

Project to Revise the Pricing Strategy for Water Use Charges and Develop a Funding Model for Water Infrastructure Development and Use and a Model for the Establishment of an Economic Regulator

Institutional and financial models for the Economic Regulator – Discussion document

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# Introduction

The Department of Water Affairs has instituted a project to investigate the most appropriate institutional model for an economic regulator for the water sector. This report forms part of this process, and sets out a range of background information as well as proposed institutional options, to serve as the basis for a discussion to take place within DWA on the options available.

The document deals with a number of aspects pertaining to the proposed economic regulator, as follows:

* Section 2 looks at the definition of economic regulation for the water sector
* Section 3 looks at the principles underpinning economic regulation for the water sector
* Section 4 looks at the proposed scope and functions of the economic regulator. This section also looks that the current functions being performed by DWA that constitute economic regulation and which would fall under the economic regulator in future;
* Section 5 sets out the possible institutional options for an economic regulator, both internal to and external to DWA, and deliberates on the pros and cons of the various institutional options
* Section 6 outlines the various criteria that can be used to make an assessment of which institutional form would be best suited for the economic regulator in the water sector
* Section 7 concludes the discussion document.

# Definition of Economic Regulation for the Water Sector

As outlined in the Economic Regulator Review[[1]](#footnote-1), governments use economic regulation to improve the efficiency with which society's resources are allocated to alter the distribution of income and to achieve broad social or cultural goals. Government also imposes regulations to alter the distribution of income partly to prevent monopoly profits and to prevent unjust discrimination and to ensure that consumers were charged "fair and reasonable" rates. Economic regulation may also be used to reduce the speed of economic change and the redistribution of income through administrative processes, a justification based on the notion that the public is generally averse to risk and that the marketplace, with its sometimes abrupt changes, unfairly distributes income. Finally, regulation may be used to confer benefits on certain customers at the expense of others. Economic regulation is typically focused on the regulation of “business” issues which are critical for institutions involved in the value chain. The objective of economic regulation is to ensure that good or services are provided in a cost efficient, fair, and sustainable manner, while bearing in mind social and economic priorities (equity objectives), set out by the policy makers (at national, provincial and local government levels).

The main objectives of economic regulation can be broken down into three broad elements:

* To protect customers from authorities abuse of their monopoly power and from political interference,
* To protect water institutions from politically driven decisions, and
* To enable the public sector to carry out long-term policy objectives.

In the context of the water sector, economic regulation is therefore typically directed at regulating the costs (tariffs) charged and the service standards of the various institutions/authorities involved in the supply and delivery of water and sanitation services to the end consumer (the entire value chain).

Economic regulations therefore intervene directly in market decisions such as pricing, competition, market entry, or exit.

Economic regulation results in the setting of overall service standards and tariff levels – as well as tariff structures for different customer categories. Social imperatives and equity objectives typically require a degree of cross-subsidisation or pro-poor support.

Ultimately, the broad objectives of economic regulation are to:

* encourage efficient, low-cost service provision (productive efficiency)
* set tariffs for cost recovery to ensure financial viability
* encourage investment (including extension of service)
* provide affordable services to low income groups (equity objectives)

In the South African context, it is argued that to meet these objectives it is essential that economic regulation is applied throughout the water value chain (water resources and water services). The driving reason for this is that from a regulatory perspective there is currently a conflict of interest with the DWA determining the raw water pricing strategy and setting the raw water tariffs, while also being the infrastructure developer and operator and the management body that spends the revenue from those tariffs. Currently DWA is the player and referee where raw water tariffs are concerned. The biggest concern in this regard relates to the substantial infrastructure portion of the water tariff that is passed through institutions to the end consumer. An economic regulator must be able to take on these very serious challenges in water resources revenue and tariff setting.

Given the broad objectives for economic regulation outlined above it would not be possible to achieve effective economic regulation if this was applied only to selected water services institutions. It is important to note that concept of economic regulation of the entire value chain is a new development in the international water sector.

Section 4.2 of the Economic Regulator Review clearly outlines the existing regulatory realities and challenges for the water sector in South Africa in the context of regulation of the entire value chain (water resources and water services) and the associated institutions. These institutions are all “government owned entities” thus the role of an economic regulator in South Africa would be to regulate the public sector provision of water and water services.

What is important to realise in this context is that to be effective a regulator must have “teeth” and therefore the ability to effectively apply sanctions/incentives. The sanctions/incentives that can be applied are very different in the context of private sector vs. public sector provision of services. In the context of the private sector, large fines act as significant deterrents to non‐compliance. In the context of the public sector, large fines do not have the same impact, and alternative sanctions must therefore be able to be imposed.

Consequently before defining specifically what is meant by ***economic regulation*** in the context of the South African water sector, it is important that the definition is informed by following:

* The broad objectives of economic regulation outlined above
* The understanding that economic regulation does not exist in isolation of other regulatory functions/domains and there are overlaps and interdependencies with technical, environmental, social and health and safety regulation amongst others.
* Drinking water quality, effluent discharge, customer service, coverage, and asset condition may be a reaction to a problem of monopoly and should also be covered by economic regulation (service standards etc.).
* The economic regulatory priorities (market failures) of the sector must be addressed.
* The scope of economic regulation (entire water value chain)
* Ability to determine and apply appropriate sanctions in the context of Cooperative governance and public sector entities.
* National governments broad economic and social development objectives.

Erhardt et al define economic regulation as “the rules and organizations that set, monitor, enforce, and change allowed tariffs and service standards”.

