REGULATED INDUSTRIES COMMISSION

Information Requirements:

Business Plan 2018 – 2023

Water & Sewerage Authority

October 2017

This document is one of a series of discussion papers exploring a specific aspect as part of the first price control review for the water and sewerage sector, when the RIC will set charges for the period 2018-2023.

Information Document

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EXECUTIVE SUMMARY

The purpose of this document, the **Information Requirements: Business Plan 2018-2023 - Water and Sewerage Authority (WASA)**, is to provide guidance to WASA, on the preparation of its business plan or price control proposal. WASA's proposal should set out how it plans to invest in its network to meet the service needs of its customers and how it intends to recover the cost of providing the service through its tariffs and charges.

In accordance with the process outlined in the RIC's supporting document **"Framework and Approach"** the RIC will use this proposal to develop its Draft Determination for stakeholder consultation. Stakeholder consultation is an opportunity for consumers and other stakeholders to express their views and have input on the quality and reliability of the services they will receive and the prices they will have to pay over the regulatory control period.

WASA's business plan or price control proposal of WASA must include, among other things, information on the following:

- Demand forecasts;
- Proposed revenue requirement:
    - Capital expenditure requirements;
    - Efficient operating and maintenance expenditure requirements;
    - Cost of capital financing; and
- Service levels.

An overview of the information that should be provided by WASA for each of the above areas is provided later in this document.

1. INTRODUCTION

1.1 Background

The Regulated Industries Commission (RIC) is responsible for establishing the principles and methodologies for determining rates, monitoring the performance and efficiency of service providers, and setting, and enforcing standards of service. The RIC Act No. 26 of 1998 requires the RIC to establish the principles and methodologies for determining rates for a maximum period of five (5) years. It is within this context that this document has been prepared.

1.2 Purpose of the Business Plan

The process of assessing and determining proposed price controls and rates over the regulatory control period involves:

- The identification of service requirements, standards and obligations to be delivered;
- The establishment of forward-looking revenue requirements for efficient delivery of services; and
- Ensuring that proposed prices are sufficient to recover the revenue requirements.

The Business Plan will form a basis for the RIC's assessment of the proposed revenue requirement and resulting determination of proposed prices to be applied over the regulatory control period in accordance with the requirements of the RIC Act.

The Plan should provide the justification for the service provider's submission relating to price control limits and should:

- explain in a clear and consistent way WASA's application for price limits, its costs and the impact on customer bills;
- set out its overall strategy for its business over the control period and into the future and identify in sufficient details all the strategic issues WASA faces that impedes the proper carrying out of its functions;

- include well-founded forecasts of costs (investments and maintenance expenditure) and revenue to ensure an adequate balance between supply and demand in the provision of service to customers;
- provide estimates of the service provider's potential to reduce costs through improved efficiency;
- establish timelines and identify outcomes to be achieved over the regulatory control period so that progress can be measured against those milestones; and
- inform of all the relevant factors the RIC needs to consider in determining fair and reasonable price limits.

The RIC's views on a number of issues related to the regulatory framework, process and approach the RIC intends to take in assessing the service provider's submission will be put out for Consultation inclusive of, tariff structures, subsidies and mechanisms for assisting the lower income groups and incentive mechanisms.

The comments received in response to these issues will assist the RIC in the finalization of its determination.

<u>Structure of this Document</u>

The remainder of this document is structured as follows:

- Section 2 describes the process of developing and assessing the Business Plan.
- Section 3 discusses the contents of the Business Plan.
- Section 4 discusses the requirements of the Monitoring Plan.

2. PROCESS FOR DEVELOPING AND ASSESSING THE BUSINESS PLAN

Broadly, there are three stages in developing and assessing the proposed Business Plan:

- **Establishment of Information Requirement and Clarification:**
  - Issuance of the Information Requirements Business Plan document.
  - Discussion between the RIC and service provider on the development of the Plan.

- Finalisation of any policy issues and other additional information requirements.

