimum level for essential needs. We have drawn upon a recent study that defines absolute basic consumption (ABC)[6] as:

'The second lifestyle level, corresponding to Maslow's second level which includes safety as well as basic physiological wellbeing, is defined as the absolute basic consumption (ABC). The ABC can be considered in this study as the minimum personal daily indoor water requirement for a healthy modern urban lifestyle and was so designated to represent a scenario of water restrictions during a drought or living in a water scarce climate. Outdoor water use, including garden irrigation, swimming pool maintenance, car washing, and cleaning of sports equipment, was not deemed a necessity when considering the minimum water requirements for the ABC lifestyle level.'

6.12 This report research suggests that per capita consumption would be in the order of 175 litres per day for a single person household falling to about 75 litres per capita per day for a household of 7 persons[7]. This equates to a household consumption range of about 5 m^3 to 16 m^3 per month (see Figure 6).

[3]Dr. Peter J. Middlebrook et al, Assessing the impact of the Ukraine crisis on Kosovo, UNDP, December 2022

[4]Monica Robayo-Abril, Trinidad Saavedra Facusse, Carlos Silva-Jauregui (of the World Bank and Besa Haqifi, Naime Rexhepi and Avni Kastrati (of the Kosovo Statistical Office (KAS)) .Consumption poverty in the Republic of Kosovo, World Bank and KAS, May 2019.

[5] These assumptions have been derived from interpolation calculations using the data recorded in the reports.

[6]AQUA — Water Infrastructure, Ecosystems and Society Vol 00 No 0, 1 doi: 10.2166/aqua.2021.056. Defining domestic water consumption based on personal water use activities, 2021.

[7] Per capita water use = SPC x $d^{-0.439}$ where SPC = single occupancy consumption and d = number of persons in the household.

6.13 By combining ABC with weighted average tariffs, we have estimated the ABC water and wastewater bill depending upon household size (see Figure 7).