In the context of economic regulation of the water sector value chain in South Africa, and given the current challenges and regulatory needs and objectives, it is proposed that it would be appropriate to define ***economic regulation*** as:

***“setting the rules to control, monitor, enforce and change allowed tariffs and service standards for the water sector whilst giving due regard to social, environmental and economic imperatives”***

This definition provides the overarching context that would guide regulatory models/option and the associated regulatory mechanisms discussed in this document.

# Principles

## Regulatory Legitimacy

In a review of regulators the following broad requirement for regulatory legitimacy was found to provide a consistent and coherent framework for good regulation. Baldwin and Cave propose five key tests of ‘legitimacy’ or ‘worthiness of support’ of a regulatory regime, these are:

* Is the action or regime supported by legislative authority?
* Is there an appropriate scheme of accountability?
* Are procedures fair, accessible and open?
* Is the regulator acting with sufficient expertise?
* Is the action or regime efficient?”

## Water Sector Governance

Water sector governance refers to a range of various systems (administrative, economic, political, social, etc.) that are in place to develop and manage water resources, and provide water services at different levels. The South African Constitution outlines basic values and principles that ensure effective public participation (proactive sharing of key information and soliciting inputs from the broader stakeholders) as part of the administrative governance. Good governance in the water sector is still evolving internationally. However, it can be tested against established systems, definitions, pillars and criteria, including:

* Levels of Governance System (principles, policy, legislation, regulations and practices)
* Defining the traditions and institutions by which authority is exercised, i.e. decision-making (The three (3) recognized pillars - open policy-making; a professional bureaucracy and a strong engaged civil society)
* UNESCO’s criteria for effective water governance (participation, transparency, equity, accountability, coherency, responsiveness, integrative and ethical considerations), and
* The King III Report key characteristics (transparency, discipline, accountability, independence, responsibility, fairness and social responsibility).

## Universal Regulatory Principles

Regulators and regulatory principles are nothing new, but regulatory success is not an easily measurable concept. Hence, the question of what may constitute ‘successful’ regulation is, in itself, the subject of much debate. A structured analysis or grouping of certain characteristics of what seems to be ‘working’, and what is not, is a more recent development that has been gaining momentum, particularly in the context of recent regulatory failures. It is possible though to identify common approaches and principles that appear to be universally workable and which could form the basis of a common approach to regulation – i.e. an emerging framework for “good regulation”. The following universal regulatory principles were identified in a regulatory benchmarking study conducted for DWA as part of the development of options for an Integrated Regulatory Framework (IRF) for the water sector in 2009.

* **Clear Roles** – Is there clear separation of the roles of policy, oversight, operations and regulation and are regulatory responsibilities clearly defined and allocated. Regulators should have clear and quantified objectives accompanied by clear measures of success/failure.
* **Transparency** – How is access to information, is it free flowing?; Are the various processes and decisions of the regulator and their justifications documented, transparent and open for scrutiny?
* **Accountability** – Is the counter principle to independence and ensures that the regulator is accountable for its decisions and actions. Consumers and the regulated body should have a right of appeal against the regulators decisions.
* **Non-discriminatory** – relates to discrimination of regulated entities as well as discrimination by the regulator. Regulatory processes should not discriminate between regulated entities and regulatory decisions should be technologically neutral.
* **Independence/Autonomy** – this principle has 3 legs; independence from political intervention, independence from role-players, stakeholders, consumers and other interests (non-conflicts of interest) and financial independence (source of revenue /funding).
* **Participation** – do sector role-players/stakeholders participate in the regulatory process and periodic reviews? Is the voice of the citizen heard?
* **Effective Monitoring and Enforcement** – does the regulatory regime allow for effective monitoring and enforcement of decisions by the regulator?
* **Minimal Regulation** – Is the regulatory framework only focused on areas where regulation is necessary to achieve specific objectives/outcomes?
* **Predictability** – refers to constraints on arbitrary changes of regulatory or regulated companies’ powers and obligations, publication and application of regulatory principles and importantly, consistency of decision making.

It is important to note that these are not the only possible regulatory principles. Due to the diversity of regulatory needs (internationally and locally) there are other principles that would be most important in a given situation that may not appear on this list. Likewise there may be less or more emphasis placed on some of these principles where different approaches are taken to regulation and different models of regulation are used.

## Compliance Monitoring and Enforcement

A key requirement for effective regulation is that it is underpinned by strong compliance monitoring and enforcement capability. Those that break the law must be held accountable and sanctioned for such practice. A critical element of this is ensuring effective monitoring, data collection and assessment, and the taking of appropriate action based on the results.

Compliance is strongly influenced by a number of features, including whether the regulation is seen as legitimate by those being regulated. Regulations perceived to be legitimate are more likely to be complied with than those lacking legitimacy. This includes legitimacy of the content of the regulation, the distributional effects, the process of making the regulations, and the process of implementation of the regulations. Perception of fairness of implementation, and people’s experience of how they have been treated by the regulatory authority, is a critical part of the recognition of legitimacy and the response to regulations.

Compliance is also strongly dependent on relationship between the economic benefits of breaking the regulations and the economic consequences of any sanctions that might be applied if non-compliance is detected. The likelihood of non-compliance being detected and acted on is an important part of people complying with regulation.

## Regulatory Independence

There has been significant and heated debate around the principle of regulatory independence and why this is preferable, desirable or necessary or not. As outlined in 3.3 above independence this principle has 3 legs; independence from political intervention, independence from role-players, stakeholders, consumers and other interests (non-conflicts of interest/regulatory capture) and financial independence (source of revenue /funding).