- **Preparation of draft Business Plan:**
  - WASA's consultation, if necessary, with customers and Minister/Ministry.
  - Submission of the draft Business Plan to the RIC.
  - RIC's assessment of, and guidance on, the draft Business Plan.

- **RIC's Assessment of the completed Business Plan:**
  - Submission of final plan to the RIC
  - RIC's comprehensive assessment of the final Plan.

The RIC will consult through its **"Framework and Approach"**, document on a number of key issues to facilitate WASA's preparation of its price control proposals, including:

- the information and approach that could be used to develop demand forecasts;
- the approach to assessing operating expenditure (Opex) and capital expenditure (Capex) to ensure efficient costs;
- measures to pursue efficiency improvements;
- provision of appropriate return on assets; and
- tariff design and structure.

3. CONTENTS OF THE BUSINESS PLAN

The Business Plan should contain three parts:

- Overview;
- Main Submission (Detailed Justification); and
- Public Summary.

3.1 Overview

The overview is a stand-alone summary of WASA's overall strategy for the execution of its functions over the regulatory control period (5 years) and beyond (10 years) to ensure the provision of adequate services to customers. This should include details of its service performance in recent years, impediments to performance, and the state of its assets. The overview also serves to draw attention to any particular issue WASA considers relevant to the price review decision-making process. It is also expected that this overview will typically cover: a SWOT analysis; the organization's growth prospects; key performance indicators; and aspirations for the future. At a minimum, the overview should:

- set out, in summary, the key activities and programmes/projects that WASA proposes to undertake over the control period, and the outputs and milestones to be achieved during the period, including its assessment of the environment and the parameters within which it will have to operate during the control period and beyond;
- set out the price limits that are being sought and how these translate into average bills for each class of customers;
- outline how WASA has taken into consideration the interests of customers and the overall balance between service levels, prices and priorities for improvements;
- include a series of summary tables covering the overall strategy, financial projections, asset values and expenditure, including the scope for improving efficiency and existing practices; and
- state how WASA proposes to finance its strategic objectives and the revenue that will be necessary to ensure financial viability.

3.2 The Main Submission

The main submission is a detailed justification of the strategy and various issues/options identified in the **Overview**. The submission will comprise four (4) sections:

- Service Provider and the Operating Environment – A Summary;
- Maintaining and improving service to customers;
- Specific Information Requirements; and
- Efficiency Improvements.

These areas are discussed in detail hereunder.

3.2.1 Service Provider and the Operating Environment – A Summary

This Summary should focus on WASA's:

- Assessment of the likely operating environment during the regulatory control period and beyond;
- Achievements to date with respect to services to customers;
- Planned improvements in service to be delivered;
- Strategies for the achievement of supply/demand balance;
- Maintenance of its network and assets;
- Key forecasts over the period; and
- Risks and uncertainties and how it intends to manage them.

In making policy decisions for the price limits, WASA must take account of the potential effects on service affordability.

3.2.2 Maintaining and Improving Service to Customers

WASA's strategy for maintaining and improving service to customers must be at the core of its submission and is the main focus under this section. The information should be provided under three (3) headings:

(a) Maintaining Service and Serviceability to Customers

WASA should provide year-by-year projections of delivery of outputs over the control period that will maintain base service levels and serviceability to both current and future customers. This should take into account customer complaints information such as supply interruptions, as well as its asset management plans and strategy including its operating practices and planned routine maintenance activities. WASA must identify the minimum level of activity that it considers necessary to maintain delivery of the outputs and justify projected operating and capital expenditure needed to deliver these outputs. **Full costing information should be provided as required under the Specific Information Requirements section.**

(b) Service Enhancement

WASA must outline its plans and strategy to improve the service delivered, measurable outputs and the performance to be achieved year-by-year over the regulatory control period, including the projected service enhancement operating and capital expenditure needs. It must set out its reasons for proposing the enhancements, for example, it should state whether existing performance is poor in comparison with its comparators. Where WASA is seeking specific financing in its Business plan, the impact of the proposed improvements on operating and capital expenditure, with expected impact on bills, must clearly be stated. **Full costing information should be provided as required under the Specific Information Requirements section.**

(c) Maintaining the Supply/Demand Balance

WASA must set out its plan and strategy for maintaining the balance between supply and demand, focusing on the implications for expenditure (operating and capital). The information must include WASA's assumptions and judgment on the expenditure (operating and capital) needed to maintain the balance. WASA's strategy must represent the least cost combination of measures to maintain the balance**. Full costing information should be provided as required under the Specific Information Requirements section**.