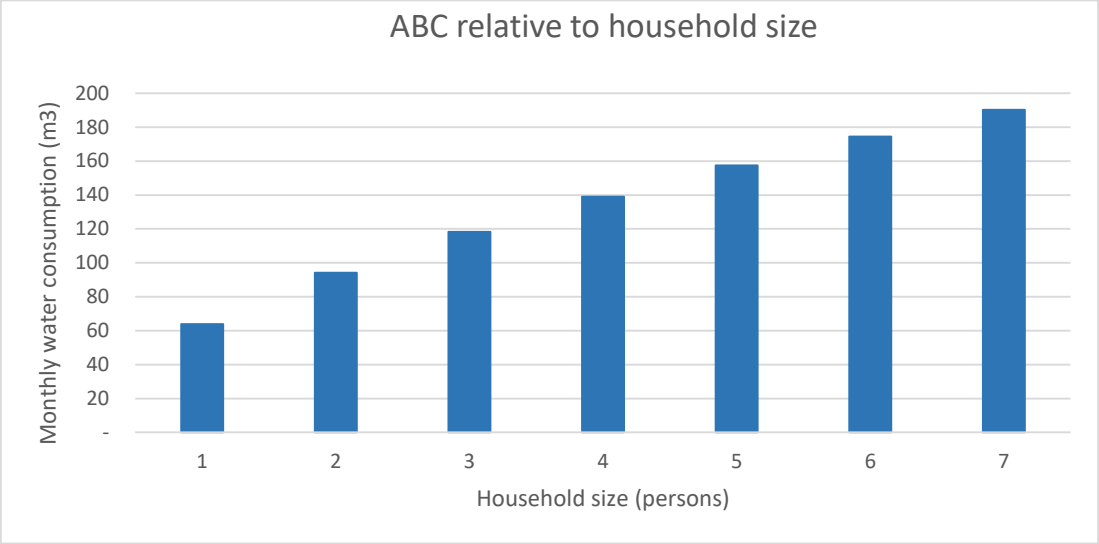

Figure 6 – Absolute basic consumption (ABC) and household size

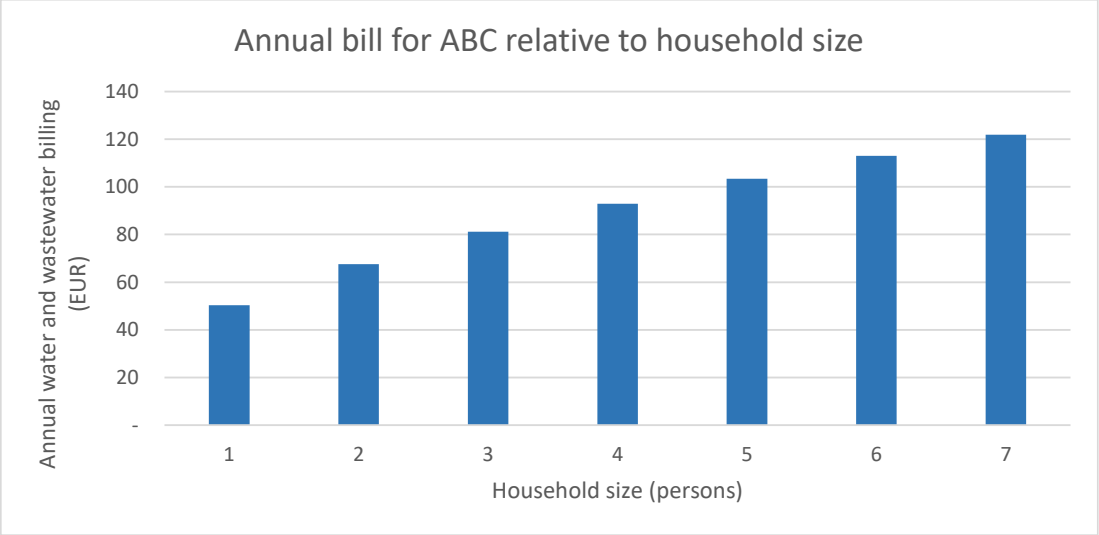

Figure 7 – ABC annual bill and household size

6.14 Using a weighted average tariff (water plus wastewater) of EUR 0.48/m^3 plus the EUR 1.00 fixed charge per month plus VAT, the annual water bills for ABC would range from about EUR 50 for a single person household to about EUR 120 for a seven-person household.

6.15 Assuming an affordability ceiling of 5% of household income that can be spent on water and wastewater services our analysis suggests that just under 13% of households are likely to experience difficulties in meeting their water bills.

6.16 Our analysis also reveals that affordability is largely confined to larger households of four or more persons.

6.17 By removing the cross subsidy and increasing the tariff by 7% the number of households that will have trouble in paying their bills will increase marginally to 14.8% of all households, an increase of 2.2%) and still largely confined to households of four or more persons.

6.18 The depth of affordability constraints, however, is not that great. Our analysis suggests that for those households that are subject to affordability constraints the average difference between bills and their

affordability limitations is currently less than EUR 20.00 per year (about EUR 1.65 per month). The impact of removing the cross subsidy increases this marginally to just under EUR 24.00 per year (less than EUR 2.00 per month). The average increase per household is EUR 3.86 pa or EUR 0.32 per month. For large households of seven persons or more this increase is EUR 4.27 pa, or EUR 0.36 per month.

6.19 Although the increase will impose additional stresses to a small number of households, we consider the adverse impact is minimal.

Our position

6.20 We conclude that the benefits of the removal of the cross subsidy is largely affordable and should be implemented within the next two tariff cycles.

6.3 Questions

19. **Do you agree that the existing cross subsidy is a price distortion that has a net negative economic impact? If not give your reasons.**

20. **Do you agree that the cross subsidy provides a financial benefit to the most consumers that do not need it?**

21. **Do you agree that the impact of removing the cross subsidy is so small as to not have any material impact on affordability of the poorest consumers? If not give your reasons**

22. **Do you agree with our position that the cross subsidy for both water and wastewater services should be removed and if so, do you agree that is should be immediate or phased in? If not give your reasons.**

23. **Do you have any other comments to make regarding our proposal to remove the cross subsidies?**

7 Cost reflectivity – replacing fixed charges with a charge based on connection size

7.1 Issue

7.1 The current tariff schedule provides for a fixed charge of EUR 1.00 per month for domestic consumers and EUR 2.00 for non-domestic consumers. This is a legacy arrangement and is tied to the volumetric cross subsidy for water supply and wastewater services. There are no financial reasons why such differences exist, especially for small businesses where their connection is no larger than that of a domestic water connection. We consider a move to more cost reflective fixed charges that will remove the cross subsidy and replace it with a more cost-reflective set of charges based on connection size.