On one hand it is argued that regulatory independence is a necessary element in providing sector stakeholders with confidence in the regulatory regime. On the other hand it is stated that independence on its own is not the critical issue it is the degree of emphasis placed on other principles such as authority, transparency, accountability, conflict of interests and participation. This is summarised by the following quote:

*“the term independence does not tell the whole story…What is needed is a credible and durable balance between authority and accountability (Olson 2012)”*

For effective and credible regulation this is also translated into the need for a clear separation of the roles of custodian, policy maker, shareholder, supporter and regulator.

It is therefore argued that in the context of economic regulation of the water sector (and public ownership of all institutions), the need/desire for a regulator to be fully independent from government can be mitigated against. This can be achieved by ensuring that through structural and administrative design (functions and rules), other appropriate key principles are embedded and established to reinforce and underpin regulatory legitimacy and credibility, regardless of the institutional option selected. Independence should be progressively built and established as a state of mind in sector stakeholders through demonstrated credibility, not necessarily imposed as an institutional form.

# Regulatory Scope and Functions

## Scope

The Economic Regulator Review conducted in June 2012 as part of the PERR project highlighted that there is no coherent economic regulation of the entire water value chain (water resources and water services). Elements of economic regulation are currently targeted at specific institutions operating in the value chain such as water boards and municipalities. While there is a mechanism to regulate water resource pricing through the raw water pricing strategy, and guidelines for determination and implementation of water use charges, in reality the raw water charges are set by DWA without regulatory oversight.

Given the proposed definition for economic regulation as stated earlier in this document and the need to apply economic regulation throughout the water value chain it is essential that this be translated into a clear understanding of the proposed regulatory scope and the related functions. The regulatory scope needs therefore to be strongly aligned to the “business interfaces” in the value chain. The business interfaces in the water value chain are in effect the various water charges and the related institutions who determine the charges.

The figure below indicates numerically the various charges imposed in the water value chain and therefore the logical focus areas for economic regulation.



Figure 4.1: Water Value Chain Charges and Regulation Points

The institutions responsible for the business interfaces/charges as illustrated in this figure that need to fall within the ambit and scope of economic regulation are as follows:

1. Water resource management charges as imposed currently by DWA but by CMAs in future
2. Water resource development charges relating to infrastructure related costs for DWA and the TCTA. The CUC charge is calculated by the TCTA for schemes that they are financing, and is factored in to the raw water charge by DWA. DWA calculates the infrastructure charge for infrastructure that it manages. The raw water charge includes capital, O&M, depreciation and RoA elements. Charges for some international agreements are also factored into the raw water charges via DWA and or TCTA.
3. The water research levy is calculated annually by the Water Research Commission on the basis of the raw water pricing strategy and is submitted to DWA for approval and inclusion in the water charges billed by DWA.
4. Bulk water tariffs and services relating to bulk water service providers (water boards/some municipalities/other intermediaries)
5. Retail water tariffs/services relating to Water Services Authorities as per the delegated powers and functions for water services
6. Sanitation charges/services relating to Water Services Authorities as per the delegated powers and functions for water services
7. Bulk waste water treatment charges/services relating to Water Services Authorities and some water boards (domestic and industrial waste)
8. Waste discharge charge which relates to water users discharging waste into a water resource and which is likely to be introduced in three catchments by 2014/15

## International Interests

One area of charges on water that is not specifically covered in this figure relates to the regulation of international interests where there are shared interests in water resources and specific off take agreements and linked charges. The NWA provides specifically for water management institutions responsible for international water management and associated agreements as is the case with inter-catchment basin transfers of raw water between countries. These transfers are undertaken through international water management institutions such as the Trans Caledon Tunnel Authority[[2]](#footnote-2) (TCTA) and the Komati Basin Water Authority (KOBWA)[[3]](#footnote-3). Compliance with international and regional agreements and the functions of the international water management institutions also need to be subject to economic regulation specifically in the case where charges for transfers between other countries and South Africa are passed down the value chain to users/consumers.

Economic regulation of international interests/agreements and related charges will have two distinct areas, the regulation of existing agreements and charges (this will be linked to the historic/existing agreements), and the processes for economic regulation of any new agreements in the future.

## Economic Regulatory Functions

The regulatory functions and linked objectives that would underpin economic regulation of the value chain and its business interfaces are set out in the table below. The regulatory scope follows the business interfaces/charges in the water value chain. Where relevant, regulatory overlaps and key linkages with other regulatory domains/functions are indicated.

While all water users and institutions involved in the various business interfaces would ultimately be included in the scope of economic regulation, it might be advisable to start with the critical areas of regulation and increase the scope over time as capacity and experience increases and as the capacity of regulated bodies to provide the necessary information for regulation increases.