3.2.3 Specific Information Requirements

This section requires WASA to furnish a comprehensive set of information on expenditure and revenue forecasts, demand projections, plans to finance its operations, the consequences for customers' bills, financial projections, existing loan agreements, cost of capital, required rate of return and capital structure. These issues are discussed below.

3.2.3.1 Demand Forecast

Demand forecasts are a central element of the Price Control review assessments and decision-making, as they underpin expenditure requirement forecasts, forecast revenue requirement and the price control modeling and decision-making. They are of particular importance in order to propose the prices required to recover the revenue needed to deliver prescribed services over the regulatory period. Demand forecasts are also a key determinant of capital and operating expenditure – as they drive the level of new connections and the need to augment existing systems. Accurate forecasts will reduce price volatility for customers and the risk of short-term mis-match between revenues and costs. In assessing the proposed prices, the RIC will, therefore, expect that the demand forecasts are reasonable and based on sound information and assumptions.

WASA must provide the following information for the price control period:

- Water consumption by Customer Type.
- Customer Numbers by Customer Type.
- Maximum daily and hourly demand during wet and dry season.
- New Customers Connections (Net Customer Increase) by customer class and broken down as follows:
  - New customer connections;
  - Existing customer Numbers;
  - Total customer Numbers; and
  - Net Increase in customer Numbers.

In addition to the above, WASA is to provide:

- information which describes the methodological approach taken in preparing forecasts;
- the key demand forecasting issues; and
- key assumptions adopted in generating the forecasts.

In preparing its demand forecasts the RIC expects WASA to:

- analyze historical levels of demand, identifying the relevant trends, the major factors that determine these trends and explain any variations;
- recognize and reflect key drivers of demand and supply;

- consult with major customers (e.g. industrial/commercial) about their anticipated requirements;
- take into account private/Government's initiatives in the housing and industrial sectors;
- consider the likely impact of any changes in tariffs and other demand side management initiatives, such as, reduction in non-revenue water (NRW) and universal metering;
- have regard to country's economic conditions; and
- reflect conservation initiatives.

Although the RIC will not require independent verification of demand forecasts for this review, in the future WASA may be required to satisfy the RIC, through an independent verifier, that its methods are reasonable and sound.

3.2.3.2 Revenue Requirement

A common and effective method for deriving the forward-looking estimates of the revenue that WASA requires to deliver proposed outcomes and meet service standards over the regulatory period is the "building-block" approach. Under this approach, the revenue requirement reflects efficient operating expenditure and a return on and of the Regulatory Asset base (RAB) updated each year of the control period to reflect any additional capital expenditure net of contributions, asset disposals and depreciation [i.e. Efficient Opex + Depreciation + (RAB + Capex) * Cost of Capital]. A detailed explanation of the components making up the revenue requirement is provided below:

(a) Operating and Maintenance Expenditure

Operating and maintenance expenditure (Opex) is a key component of revenue requirement and is included in the year in which it is incurred. A key issue for the RIC is to ensure that the expenditure forecasts are efficient and reflect a long-term planning horizon. The Business Plan should clearly outline forecasts of Opex for each year of the regulatory control period. These forecasts must be justified through the inclusion of a discussion on the main drivers of expenditure and must supply evidence to support forecasted productivity improvements. It also needs to outline the relationship between expenditure and the delivery of outcomes and obligations over the control period. **Table 1 in the Appendix provides a breakdown of the key expenditure areas that WASA must supply with respect to OPEX.**

Information provided should include historical levels of maintenance expenditure by asset categories and subsets, the projected capital maintenance needs by categories and sub-categories.