7.2 Option – to introduce fixed charges based on connection size

Proposal

7.2 The fixed charge should cover the non-volume related costs of the service including meter reading, bill preparation and revenue collection. Other customer services may also be included. A principal cost is periodic meter repair or replacement which is dependent on the size of the connection.

7.3 We propose to remove the cross subsidy on fixed charges. Fixed charges in future are to be based on connection size to reflect the non-volume related costs of providing a service, in particular the cost of periodic meter replacement.

Impact assessment

7.4 We have examined the costs of meter supply and installation which range from approximately EUR 50.00 for a small 15 mm diameter domestic meter, to nearly EUR 1,500.00 for a larger 150 mm diameter meter used by a large business. The monthly cost of this meter replacement ranges from EUR 1.00 for the 15 mm domestic meter to over EUR 25.00 for a !50 mm diameter meter, substantially more than the EUR 2.00 they are charged today. It can be argued that domestic consumers and small non-domestic are subsidising larger non-domestic consumers.

7.5 Rather than have a separate charge for every size of meter we propose a range of meter sizes and corresponding monthly fixed charges. To give an indication of the impact of more cost reflective charges Table 2 has been developed by annuitizing the cost of meter replacement over 5 years. This is indicative only and a more detailed analysis may be required for implementation.

Table 2 – Suggested cost-reflective fixed charges based on connection size

Meter size range	Suggested approximate fixed charge (EUR /month)
15- 20 mm	1.00
25 – 50 mm	2.00
65 – 100 mm	8.00
125 – 200 mm	20.00
250 mm	50.00
Larger than 250 mm	To be determined

7.6 The current tariff determination model is such that the fixed charges are deducted from the revenue requirement and the balance is reflected in volumetric tariffs. The imposition of the above indicative schedule of charges will not result in additional gains for the RWCs.

7.7 We appreciate that we would need to rely on the RWCs to implement the charges and to inform us of their expected revenue from these charges. We will require them to be incorporated in the model as part of their tariff submissions to us. This may be subject to a degree of error in the first submission, but we consider that his will be a temporary effect until RWCs have improved information on their

connections. Certainly, we consider that RWCs should have sufficient details for their larger consumers and any error will be minimal.

7.8 Some consumers may have a connection that is larger than their needs and may feel that they could be subject to a fixed charge that is higher than it would be if the connection was of the correct size. In such circumstances we would encourage the RWCs to apply discretion in the application of their fixed charges and/or offer to change the connection to one more suitable to the consumer's needs.

Our position

7.9 We consider that the fixed charge cross subsidy should be removed and replaced with a more cost reflective charge based on connection size and that this should be implemented at the outset of the next tariff review period.

7.3 Questions

24. Do you agree that the cross subsidy in the fixed charge should be removed? If not give your reasons.

25. Do you agree that fixed charges based on connection size is more cost reflective and more appropriate? If not give your reasons.

26. Do you agree that the outline schedule of charges we have suggested is reasonable? If not give your reasons.

27. Do you have any alternative suggestions for amending the fixed charges?

8 Cost reflectivity – off-site infrastructure reinforcement charges

8.1 Issue

8.1 The current '*Government Water Policy Paper (2015),* prepared by the Inter-Ministerial Water Council (IMWC) states:

Policy Statement: Infrastructure development charge

The Government calls for municipalities, in cooperation with WWRO and RWCs, to consider the application and collection of a water infrastructure development charge in addition to the municipal infrastructure development charge (for roads, drainage, street-lighting etc.). The water infrastructure development charge would need to be a regulated fee subject to the approval of WWRO.

8.2 To date infrastructure development charges for water supply and wastewater infrastructure have not been applied but to meet the expectations of this policy objective this paper examines options for its future application.

8.3 With growth new consumers are added to the system. These include:

- New residential developments that result in the expansion of the network and increased demand.
- New commercial and industrial developments that also result in the expansion of the network and increased demand.
- New developments (domestic and non-domestic) in existing developed areas but may not necessarily contribute to increased demand.
- Existing properties not connected to the system but with system expansion they are able to be connected (this applies primarily to wastewater rather than water supply)
- Adoption of additional service areas and accompanying water supply systems into the ownership of the regional water companies (RWCs).