Table 4.1: Scope, Functions and Objectives

|  |  |  |  |
| --- | --- | --- | --- |
| **Regulatory scope** | **Regulatory function/s** | **Regulatory objective** | **Regulatory overlaps** |
| Water resource management charges - DWA/CMAs | Set rules for raw water management charges determination.  Approve raw water management charges | Ensure reasonable charges to archive catchment objectives | Environmental / social (CMS) |
| Sustainability of institutions |  |
| Water resource development charge -DWA /TCTA | Set rules for raw water management charges (raw water tariff) determination.  Approve raw water management charges/tariff. | Ensure reasonable charges |  |
| Sustainability of institutions |  |
| Consumer/user protection | Environmental |
| Strategic asset management |  |
| Raw water quality service standards | Raw water quality | Environmental/CMS |
| Regulatory review | Deal with Disputes/appeals |  |
| **3** Bulk water tariff/services | Set rules for determination of bulk potable water tariffs.  Approve bulk potable water tariffs | Ensure reasonable charge for bulk potable water customers |  |
| Assess compliance with drinking water quality standards | Meet SANS 241  (Blue drop) | Health |
| Set rules for determination of bulk raw water tariffs.  Approve bulk raw water tariffs  Raw water quality standards | Ensure reasonable charge for bulk water raw water customers |  |
| Sustainability of institutions |  |
| Assess reliability of supply | Norms and standards met/ review |  |
| Customer protection | Norms and standards met/ review |  |
| Monitor efficiency and serviceability of supply | Specifying asset  conditions  Specifying efficiency and or performance targets | Technical impacts |
|  | Regulatory review | Deal with Disputes/appeals |  |
| **4** Retail water tariffs/services | Set rules for determination of retail water tariffs.  Approve Retail water tariffs ***This is the ideal action for the regulator, but is likely to require a constitutional amendment. It is likely that the regulator will only be able to make Or:***  Assess compliance with retail tariff determination rules and make recommendations | Ensure reasonable charge for retail water to water customers |  |
| Sustainability of institutions |  |
| Monitor drinking water quality standards | Meet SANS 241  (blue drop) | Health |
| Monitor reliability of supply | Norms and standards met |  |
| Customer protection | Norms and standards met |  |
| Monitor efficiency and serviceability of supply | Specifying asset  conditions  Specifying efficiency and or performance targets | Technical |
| Service coverage | Service coverage targets met | Social |
| Regulatory review | Deal with Disputes/appeals |  |
| 1. Sanitation Charges/services | Set rules for determination of sanitation charges (tariffs).  Approve sanitation charges(tariffs). ***This is the ideal action for the regulator, but is likely to require a constitutional amendment.***  ***Or:***  Assess compliance with sanitation charges (tariffs) determination rules and make recommendations | Ensure reasonable charge for sanitation customers |  |
| Sustainability of institutions |  |
| Monitor reliability of service | Norms and standards met |  |
| Customer protection | Norms and standards met |  |
| Monitor efficiency and serviceability of supply | Specifying asset  conditions  Specifying efficiency and or performance targets | Technical |
| Monitor service coverage | Service coverage targets met | Social |
| Regulatory review | Deal with disputes/ appeals |  |
| 1. Bulk waste water charges/services | Set rules for determination of bulk sanitation charges (tariffs).  Approve bulk sanitation charges (tariffs). ***This is the ideal action for the regulator, but is likely to require a constitutional amendment.***  ***Or:***  Assess compliance with retail tariff determination rules and make recommendations | Ensure reasonable charge for sanitation customers |  |
| Sustainability of institutions |  |
| Monitor reliability of service | Norms and standards met |  |
| Customer protection | Norms and standards met |  |
| Monitor efficiency and serviceability of supply | Specifying asset  conditions  Specifying efficiency and or performance targets | Technical |
|  | Regulatory review | Deal with disputes/ appeals |  |
| 1. Waste discharge charge | Set rules for waste discharge charges determination.  Approve waste discharge management charges  (Green Drop) | Ensure reasonable charges | Environmental |
| Sustainability of institutions |  |
| Regulatory review | Deal with disputes/ appeals |  |
| 1. International agreements/ charges | Set rules for review existing raw water tariff charges | Ensure reasonable charges | Environmental |
| Sustainability of institutions |  |
| Set rules for determination of raw water tariffs for new schemes/ agreements  Approve new raw water tariffs | Ensure reasonable charges | Environmental |
| Sustainability of institutions |  |
| Regulatory review | Deal with disputes/ appeals |  |

It should be noted that these functions extend across the whole value chain, but that the powers of the economic regulator will be different at different points of the value chain due to the constitutional division of functions and the constrained powers of regulation and intervention of the national sphere over the provincial sphere.

## Incremental Approach

The suite of functions listed above is extensive, and will require extensive capacity to implement effectively. It should be noted that it is not only the capacity of the economic regulator that is necessary to make economic regulation work effectively. Without appropriate capacity in the entities to be regulated, the effectiveness of the economic regulator will be severely curtailed. For example, provision of accurate information by a water services authority on the value and state of water services infrastructure assets is necessary for the economic regulator to be able to determine the appropriateness of tariff to be charged, but many water services authorities are not in a position to be able to provide this information, making the role of the economic regulator extremely difficult. Accessing such information will, therefore, become one of the first tasks of the economic regulator.

Because of the extensive nature of the activities to be implemented to achieve effective economic regulation, and the challenges of capacity both in terms of the economic regulator, and in terms of the regulated bodies, it is proposed that an incremental approach be adopted where the economic regulator begins by regulating the most critical elements of the value chain, and builds its regulatory functions to other elements over time.

In this regard, figure 1 below sets out the priority areas for economic regulation, focusing initially on national water resources infrastructure bodies, including WUAs that manage state infrastructure; bulk and retail water services providers. Within these areas, the key focus initially should be on getting the appropriate information from the regulated bodies, and aligning this to the proposed tariffs/charges and the required service levels. This is a programme that will take several years to achieve.

On the other hand, the water resources management charges, and the WRC levies are relatively easy to regulate, and information on these may be relatively easy to obtain. The economic regulator may, therefore, choose to regulate these elements relatively early on not because of their significance in impact on water users, but because of their relative ease of regulation.



Figure 4.2: Priority Areas for Economic Regulation

## Current Economic Regulatory Functions Performed by DWA

The obvious place to start with economic regulation is to identify the functions already being performed, and to consolidate these, while adding in other regulatory functions as required. However, in analysis the current situation it becomes clear that while there are a number of oversight functions being performed by the Department as Shareholder/ Owner of water sector institutions (TCTA, WRC, CMA, WB, WSA, and WSP) that do consider the institutional and financial performance of the institutions, this does not amount to the performance of economic regulation. Although the Department may be fulfilling a number of technical regulatory functions, it is currently performing very few economic regulatory functions.