Justification and Key Drivers of Opex

The Business Plan should provide information and justification in support of the proposed Opex and outline the key drivers for both; business as usual expenditure, and expenditure related to the delivery of new obligations. The RIC would expect a high level of justification where WASA is proposing a significant departure from historical levels.

The price-control proposal of WASA must include three categories of forecast operating and maintenance expenditure (Opex):

- base operating and maintenance costs - this will exclude guaranteed scheme payments and cess (these are to be shown separately);
- costs associated with the impact of growth (i.e. increase in total customers); and
- changes in the composition of Opex arising from new obligations and functions.

The base Opex for the regulatory control period will be based on the existing obligations and functions of WASA and will be calculated by using the actual expenditure for 2016, less the cess payments and guaranteed scheme payments[1]. Copies of WASA's financial statements for the period 2011 - 2016 (audited and unaudited where audited statements are not available) must be included in the submission. WASA must also forecast a rate of change for each year of the regulatory control period which will be used to generate the forecast base Opex. Additionally, the Opex costs associated with any new obligations and functions are required to be forecast separately. WASA must also detail its capitalization policy in its proposal.

Productivity/Efficiency Improvements

The RIC Act requires that the service provider's proposed prices provide for a sustainable revenue stream that does not reflect monopoly rent or inefficient expenditure and that proposed prices provide incentives to pursue efficiency improvements.

One approach which can be used to estimate efficient Opex expenditure is to benchmark the performance against other relevant utilities/businesses (best in class). WASA must indicate the methods that will be used for assessing the efficiency of its Opex and provide information on the indicators used for comparison, such as total costs, operating and maintenance costs, overhead costs and other efficiency and productivity measures including comparing costs of particular tasks. Such an approach could be undertaken at "the whole of business level", or for specific components of expenditure, taking into consideration the danger of relying exclusively on benchmarks to assess expenditure forecasts.

Another approach is to review historical expenditure incurred and to then examine the continuing trend over the regulatory period, setting out any reasons for expected departures from trend expenditure.

[1] It is expected that the Quality of Service Scheme will be operational before the RIC publishes its Draft Determination.

In addition to the information listed in **Appendix 1, Table 1**, WASA must provide Opex breakdown by:

- customer group (for example, industrial, commercial, domestic);
- labour related items:
  - level of overtime of the total payroll costs;
  - level of sickness and absenteeism;
  - level of total leave (contracted, extended and emergency leave);
  - activity (for example, infrastructure maintenance, customer service);
- on-going controllable and uncontrollable costs and one-off costs or non-recurring operating costs; and
- costs relating to building or restoring a brand and sponsorships.

(b) Capital Expenditure Requirements

Capital expenditure (Capex) is another key element of the revenue requirement. Net Capex is added to the regulatory asset base (RAB) and the service provider receives the revenue to repay its debt principal and interest charges through a **return of** the RAB (i.e. depreciation) and **return on** the RAB. In assessing the Capex forecasts, the RIC has to be satisfied that they are efficient and prudent.

WASA must set out its forecast capital expenditure programme for the regulatory control period and beyond, and provide supporting explanations for the proposed level, time paths of expenditure, complete with due dates for delivery of the projects and the outcomes that will be delivered. The forecasts must be internally consistent and reconcilable with other relevant proposals and supporting information presented in the price control proposal. Details must be provided as per **Appendix 1, Table 2**. **All projects/capital expenditure to be funded by the State and/or other bodies must be shown separately**.

To facilitate proper assessment of capital expenditure forecasts, the expenditure must be categorized according to:

- **Replacement:** Expenditure to upgrade assets reaching the end of their functional life. The process for the upgrade or replacement of existing assets is based on the assessment of the asset condition, its likelihood of failure, the consequences of failure, and the need for increased capacity. Capital expenditure to maintain the asset base should normally be divided into preventative/proactive capital maintenance, reactive capital maintenance, capital maintenance for health and safety and to meet any required environmental standards.
- **Growth:** Expenditure required to service population growth and new development.
- **Enhancement:** Those projects required to minimise risks and environmental impacts or improve service delivery standards. These projects may be required for example, to meet drinking water standards, reduce known adverse impacts such as odours, mitigate risks to the assets from corrosion, and provide for a lack of standby systems or under-performing assets.
- **Other**: This would include all other capital expenditure.