8.4 These activities demand investment in tertiary infrastructure and may also have a knock-on effect on wider infrastructure development which, in some cases, may provide justification to apply charges to developers, businesses and consumers. This tertiary infrastructure is normally constructed by developers and handed over to the RWCs on completion. The RWC will apply a connection charge to the individual properties to cover the costs of service pipes, meters and other necessary apparatus specific to individual consumers plus an amount to meet associated administrative costs.

8.5 In many cases the wider non-water related tertiary infrastructure (roads, street lighting and drainage etc.) is developed by the municipality and charged through a *municipal infrastructure development charge.* This does not necessarily include for the provision of water supply and wastewater services infrastructure. In some cases, the municipalities may develop the water and wastewater infrastructure or call upon the RWCs to provide it. These costs are then passed on the developer.

8.6 In the above examples the cost of the tertiary infrastructure is effectively passed on to the new consumers. This is either through being included in the purchase price or rental of the property plus any associated connection charges, the latter paid through the developer or directly between the new consumer and the RWC.

8.7 Although the current arrangements provide for the costs of the development of the tertiary infrastructure to be passed through to the new consumers these developments may result in necessary additional capital investment in upstream (water) or downstream (wastewater) infrastructure such as additional pipes, increased pumping capacity and storage. There are no provisions for the costs of these additional investments to be passed on to the new consumers who imposed them. The costs of these investments are socialised across all consumers by their inclusion in the RWCs' business plans and passed through to tariffs. We consider that existing consumers should not be expected to finance this network reinforcement through tariffs if the need for this reinforcement is triggered by new consumers. Imposing such costs on existing consumers is not considered cost-reflective and may be regarded as

unfair. Improved cost-reflectivity could be achieved by allocating the costs of these additional investments on the new consumers that triggered the investment.

8.8 The UK water industry has addressed this issue through the establishment of what they refer to as an *'infrastructure charge'* which is a contribution towards upstream (water) or downstream (wastewater) network reinforcement that is attributable to service expansion resulting from new consumers and is effectively imposed as a surcharge to the connection charge. **Note: the terminology *'infrastructure charge'* as used in the UK may result in a degree of confusion in Kosovo where it may be mistaken for the municipal *'infrastructure development charge'* which is for the tertiary on-site infrastructure (roads, drainage and lighting) directly supporting the new development and does not refer to off-site infrastructure investments. For the avoidance of confusion, we refer to this charge as an *'off-site infrastructure reinforcement charge'.***

8.9 The UK *'infrastructure charge'* (in Kosovo the *'off-site infrastructure reinforcement charge'* does not apply to investment in new treatment works as this will automatically pass through to the new consumers in the tariff on the grounds that as the new consumers add to demand, the more they will pay towards the cost of production as a per m^3 tariff. The charge relates to reinforcement of the network only. For many years the infrastructure charge was arbitrarily set by the regulator and was the same across the whole of England and Wales. It has since been passed over to the water companies to determine. This charge relates to a long run marginal cost of network reinforcement and varies by water company. Table 3 illustrates the range of infrastructure charges applied in the UK.

Table 3 – Sample of infrastructure charges applied by water companies in England and Wales, UK

Water company	Infrastructure charge water per new dwelling (EUR)	Infrastructure charge wastewater per new dwelling (EUR)
Northumbrian Water	150 – 160	110
Severn Trent Water	420	340
Thames Water	760	440
Wessex water	230	380 - 760

8.10 We consider that the significant levels of new housing development in Kosovo warrants the introduction of 'off-site infrastructure reinforcement charges' to be imposed on developers as a contribution towards network reinforcement. The revenue from these charges will be credited against the required revenue and thereby reduce tariffs for existing consumers.

8.2 Option – 'off-site infrastructure reinforcement charge' per dwelling plus an assessed charge for new non-domestic developments based on dwelling equivalents

Proposal

8.11 We propose to introduce 'off-site infrastructure reinforcement charges' for all new developments for water supply and wastewater connections.

8.12 These charges shall apply to all net new dwellings. For example, if a developer pulled down a small apartment block of 10 dwellings and replaced it with a new block of 25 dwellings then the infrastructure charge imposed on the developer would equal the charge per dwelling x 15 (not 25 as development only imposes additional demand of only 15 dwellings). The developer would still have to pay for 25 connection charges including connections meters etc.

8.13 A simplified calculation suggests that the following schedule of charges for 'off-site network reinforcement charges' would be appropriate to be imposed on property developers in addition to the connection charges (Table 4)[8].