Table 2 below provides an outline of the current status of economic regulation functions being performed by DWA.

Table 4.2: Current DWA Economic Regulation Functions

| REGULATED ENTITY | REGULATED ACTIVITY | ECONOMIC REGULATION FUNCTION PERFORMED BY DWA |
| --- | --- | --- |
| DWA | * Sets Water resource management charge, waste discharge charge (to come) and water resources consumptive charge; * Builds water resources infrastructure with cost implications for users; | No regulation |
| NWRI Branch | * Development, operation and maintenance of specific water resources infrastructure and managing water resources in specific Water Management Areas | No regulation |
| TCTA | * Raise off budget finance on capital markets to develop raw water infrastructure that delivers water for industries and consumers in a cost effective manner * Tariff setting * Structuring and raising project finance * Bulk raw water infrastructure. It provides financial and treasury management services, tariff setting and debt management services to designated WBs, WMIs and the DWA * Determines CUC for off-budget infrastructure | Minimal regulation, as shareholder/ executive authority DWA is mainly performing an oversight role in respect of price setting of TCTA tariff. |
| CMA | * Once delegated, Sets the Water Resource Management Charge. Costs should be cost reflective. Sets waste discharge charge (to come) | No formal regulation of charge, oversight role by DWA as shareholder/ executive authority. The business plan and financial reports submitted to DWA as Executive Authority not regulator |
| WRC | * Advises Minister on water research levy; | No regulation |
| WSA/ WSP | * Tariff setting. (to be cost based and subsidy should be fully disclosed) * Bulk water services tariff where the WSA is the bulk water services provider * Negotiation between the WSA and the external SP * Retail water tariff and sanitation charges | * S9 (technical regulation but has implication on economic regulation) * s10 regulation (economic regulation). It is unclear to what extent economic regulation is taking place in terms of this section. An added complexity is that non-compliance with this section/ norms and standards does not attract an appropriate penalty * s63 – Intervention * Consumer satisfaction surveys * Service quality issues * Regulation information consumer protection * Deal with financial related disputes |
| WBs | * Sets prices for bulk * Sets bulk waste water tariff (recovers the cost of conveying and treating bulk water and waste water). * This is done through negotiation between WB and WSA * Contracts entered into with WSA/ WSP – section 32(b) of the WSA – basis of funding for the WB * A water board must set conditions for the provision of services in relation to the determination and structure of tariffs; and the payment and collection of money due to the water board ss33(1)(c);(d)). | * Charges are cost plus, no formal economic regulation * Section 10 of WSA – norms and standards for tariff setting, in draft form * Minister tables annual increases of the bulk water tariff of Water Boards in Parliament |
| WUAs government water schemes | Levying of water charges on members on behalf of DWA | No regulation other than determination of the % of revenue that can be kept by the WUA to cover costs of collecting water charges on behalf of DWA |
| Dispute resolution | Resolution of disputes between entities within the water value chain | There has been intervention between municipalities and water boards over non-payment issues |

# Institutional Options for the Regulator

Currently, economic regulation of the water sector is largely informal and relatively weak. There are few economic regulatory methodologies being formally applied, and the transparency of tariff and charge setting across the value chain is weak. Clearly, this situation needs to change, with stronger, more transparent and effective economic regulation being instituted. There are a number of aspects to this – improving the capacity to regulate, improving the regulatory tools to be used, and improving the institutional arrangements for economic regulation.

This chapter will focus on the issue of the optimal corporate form for the performance of economic regulation. Various corporate forms are available for the performance of economic regulation as governed by the Public Finance Management Act (PFMA) and the Public Service Act (PSA). We will however only discuss the three most relevant corporate forms for purposes of economic regulation, namely:

1. Departmental restructuring to establish a dedicated departmental unit;
2. Government Component; and
3. Public Entity.

Each of these corporate forms have advantages and disadvantages, and each needs to be considered in the context of the functions that the economic regulator must perform, and particularly the core purpose of regulating tariff and charge setting along the water value chain.

## Option 1: Internal to the Department

The first option is to introduce no change to the corporate form, but rather to put in place an internal restructuring within DWA that will create a dedicated departmental unit. This option would mean that the economic regulation function would be performed by the Department itself through a dedicated and ring-fenced unit/ branch.

Option 1 would require additional posts, clarifying or redefining job descriptions and responsibilities, introducing or improving systems for budgeting, work flows and administration, and possibly delegating authority to lower levels, where appropriate.

Under option 1, the Department may choose to consolidate the new regulatory function into a branch or a unit within a branch. The critical difference between these two options is the level at which the posts sit, with a branch being headed by a Deputy Director General, and a unit being headed by a Chief Director or lower. This is of importance in terms of the ability to recruit the necessary scarce and technical skills to perform the economic regulation functions.