This will help ensure transparency to all stakeholders of the cost of new obligations and hence the impact on rates.

WASA is required to demonstrate how its current and proposed expenditure patterns sit within an asset management programme and how these patterns are consistent with, or vary from, the past. Furthermore, WASA has to demonstrate that processes are in place to address issues relating to:

- security of supply inclusive of disaster planning;
- service reliability and performance;
- ensuring expenditure is prudent and is undertaken efficiently; and

- post-project evaluation.

WASA should also provide details of major capital expenditure undertaken over the period 2011-2016 (including of source funding), and inclusion of whether or not these projects were completed on time and within budget. WASA must also detail its capitalization policy.

(c) Cost of Capital Financing

Cost of capital may be calculated by one of the following methods:

- Return on RAB plus depreciation.
- Cash needs, where cost of capital is simply the amount of debt service (i.e. interest and principal payments).
- Infrastructure renewals accounting plus a return on RAB.

The RIC Act [Section 67(4)] provides for the recovery of cost of financing existing and new investment through:

- earning a return on the value of the RAB plus
- a return of the value of the RAB (i.e. depreciation).

WASA is asked to set out in its proposal:

- opening regulatory asset base;
- an estimate of its rate of return or weighted average cost of capital;
- forecast regulatory depreciation; and
- actual and forecast asset disposal.

Regulatory Asset Base (RAB)

Accurate asset valuation is critical to generating appropriate price limits. There are a number of methods of asset valuation (shown below) which can generate different values for similar assets.

Valuation Methods

Cost Based	Value Based	Hybrid
- Historical cost - Replacement Cost - Reproduction Cost	- Net Present Value - Net Realisable Value	- Deprival Value

WASA must supply:

- list of Assets by class/type e.g. land/buildings, plant, pipelines, miscellaneous (vehicles, other equipment, furniture, IT).

- valuation method used for particular class/group of assets based on the above valuation methods listed above.

- total RAB.

<u>Rolling forward the RAB</u>

WASA needs to show the forecast value of the RAB for each year of the regulatory control period. This is done in the following manner:

- Opening RAB + forecast gross capital expenditure - forecast contributions - forecast proceeds from disposal of assets - depreciation = closing RAB.

WASA should, therefore, set out:

- forecast levels of contributions and the assumptions underlying those forecasts; and
- an estimate of the proceeds from asset-disposals, and the nature and type of assets to be sold.

<u>Asset Consumption (Depreciation)</u>

Broadly, there are two methods of dealing with asset consumption:

Depreciation - this is the common accounting approach for recognizing the loss in value as assets wear out. There are a number of methods for allocating depreciation – Straight Line, Accelerated or Units of Production.

Renewals Annuity Accounting - where the network of assets is viewed as a single system, the service potential of which is maintained in perpetuity through regularly planned maintenance and renewal programmes and, therefore, does not need to be depreciated. Essential elements of this method are the Asset Management Plan and Expenditure needed to maintain the system. If WASA proposes this approach, the Business Plan must include supporting information.

WASA must indicate which depreciation methodology it has utilized in the preparation of its forecasts.

WASA must also provide data relating to the utilization of assets, the weighted average remaining life of assets/asset class/groups of assets, and the weighted average depreciation rates for assets/asset class/groups of assets.

Rate of Return on Capital

An allowed rate of return can be derived by calculating the Weighted Average Cost of Capital (WACC) (i.e. cost of debt and equity capital). Generally, the cost of equity is estimated by the Capital Asset Pricing Model (CAPM). WASA has the option of using an alternative method, which must be properly justified. However, this will not bind the RIC in its determination.