[8] To accurately determine an 'off-site infrastructure reinforcement charge' in Kosovo that is reflective of network reinforcement demands will be a complex calculation. This requires detailed engineering analysis and complex long run marginal

Table 4 – proposed off-site network reinforcement charges

Service	Of-site network reinforcement charge per new dwelling (EUR)
Water supply	110
Wastewater	90

One accounting option is to consider the revenue from these charges as grant financed investment to finance infrastructure enhancement and hence not be added to the RAB. Alternatively, the revenue can be credited against the revenue requirement but any investment in network reinforcement will be added to the RAB. Impact assessment

8.14 Under the current framework the costs off-site network reinforcement is socialised in the tariffs and is paid by all consumers which we consider to be unfair. The degree to which existing consumers are financing the network reinforcement depends on the number of new properties. The impact on the tariffs for existing consumers will depend on how the revenue is treated, either as a grant contribution to infrastructure renewals or as a credit against the revenue requirement. To illustrate the impact if we assume that over a three-year period the number of domestic consumers increases by 10% and the combined water and wastewater off-site network reinforcement charge is EUR 200. The benefit to consumers will either be:

- EUR 0.91 per consumer per year in perpetuity (assuming a 5% return on capital) if treated as a grant contribution, or
- EUR 6.06 per consumer per year but limited to the three years of the price control if deducted from the revenue requirement.

Our position

8.15 We consider the adoption of off-site network reinforcement charges as being a fairer system in that is ensures that those responsible for imposing costs on the RWCs finance network reinforcement.

8.16 We are undecided as to how to apply treat the revenue from these charges. On balance we lean in favour of simply deducting the charges from the revenue requirement as this will have a significant short-term benefit to consumers which may be preferable to the longer term (perpetuity) benefits of regarding it as grant finance towards infrastructure enhancement. We seek opinions on this issue.

cost calculations. The cost per new dwelling may vary considerably for each RWC and by systems within each RWC. A simpler method is required.

At the time the opening RAB was determined (2008) the ARRU (WWRO at the time) arrived at EUR 200 per connection for water and EUR 100 for wastewater. At 2023 price levels these values equate to EUR 288 and EUR 144 respectively. If the non-domestic consumers are converted to domestic equivalent numbers proportionate to flow rates the domestic equivalent opening values will be lower. Our analysis estimates that these values need to be adjusted to EUR 260 and EUR 130 for water supply and wastewater respectively for a typical domestic property.

For water supply the network assets accounted for approximately 70% of the total RAB. Therefore an opening RAB for water infrastructure assets for a domestic property (at 2023 price levels) would be 0.7 x EUR 230 = EUR 161 per dwelling equivalent. For wastewater there was very few assets related to treatment and when the opening RAB was established giving a RAB value of EUR 130 for wastewater infrastructure assets per dwelling equivalent.

These values relate to all network infrastructure assets including the tertiary networks which a developer would finance directly. It is almost impossible to separate the network RAB values between primary and tertiary, so a simple arbitrary assumption is necessary, e.g. assume that the tertiary networks account for 30% of the total network values. Therefore, the opening RAB (2023 price levels) for non-tertiary networks would be in the order of 0.7 x EUR 161 = EUR 113 for water supply and 0.7 x EUR 130 = EUR 91 for wastewater.

8.3 Questions

28. **Do you agree that the application of off-site infrastructure reinforcement charges is a fair way to finance network reinforcement that is triggered by new development? If not give your reasons.**

29. **Do you agree with our proposals for the charge, i.e. EUR 110.00 and EUR 90.00 for water and wastewater respectively per new net connection?**

30. **Do you think it is preferable for existing consumers to have a smaller benefit in perpetuity or a larger benefit but limited for the three years of a price control period?**

9 Cost reflectivity – assessed wastewater charges

9.1 Issue

9.1 The current wastewater charging framework sets wastewater charges as a charge per m^3 of water sold. For almost all consumers this rational as the wastewater generated was originally sourced from the RWC water supply, i.e. the more water consumed the more wastewater generated.

9.2 It has come to our attention that there may be some consumers who have access to alternative or additional sources of water (borehole supplies or other sources) and their wastewater generated is not a function of RWC water sold[9]. We consider that this needs to be corrected at the earliest opportunity.