### The Key Elements of Option 1

The key elements of this Option are the following:

* The economic regulatory functions of the Department are consolidated and ring-fenced into a dedicated Economic Regulation Branch or Unit within a branch. This would require that all the existing economic regulatory functions that are currently scattered/located within different Branches, Chief Directorates and Directorates are identified and relocated within the Economic Regulation unit. This would include shifts in the roles and responsibilities of the national and regional offices. It would also require strengthening of the enforcement capability of the Department to ensure that economic regulation could be enforced where necessary.
* New economic regulatory functions, currently not performed by DWA, would need to be identified and also be located in this unit.
* The economic regulatory functions would need to be re-organised to ensure that there is appropriate and holistic economic regulation of the entire Water Value Chain (WVC).
* In light of the minimal economic regulation currently taking place, to perform the economic regulation function effectively, a number of new posts would need to be created and filled and an appropriate budget allocated to the function. The Department would need to substantially strengthen the current levels of economic regulatory capacity and acquire additional specialist skills that are necessary to ensure that the capability to regulate is established, particularly financial, legal, engineering, and economic skills.
* While the establishment of an economic regulation branch does not require legislative action to establish the branch, existing legislation, such as the NWA and WSA, as well as the PFMA, MFMA and Municipal Structures/Systems Acts may require significant amendments to enable the effective performance of the economic regulation functions in relation to municipalities in particular.
* Strategies and initiatives would be required to ensure that the capacity and capability of all regulated institutions are progressively built to improve their capacity to be regulated. This will include strategies and initiatives to ensure that access to and the provision of valid and accurate regulatory information is substantially improved. Without this, effective economic regulation will be extremely difficult.

### Advantages of Option 1

1. This option will, to a limited extent, enable a degree of separation of the economic regulation function from the policy, support and implementation roles of DWA, and provide a basis for more focused economic regulatory activities.
2. This option can be implemented swiftly, with limited requirements for legislative amendments or promulgation of legislation.
3. This option allows for an incremental approach, building on current functions and developing them further.
4. This option allows for close alignment between the policy imperatives of the Department and the implementation of these policy imperatives through economic regulation.
5. No assignment or delegation of functions is necessary
6. The unit can make use of the Department’s corporate and financial services and systems
7. It is possible to establish, under the National Water Act, an advisory committee to advise the executive authority on service delivery matters and/or to accommodate stakeholder interests and to support the process of economic regulation.

### Disadvantages of Option 1

It needs to be noted that while this option will enable certain improvements in the regulation of key components of the WVC to be made, it will ***not address*** the following:

* All the current identified regulatory gaps and constraints, without amendments to existing legislation.
* It will not enable alignment with best practice in terms of some of the identified critical “best practice” specifically in regard to independence, conflicts of interest, and role separation and clarification.
* Areas where DWA will continue to be the regulator and the regulated body.
* The difficulty of recruiting and retaining highly skilled financial, legal, economic and engineering staff.
* The current reality with regard to finalising institutional arrangements in the water sector, in particular the slow pace of establishing CMA’s and the uncertainties regarding the muted NWRIA, will be a significant constraint to effective implementation of this option.

## Option 2: Government Component

A government component is a separate institution within the public service which is listed in Schedule 3 of the Public Service Act read with the PFMA. The government component is a separate entity within the Department, with its own accounting officer, still accountable to the Minister. This organisational form allows for the delegation or assignment of government functions to a government component within the public service without having to create a separate juristic person outside the public service e.g. a national public entity or business enterprise.

Such a component would be under the direct control of a Head of Component, with accountability and responsibility vested in the functionaries directly involved with the performance of the functions in question. The Head of Component is the accounting officer in terms of the PFMA. The government component can have its own administrative resources e.g. HR, Finance, IT, etc., or it can share these resources with its parent department.

A Government Component may have original statutory powers or assigned or delegated statutory powers and duties. Because an economic regulator for water would impact on the human right to water, the establishment of a government component would require an Act of Parliament.

A government component is linked to a principal department responsible for the relevant policy/functional area in order to assist the executive authority to exercise oversight over the component on policy implementation, performance, integrated planning, budgeting and service delivery. A government component falls within the Budget Vote of the principle department and may receive a transfer payment from the principal department.

This organisational form provides more than one accounting officer under the same Vote.

### Advantages of Options 2

The advantages of using this organisational form in the public service include:

* This corporate form allows a good balance between having an economic regulator that is separate from the Department but linked to it for purposes of oversight and achieving alignment with the governmental mandate;
* The Head of Component will be the accounting officer for the economic regulation function alone and will be able to focus strongly on this specific and complex function.
* The head of Component has a similar standing to that of the DG of the Department
* There will be direct control and influence by the Executive Authority over service delivery outcomes and outputs without the need to create an entity outside the public service;
* Although the GC staff will still fall under the public service regulations, the GC will be able to focus is HR component on the recruitment, training and retention of staff with the specific skills required for economic regulation.

### Disadvantages of Option 2

The disadvantages of this option include:

* Bound by public service regulations which limit salaries and conditions of service which may pose challenges in recruiting the quality of skilled staff required for this function;
* Can take between 12 to 24 months to establish depending on the length of time to get the necessary Act through Parliament;
* In terms of legal status, it remains part of the government, with a similar legal status to that of the principal department. This limits its ability to take legal action against the principal department.
* It will not address the current identified regulatory gaps and constraints, without amendments to existing legislation
* The current reality with regard to finalising institutional arrangements in the water sector, in particular the slow pace of establishing CMA’s and the uncertainties regarding the NWRIA, will be a significant constraint to effective implementation of this option.

Option 3: External Economic Regulator

Option 3 refers to the possibility of setting up the economic regulator outside DWA, as a National Public Entity (NPE). This corporate form allows for even more operational autonomy compared to the government component, as it is separate from the Department (and the public service) and accountable directly to Parliament. The PFMA defines a National Public Entity as follows:

***(a) a national government business enterprise; or***

***(b) a board, commission, company, corporation, fund or other entity (other than a national government business enterprise) which is—***

***(i) established in terms of national legislation;***

***(ii) fully or substantially funded either from the National Revenue Fund, or by way of a tax, levy or other money imposed in terms of national legislation; and***

***(iii) accountable to Parliament;***

For purposes of this Report, we will only discuss category (b) National Public Entities, as an economic regulator does not fit the definition of a government business enterprise.