Information to be supplied under this section:

- model used to determine the overall rate of return;
- capital structure (gearing level), industry benchmark;
- total debt servicing (Interest and finance charges);
- appropriate risk free rate used, market risk premium, the appropriate quantification of the equity beta, gamma etc.;

- all loans with interest rates, marginal rate, average cost of debt;
- government guarantees, if any, for each loan; and
- purpose of each loan.

(d) Service Levels and the Service Incentive Mechanism

Economic regulation must consider quality together with price because lowering of quality is economically the equivalent of a high price. Price controls such as multi-year RPI-X price/revenue caps which provide incentive to reduce expenditure can result in reduced quality of service unless the regulator implements a Quality of Service monitoring programmes. These programmes therefore complement price regulation. There are a number of methods of providing incentives to improve service performance. These include:

- Public Reporting of quality of service performance,
- Service Incentive Scheme (or S-Factor Scheme) where a service provider's allowed revenue is increased (decreased) based on its performance in relation to performance targets, and
- Guaranteed Payment Scheme. Under this scheme, payments are made to customers where the service received by them is below a specific threshold. The RIC is in the process of establishing Guaranteed Service Level payments scheme (Guaranteed and Overall Standards) and when implemented this will be monitored. WASA will be required to provide information to demonstrate how it intends to improve its performance under the scheme.

(e) Form of Price Control and Tariffs

In this section, WASA should outline the form of price control it would prefer, as well as provide a detailed discussion of the reasoning underpinning its proposals. The following are among the different forms of price controls that may be adopted:

- tariff basket
- individual price caps

- revenue cap
- revenue yield
- combination of the above.

With respect to pricing proposals, WASA must show that the impact on customers of the proposed tariff structures have been fully taken into account and how low income or vulnerable customers will be affected. WASA must consider how it intends to implement the tariffs i.e. whether a phased or rapid introduction of new tariffs. The practicalities and costs associated with administering a number of tariff structures must also be considered. In short, this section must contain the following discussion:

- background information about the service and recent pricing history;
- the reasoning behind the proposed tariff structure, including a clear identification of the principles underpinning the proposal (including a cost of service study);
- customers' responsiveness to proposed tariff structure;
- the manner in which the tariffs is to be implemented (i.e. billing period, customer class etc.); and
- the impact of the proposal on different customers, on inflation and on the country's competitiveness.

(f) Miscellaneous Charges

The Business Plan should include information on all miscellaneous charges inclusive of major contracting charges, and fees (regulated and unregulated), inclusive of water abstraction fees, that WASA intends to impose and must outline:

- the proposed miscellaneous price and tariff structure;
- the justification for the charges; and
- the impact of the proposed charges on customers.

3.2.4 Efficiency Improvements

WASA must detail its plans to improve both operating and capital expenditure efficiency over the regulatory control period, show how those have been incorporated into its projections and identify any assumptions made. The scope for improvements in efficiency should cover all major areas of operations. WASA should provide a list of areas where measures were undertaken to improve efficiency over the last five (5) years and how they impacted on reducing costs of the organization.

Additionally, WASA must furnish information showing its relative efficiency or inefficiency compared with other countries in the Caribbean and elsewhere, including any efficiency studies undertaken and methodology used.

3.2.4.1 Performance Indicators

WASA must supply information on the following performance indicators (compared with the "Best Practice" world-wide where information is available):

Performance Indicator	**Description**
Service Quality	
Water Coverage	Population, and/or Households/Businesses with easy access to water expressed as a percentage
Sewerage Coverage	Population with sewerage service expressed as a percentage
Total Water Supplied	Total annual water supplied to the distribution system expressed by litres per capita per day
Metering Level	$\left[\frac{\text{Total number of connections with operating meter}}{\text{Total number of connections}}\right]$ %
Non-Revenue Water (NRW)	Difference between water supplied and water sold expressed as a percentage of net water supplied, volume/year and as volume/km/day and volume/connection/day;
Pipe Breaks	Total number of pipe breaks (water service connections and mains) per year expressed per km of the water distribution network;