9.2 Option – provide for certain consumers to have their wastewater charges based on assessed charges where the volume of wastewater is not related to RWC water purchased

Proposal

9.3 We propose to introduce the concept of assessed charges where specific consumers are charged according to the volume of wastewater generated regardless of the volume of water supplied. This will require the RWCs to estimate the volume of wastewater from certain consumers through metering and/or other methods.

Impact assessment

9.4 The assessed charge tariff will not be the same as the tariff for water supply due to return factors (not all water received goes to wastewater). We estimated that the tariff for an assessed charge will be about 10% to 20% higher than the tariff based on water received.

9.5 We assume that those consumers that would need to have an assessed charge are currently paying less than they should be. Any correction in this regard will result in a reduction in charges for all other consumers.

9.6 As the number of consumers that would be subject to an assessed charge is probably very small the net impact on all other consumers will be small, but nonetheless beneficial.

Our position

9.7 We see no reason to not proceed with allowing the RWCs to impose assessed charges on specific consumers where the charges based on water input are not appropriate.

9.3 Questions

31. Do you agree that specific consumers should be subject to assessed wastewater charges when their wastewater generated is not related to the water input? If not give your reasons.

[9] We are also aware that some food processing industries generate high volumes of wastewater where the wastewater is a product of their business and did not originate from the RWC supply, e.g. milk being processed into cheese and whey discharged as wastewater.

10 Cost reflectivity – wastewater charges based on volume and quality of wastewater discharges

10.1 Issue

10.1 For most RWCs wastewater is discharged into the sewer network and is eventually discharged into the environment without treatment. This shortcoming is being addressed with significant investment in wastewater treatment in progress or being planned.

10.2 The economic costs of this practice are indeterminate, but government recognises that the resulting harm to the environment should be minimised where possible. *MESP 30/2014 Manners, parameters and limit values of wastewater discharge into public sewer network and in the water body* sets the standards for wastewater quality discharges and sets limits as the content of commercial consumers' waste (biochemical oxygen demand (BOD), suspended solids (SS) and other parameters). These standards compel consumers to pre-treat their effluents prior to discharge into the network if their effluents exceed these standards.

10.3 In practice, these standards are not adhered to, and enforcement is limited. Furthermore, the blanket imposition of such standards may not be the most economically efficient approach. For example, if a consumer's effluent exceeds the standards and it is cheaper for the RWC to treat that wastewater than for the consumer to invest in pre-treatment then that consumer's economically efficient decision it not to invest in pre-treatment but to pay the RWC to do it instead. If it costs the RWC more to treat and these costs were passed on to the consumer, then the consumer's economically efficient decision would be to invest in pre-treatment.

10.4 The current ARRU tariff policy sets charges for wastewater based on the revenue requirements for the delivery of wastewater services (operating costs, capital maintenance and return on capital). These costs are converted to a charge per m3 of water sold, with the volume of water being used as a surrogate for the volume of wastewater generation.

10.5 The policy also provides for a cross-subsidy between consumer groups, generally non-domestic consumers pay almost twice as much per m^3 of water sold than domestic consumers. This cross subsidy was originally perceived as justified on the grounds that non-domestic consumers may be more polluting than domestic consumers and thereby impose more costs on the treatment systems and networks. Subsequent desk study investigations into wastewater quality characteristics reveal that this assumption is not necessarily true and although some consumers, e.g. breweries and food processing industries can produce highly polluting wastewater most non-domestic consumers generate wastewater that is similar to domestic wastewater, e.g. office blocks, shopping malls etc.

10.6 Especially for those users whose wastewater is significantly more polluting we consider that by charging the same tariff as for all other consumers results in them being charged less than the costs they impose and the remaining consumers being charged more, effectively a cross subsidy from domestic and most non-domestic consumers to specific industrial consumers. Even though the consumer may not be penalised by the environmental authorities for non-compliance with standards the RWCs should still be entitled to charge the consumer for the costs it imposes on the RWC.

10.7 Currently, industrial consumers with highly polluting wastewater are discouraged from investing in pre-treatment as it is cheaper for them to continue to let the RWCs treat their wastewater at a price that is lower than the costs imposed on the RWCs.