An NPE is established through national legislation in order to perform functions that are typically prescribed in law and serve identified ‘public purpose’ objectives. Public entities form part of the “general government”, and not the “business sector”, but they are juristic persons, have governing boards and have limited recourse to the resources and the authority of the State. A NPE’s governing board is accountable to Parliament through the Minister and the NPE forms part of a Minister’s “portfolio” of executive responsibilities. The governance arrangements for an NPE are specified in the enabling legislation and various codes and protocols such as the King Code and Protocol on Corporate Governance and are not determined by the Minister.

An NPE enjoys separate legal status and is a juristic person, and the functions and powers of the Economic Regulator would be directly assigned through its establishing legislation. Once established it must be listed as a NPE in Schedule 2 of the PFMA.

In terms of accountability, the Board of an NPE has to submit the following information to the DG of the parent Department and National Treasury:

* a projection of revenue, expenditure and borrowings for that financial year in the prescribed format; and
* a corporate plan in the prescribed format covering the affairs of that public entity or business enterprise for the following three financial years, and, if it has subsidiaries, also the affairs of the subsidiaries.

### Advantages of Options 3

* A Public Entity falls outside the public service regulations and can therefore pay higher salaries, provide better working conditions, and recruit and retain highly skilled individuals;
* As a separate juristic person it is better placed to take legal action against DWA and municipalities if required;
* It provides a clear separation of roles and responsibilities (avoids conflict of interest and player/referee conflicts).

### Disadvantages of Option 3

* It requires an Act of Parliament for establishment, and the approval of National Treasury and the DPSA;
* Unlike with options 1 and 2, the staff will not be considered public servants which may result in some challenges of staff transfers from DWA
* Establishment may take 2 to 3 years
* This option is generally more expensive than the options internal to the public service
* It will not address the current identified regulatory gaps and constraints, without amendments to existing legislation
* The current reality with regard to finalising institutional arrangements in the water sector, in particular the slow pace of establishing CMA’s and the uncertainties regarding the NWRIA, will be a significant constraint to effective implementation of this option.

## Comparison of Corporate Forms

The following table provides a comparison of the corporate forms.

Table 5.1: Corporate Forms Comparison

|  |  |  |
| --- | --- | --- |
| Internal to DWA | Government Component | External to DWA |
| Strategic Direction | | |
| Minister | Minister | Minister as shareholder and Board |
| Governance and administration | | |
| Public service rules and regulations | Adhere to governance arrangements applicable to the public service with conditions determined by the executive authority | Adhere to governance arrangements specified in enabling legislation and various codes and protocols e.g., King Code and Protocol on Corporate Governance |
| Accounts to executive authority | Accounts to the executive authority | Accounts to Parliament via the executive authority in terms of its enabling legislation |
|  | Head of a GC shall have the same duties and responsibilities as:   * A head of a national or provincial department - PSA * The accounting officer - PFMA | Board is the accounting authority |
| Legal status/ Framework | | |
| Government department | Remains part of the State similar to that of a department | Separate juristic person in terms of enabling legislation |
| Requires re-organisation of DWA and approval by DPSA if new branch is created | Original, assigned and/or delegated statutory powers and duties | Original, assigned and/or delegated statutory powers and duties |
| Requires reorganisation of budget structure | Requires act of Parliament for establishment, Can take 12 – 18 months | More complicated to set up – 2 to 3 years |
| Financial Arrangements | | |
| Funded from fiscus and/or water charges | Transfer payment from DWA supplemented by revenue from water use charges in terms of legislation | Transfer payment from principal department supplemented by revenue from water use charges in terms of legislation |
| No separate bank account | Separate bank account, must maintain separate financial accounts and prepare own financial statements and annual report | Will have a separate bank account, must maintain separate financial accounts and prepare its own financial statements and an annual report |
| Reports annually to Parliament | For the purpose of reporting to Parliament accounts could be consolidated into the financial statements of the parent department | For the purpose of accounting to Parliament accounts are tabled in Parliament |
| Cash or accrual accounting depending on source of funding | Cash or accrual accounting framework similar to department; or | Accrual Accounting framework. Chapter 6 of the PFMA applicable. |
|  | Retention of income on conditions set by National Treasury | Retention of income |
| No borrowing powers | No borrowing powers | No borrowing powers |
| HUMAN RESOURCES | | |
| Staff remains public servants | Staff remains public servants | Staff are employees of the entity |
| Dependent on corporate and support services of department | May share services with its parent department e.g., corporate services in instances where separate corporate services may not be justified or may establish separate corporate and financial services | Separate administration and own systems do not allow for sharing of services |

# Criteria for Assessment

## Required Regulatory Outcomes

When considering regulatory models and options it is important to ensure that the assessment of possible institutional options is informed by a clear understanding of the required regulatory outcomes or functions. In the case of economic regulation the functions are typically the following:

* Limiting water services tariffs to no more than reasonable levels
* Setting and enforcing minimum service standards for water services

As outlined in paragraph 4 above, due to the specific challenges of the water sector in South Africa these regulatory functions should also be extended to include appropriate elements of other aligned/linked regulatory domains such as:

* Drinking water quality standards (Health and Safety)
* Customer coverage (social domain)
* Customer complaints (Consumer Protection)
* Effluent discharge standards (Environmental)
* Asset condition (Technical)

The assessment and decision on a preferred regulatory option or model is in effect a decision on which organisational structures are best suited to perform the specified and required regulatory functions (form follows function). There is no blueprint for this, no prescribed “plug and play” model that can guarantee success if used. International experience has shown that the best regulatory models are those that are developed on a case by case basis to address specific and clearly understood regulatory functions and outcomes, but also incorporate essential elements of “best practice” in regulation.