Service Complaints by type	Number of complaints of quality of service during the year expressed per total number of service complaints (water and wastewater) x 100
Water Quality	Total number of treated water tests complying with the applicable standards during the year expressed per total number of tests of treated water performed during the year x 100
Sewerage Clogs	Total number of blockages per year expressed per km of sewers; and per number of sewerage connections;
Financial	
Unit Operational Cost (Water)	<u>Total annual operating expenses</u> and <u>Total annual operating expenses</u> Total annual water produced Number of connections
Composition of Operational Costs	Category of operational costs e.g. personnel and fuel/energy as a percentage of total costs;
Collection Period	Year-end accounts receivable/Total annual operating revenues expressed in months equivalent of sales. That is, the ratio between the year-end accounts receivable and operating costs exclude depreciation and interest payments
Operating Ratio	Annual operating costs to annual operating revenues (operating costs includes depreciation and interest payments but excluding debt service payments);
Debt Service Coverage Ratio	(Gross Internal funding ÷ by Debt Service)
Operational	
Staff Connection Ratio	Total number of staff expressed per thousand water connections
Staff Composition	Category/Level of staff expressed as a percentage of the labour force
Labour costs vs. Operating Costs	Total annual labour costs (including benefits) expressed as a percentage of total annual operational costs;

Contract out service costs vs. Operational Costs	Total cost of services contracted-out to the private sector expressed as a percentage of total annual operational costs
Continuity of Service	Average hours of service per day for water supply
Operating Cost per Customer	Operating costs ÷ Total number of customers
Tariffs	
Industrial to Residential Charge	The average charge (per m^3) to industrial customers compared against the average charge (per m^3) to residential customers;
Average Tariff	Total annual operating revenues expressed by amount of water sold
Connection Charge	The cost to make a residential pipe connection to the water system and sewer system measured in absolute amount and as a percentage of GDP

Where WASA is unable to supply information with respect to a particular indicator it should state this.

3.2.4.2 Other Information

WASA must provide the following:

- a methodology outlining plans and procedures for the reduction and control of non-revenue water (NRW) and NRW reduction targets for each year of the control period;

- a methodology outlining the measures for the implementation of universal metering with the attendant activities of meter reading, testing, and maintenance;

- detailed information on Scheduled Areas, including class of supply (number of hours) and approximate number of customers in each area;

- information on worst served areas/customers and projects that have been introduced or earmarked for introduction to improve the quality of service;

- an environmental summary outlining strategies to meet environmental standards for future plant and infrastructure and mitigation measures for existing plant;

- plans for wastewater improvement including adoption of (sewerage treatment plant) STPs, sewer replacement and expansion, dealing with industrial wastewater and operational and administrative changes;

- measures to improve the quality of drinking water;

- bad debt policy;

- receivables and collection policy;

- cost of service (latest available);

- forecast of revenue by class; and

- number of employees (permanent/temporary), inclusive of its approved statutory organisational requirements and forecast.

3.3 Public Summary

The Public Summary is a stand-alone summary written with the customers in mind to enable them to understand WASA's plan and strategy for the regulatory control period. It should clearly identify:

- WASA's deliverables with timeframes for the control period, in terms of quality enhancements and service delivery, together with implications for prices and average household bills;

- WASA's key financial projections with underlying assumptions;
- the implications of major enhancement programmes in terms of benefits to customers; and
- WASA's targets and proposals for efficiency improvements.

4. MONITORING PLAN

4.1 Monitoring Plan

The Monitoring Plan is a public record of WASA's planned outputs, targets, and key activities to be delivered during the regulatory control period and will be utilized by the RIC as part of its overall compliance framework.

To assess the performance year-by-year, WASA will be required to submit its **Monitoring Plan** for the control period to the RIC within three (3) months of final determination. The RIC will stipulate the minimum requirements and reporting timeframe in the final determination. The Monitoring Plan will be placed in the RIC's Library and on its website and will be distributed to stakeholders including NGO's, consumer groups, local Authorities and other interested parties.