10.8 This is addressed by many utilities and regulators throughout the world using the Mogden formula which sets charges for specific consumers according to the quality of their wastewater as well as the volume. The quality charges are set to reflect the costs of wastewater treatment and thereby encourage the industrial consumers to invest in pre-treatment but only when it is economically efficient to do so. If the lifetime cost of pre-treatment is less than the surcharges resulting from the Mogden formula the industry will choose to invest and vice versa.

10.9 For consumers to respond efficiently the charges must be cost-reflective and not include any distortions. For example, if a consumer installs pre-treatment the reduction in charges must reflect the savings in costs to the utility that the pre-treatment delivers. This must not be distorted by adjustments to satisfy cost recovery requirements in particular any distortions created through grant funded investments and cross subsidies.

10.10 As the total revenue requirement is unchanged any additional revenue resulting from wastewater quality surcharges will be used to reduce the wastewater charges for all other consumers.

10.11 We consider that for a limited number of consumers in Kosovo the adoption of the Mogden formula will provide improved cost reflectivity for all consumers.

10.2 Option – to introduce quality-based charging for specific non-domestic consumers

Proposal

10.12 We propose to allow the RWCs to impose quality-based charges for industrial consumers where they believe that the quality of wastewater discharged is materially different from domestic wastewater. This will not apply to office blocks, shopping malls, small businesses etc. This will only apply to larger industrial concerns where the quality of wastewater is materially different from domestic wastewater, e.g. breweries, food processing etc., and that they are of sufficient size to be able to respond to price signals by considering pre-treatment of their wastewater and thereby reduce their charges. We have

10.13 We have examined the consumer base for all RWCs and there are very few industries where we believe this would apply. Consequently, we consider that the decision to apply the quality-based charges should be for the RWCs to determine. We will encourage the RWCs to apply quality-based charges where appropriate. It will not be mandatory. If an RWC considers that there the are very few if any industrial consumers in their area of supply and that the quality of wastewater is not materially different to domestic wastewater, they should not be obliged to adopt this process.

10.14 The method we propose is the Mogden formula which considers the cost of treatment for two principal parameters, the biochemical oxygen demand (BOD) and the suspended solids (SS) as these two parameters contribute to most of the costs of wastewater treatment.

10.15 At this time, we are proposing that quality-based charging should only apply to larger industrial consumers where there is the opportunity for them to respond to price signals. Although it is possible to introduce quality-based charging for small consumers using assumed quality parameters we consider that the net impact on prices overall will be minimal, and the benefits may le substantially less than the administrative and other costs associated with its application.

10.16 For quality-based charges to be applied effectively the RWCs may need to be assigned more powers than they currently enjoy, especially the rights associated with site inspections. They also need to be afforded much stronger enforcement powers over consumers who are found to be discharging waste that is outside the prescribed water quality parameters and in extremis be able to issue enforcement notices on them to cease discharging in the system until such time that the wastewater is brought to within allowable standards. To guard against the consumer continuing its activities and discharging into the environment legislation should compel the RWCs to inform the appropriate environmental protection authorities of every enforcement notice so that they are made aware of any potential environmental pollution incidents

10.17 Kosovo has limited wastewater treatment facilities although this is expected to grow rapidly over the next ten years. There are two implementation options for quality-based charging under this operating environment:

1. Apply the quality-based charging to only those consumers whose wastewater is ultimately subject to treatment but not to those consumers whose wastewater is eventually discharged to the environment without treatment on the grounds that it can only be imposed to reflect the costs to the RWCs but not to the environment.

2. Quality- based charging to apply to all consumers on the grounds that it complies with the polluter pays principle. Even if the wastewater is not being treated the surcharges will reflect the relative harm the effluents impose on the environment. This is in line with the existing policy of uniform charging across the service area.

10.18 Option 1 above will result in discriminatory pricing within each RWC service area, contrary to the current policy of uniform charges within a service area, i.e. two identical consumers may face different charges depending on whether or not their wastewater is subject to treatment. Option 2, on the other hand, is in line with the current policy of uniform charges and satisfies the polluter pays principle. It could, however, be subject to legal challenge on the argument that those consumers whose wastewater is not subject to treatment should not incur higher charges if they are not imposing any additional costs on the RWC systems.

10.19 In the long run all consumers' wastewater discharged into the RWC networks will be expected to be treated. All affected industrial consumers should therefore be subject to the same economic signals to encourage efficient investment at the earliest opportunity.

Impact assessment

10.20 The impact on domestic and non-domestic consumers will not the same everywhere and will depend on the specific characteristics of the industrial consumers for which it will apply.