In this regard it is essential that the different institutional options/models for and economic regulator are assessed against a set of criteria that will provide a reasonable, objective and defensible basis for comparison and selection.

The assessment criteria for the options/models for the most appropriate regulation institutional structure need to include the following:

* Criteria to assess regulatory legitimacy
* Criteria to assess the degree that the regulatory option is aligned to “best practice” and;
* Criteria to assess the fit of the regulatory option to the “market structure” of the sector and its stakeholders

These specific criteria are set out below.

### Regulatory Legitimacy

* Is the action or regime supported by legislative authority [just legislation]?
* Is there an appropriate scheme of accountability?
* Are procedures fair, accessible and open?
* Is the regulator acting with sufficient expertise?
* Is the action or regime efficient?”

### Regulatory Best Practice

* Clear Roles
* Transparency Accountability/Non discriminatory
* Independence/Autonomy
* Participation
* Effective Monitoring and Enforcement
* Minimal Regulation
* Predictability

### Market Structure Fit

* Building on the strengths of current water sector regulatory structures mechanisms and initiatives.
* Progressively building regulatory capacity within the sector institutions.
* Introducing more appropriate separation of roles and responsibilities, reducing conflicts of interest and providing a basis for improved alignment of policy and legislation.
* Accommodating the necessary regulatory scope and mix that is required to ensure that the entire WVC is regulated in an integrated and holistic manner.
* Addressing existing critical regulatory gaps and constraints.
* Ensuring that the regulatory options/models address the existing water sector “market failures” on a priority basis.
* The regulatory option enables “quick wins” to be made.
* Accommodating the regulatory preferences of key sector stakeholders.

## Institutional Options Assessment Tool

The following table sets out the regulatory options against the regulatory criteria discussed above. It is recommended that this table be completed through a consultative process with key DWA officials.

Table 6.1: Regulatory Criteria Assessment Tool

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CRITERIA** | **Option 1**  **( Inside Branch)** | | | **Option 2 (Government Component)** | | | | | **Option 3 (External Regulator** | | |
| **Degree of Alignment ( Y-yes, P-partial, N-no)** | | | | | | | | | | |
| **Y** | **P** | **N** | | **Y** | **P** | **N** | **Y** | | **P** | **N** | |
| **Regulatory legitimacy** |  |  |  | |  |  |  |  | |  |  | |
| Is the action or regime supported by legislative authority |  |  |  | |  |  |  |  | |  |  | |
| Is there an appropriate scheme of accountability |  |  |  | |  |  |  |  | |  |  | |
| Are procedures fair, accessible and open |  |  |  | |  |  |  |  | |  |  | |
| Is the regulator acting with sufficient expertise |  |  |  | |  |  |  |  | |  |  | |
| Is the action or regime efficient |  |  |  | |  |  |  |  | |  |  | |
| **Regulatory Best Practice (Do the options address regulatory principles?)** |  |  |  | |  |  |  |  | |  |  | |
| Clear Roles |  |  |  | |  |  |  |  | |  |  | |
| Transparency Accountability/Non discriminatory |  |  |  | |  |  |  |  | |  |  | |
| Independence/Autonomy |  |  |  | |  |  |  |  | |  |  | |
| Participation |  |  |  | |  |  |  |  | |  |  | |
| Effective Monitoring and Enforcement |  |  |  | |  |  |  |  | |  |  | |
| Minimal Regulation |  |  |  | |  |  |  |  | |  |  | |
| Predictability |  |  |  | |  |  |  |  | |  |  | |
| Judicial review |  |  |  | |  |  |  |  | |  |  | |
| **Water Sector Fit (Does the option facilitate?)** |  |  |  | |  |  |  |  | |  |  | |
| Building on existing regulatory capacity and structures |  |  |  | |  |  |  |  | |  |  | |
| Progressively building regulatory capacity within the sector institutions. |  |  |  | |  |  |  |  | |  |  | |
| Introducing more appropriate separation of roles and responsibilities |  |  |  | |  |  |  |  | |  |  | |
| Addressing existing critical regulatory gaps and constraints. |  |  |  | |  |  |  |  | |  |  | |
| Ensuring that the existing water sector “market failures” are addressed on a priority basis. |  |  |  | |  |  |  |  | |  |  | |
| Enables “quick wins” to be made. |  |  |  | |  |  |  |  | |  |  | |
| Accommodates the regulatory preferences of key sector stakeholders |  |  |  | |  |  |  |  | |  |  | |

# Conclusion

This report has set out the scope and functions of the proposed economic regulator for water, as well as a consideration of three possible corporate forms for the economic regulator. It is proposed that this document is used within DWA to promote discussion on these issues, and to consider the most appropriate corporate form against the evaluation criteria provided. A decision on the most appropriate corporate form will allow the next phase of work to continue to examine the requirements of the preferred corporate form, the most appropriate regulatory mechanisms to be used, and further details to enable DWA to move forward on the decision making process for the establishment of an economic regulator.

1. Economic Regulator Literature Review, Pegasys Strategy and Development (Pty) Ltd,; 29 June 2012 [↑](#footnote-ref-1)
2. The South African interest in the Lesotho Highlands Water Project [↑](#footnote-ref-2)
3. The South African/Swaziland Komati River interests [↑](#footnote-ref-3)