The information to be included in the Monitoring Plan will be under the following headings:

- **Outputs**

  The required minimum outputs and targets will be established in some detail in the final determination and monitoring the delivery of these outputs will be the primary consideration. Evidence of a likely failure to deliver the required output/improvement could trigger additional reporting and regulatory action.

- **Serviceability to Customers**

  Under this section, WASA will be required to deliver on its commitments of maintaining serviceability to customers. These commitments will be translated into projects and programmes that would be carried out during the control period. Where commitments involve renewing, replacing or extending physical assets, WASA will be required to detail the areas, the expected commencement and completion dates, etc.

- **Prices**

  The overall price limit for the regulatory control period will be set by the RIC in the final determination. WASA will be expected to submit, at least two months prior to the beginning of each year of the regulatory control period, its proposed tariffs to apply from the start of each year, for the RIC's verification of compliance. Additionally, WASA would be required to explain the implications of the approved tariffs for typical customers' bills in different customer classes.

4.2 Performance Reporting and Auditing

Apart from the Monitoring Plan discussed above, the RIC will also be monitoring and reporting annually on the performance of service providers. This is consistent with the RIC's mandate under its Act, which provides for the RIC to monitor and report publicly on the performance of WASA, including the quality of performance information. The RIC considers that the performance reporting framework should broadly cover the following areas of service:

- baseline explanatory data (for example, customer number and network length);
- quality of supply;
- network reliability and efficiency (for example, interruptions and losses);
- consumption and environmental and conservation initiatives;
- customer responsiveness and service (for example, response to service disruptions and complaint handling); and
- financial performance.

Performance Reporting and Auditing will form part of the RIC's overall Compliance Scheme for WASA and the RIC will utilize remedies, in accordance with the RIC Act, as needed.

Appendix 1

Table 1: OPEX

	Actual 2011 -2016 (this information must be broken down by Financial Year)	**Forecasted Year 1-Year 5 of the Regulatory Control Period (this information must be broken down by Year)**
Personnel Cost:		
- Basic Salaries and Wages (shown separately)		
- Over Time		
- Pension		
- Employers Contribution to NIS		
- Allowances (Travelling, Vehicle leases, travelling meals etc.)		
- Training		
- Gratuity		
- Any other Employee costs not captured above		
Total Employee Cost		
Purchased Water (Desalination)		
Electricity		
Chemicals (Split between Chlorine and Other)		
Materials and Supplies		
Contractual Services (split into Engineering, Tankering of Water, Legal, Road Restoration Pipeline Repair and all other contracted services)		
Transportation Expenses (Vehicle Rental and other expenses shown separately)		
Insurance (motor vehicles, buildings equipment and other shown separately)		
Rental of Equipment		
Property/Building Rental		
Disconnection/Reconnection Expenses		

Advertising Marketing Expense		
Telephone Expense		
Sponsorships		
Regulatory Expense (RIC Cess)		
Guaranteed Standard Scheme		
Miscellaneous Expense		

Table 2: Information with respect to Capex Plan

WASA should supply a five year Capital Expenditure Plan for the five year control period with the following information:

1	Name of Project –
2	Category under which the Project falls i.e. **Water production** (e.g. Design/construction/refurbishment Water Treatment Plant), **Water Transmission/Distribution projects** (e.g. Replacement of transmission and distribution pipelines, New pipelines, Design/Construction /Refurbishment of Service Reservoirs), **Other Network Related Projects** (e.g. DMA Coverage and pressure management, customer metering), **Wastewater projects** (e.g. Design/Construction of Wastewater Treatment plants, Construction of Collection Systems, Upgrade of Sewers, Upgrade of Wastewater Treatment plants, Upgrade of Wastewater Facilities, Upgrade of Lift Stations, interconnection, Disinfection of Facilities, Acquisition of Land for Catchment). WASA must indicate as well whether it is for replacement, growth or enhancement.
3	Complete Project Description
4	Total Project Cost disaggregated by year over a five year period;
5	Estimated Completion Date
6	Source of Funding
7	Expected Benefits