10.21 We anticipate that the quality-based charging will only apply to one or two RWCs as most RWCs do not have large industrial consumers with wastewater that is materially more polluting than domestic wastewater.

10.22 Where it is applied it will have the effect of increasing charges for the affected industrial consumer and reducing charges for all other consumers, including domestic consumers.

10.23 We have received analysis from one RWC with a large industrial consumer which suggests that this consumer's wastewater tariff should increase by over 50% and tariffs for all other users would be reduced by over 25%. This example is exceptional and where applied elsewhere we would expect the effect to be smaller.

10.24 Wastewater quality-based charging is dependent upon the RWCs having access to professionally staffed wastewater quality testing laboratories. This demands capital and human investment.

10.25 The industrial consumers may be required to have the volume of their wastewater measured. The affected consumers, possibly under the guidance of the RWCs will need to purchase and install the necessary metering equipment.

Our position

10.26 We consider that quality-based charging should be permissible and applied at the RWCs' discretion. When making submissions to us we will require the RWCs to provide evidence that the determined charges are cost reflective.

10.27 Important in this proposal is that quality-based charges are not to be regarded as additional revenue but rather a redistribution of revenue with charges increasing for some consumers and falling for the rest. The revenue requirement in the business plan is unchanged.

10.28 To implement this proposal, we shall issue guidance to the RWCs in the form of a guidance note advising them of how the charges should be determined, and the adjustments they will need to make to all tariffs. This guidance will include rules on how to respond to changing circumstances, e.g. the installation of pre-treatment within a price review period.

10.3 Questions

32. **Do you agree that quality-based charging for larger industrial consumers is more cost reflective and a fairer way to allocate charges across the consumer base? If not give your reasons.**

33. **Do you agree that the implementation of quality-based charges should be limited to only larger industrial users in the first instance and that quality-based charges for smaller consumers should be deferred for the future?**

34. **Do you agree that the adoption of quality-based charges should be at the discretion of the RWCs or should it be mandatory for all RWCs?**

35. **Do you agree that quality-based charges should apply regardless of whether the wastewater is subject to treatment as a means of sending economic price signals to consumers to pre-treat their wastewater and as a reflection of the cost of harm to the environment?**

36. **Do you have any other opinions about quality-based charging for wastewater services?**

11 Protection for vulnerable consumers

11.1 Issue

11.1 Our analysis reveals that the existing cross subsidy arrangement is an inefficient mechanism to deliver support to vulnerable households with over 85% of households estimated to be able to afford their water bills if the subsidy was removed. The value of the subsidy equates to about EUR 6.00 per households, assuming minimum basic needs consumption levels. The benefit is even higher for wealthier households whose discretionary use of water is higher. We estimate that the 83% of the total value of the subsidy goes to households that do not need it (errors of inclusion). For those that need support the subsidy is insufficient with an average shortfall of EUR 16 per year for the 15% who would struggle to afford their water and wastewater bills (errors of exclusion).

11.2 We recognise that some households may require support that is targeted to them rather than all consumers.

11.2 Option – targeted support to vulnerable households

Proposal

11.3 Targeted support through tariffs to support vulnerable households.

Impact assessment

11.4 We estimate that it is larger households that will be most affected where water consumption may be unavoidably high, but incomes may be low. However, our analysis shows that even amongst larger households of five or more persons affordability constraints only affect about 20% of such households. Consequently, targeting support based on household size or the number of children will still result in significant errors of inclusion.

11.5 We have explored other options to effectively target support to vulnerable households, but we are unable to identify any that can be considered efficient.

Our position

11.6 We have concluded that a tariff-based solution to target vulnerable households to help them with their water and wastewater bills is not appropriate. Identifying those in need of support will be fraught with difficulties and we do not consider that this should be a function of the RWCs to determine. We consider that the provision of financial support to vulnerable households is not a water utility responsibility but rather that of government through the social assistance scheme.

11.7 We therefore conclude that we should not include specific measures in the tariff determination methodology to cater for vulnerable consumers.

11.3 Questions

37. Do you agree that responsibility of supporting vulnerable consumers should not vested with government as they are best placed to identify those need and to provide the support more efficiently than can be delivered through tariffs? If not give your reasons.

38. Do you have any suggestions as to how the most vulnerable in society can be supported with their water and wastewater bills?