



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

Notes on Draft Water Use Pricing Strategy under the National Water Act

March 2013

WP10465



water affairs

Department: Water Affairs **REPUBLIC OF SOUTH AFRICA**  Status of document: Final

Date of document submission: 29/03/2013

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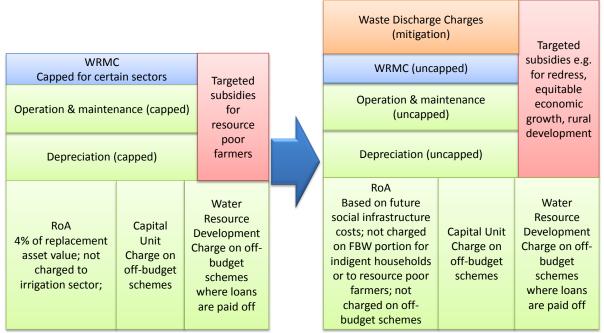
#### BACKGROUND

The Department of Water Affairs (DWA) has put in place a process to review and, where necessary, amend the Pricing Strategy for Water Use Charges under the National Water Act. This document provides some supporting and explanatory notes regarding the draft revised pricing strategy submitted with this document.

Under the Pricing and Economic Regulator Review (PERR) project, an analysis was conducted of the 2007 Pricing Strategy to identify key gaps, challenges and issues that need to be addressed. This analysis was presented to the Pricing Strategy work-stream and the PSC for discussion and recommendations.

This document provides some explanatory notes to support the draft pricing strategy. The numbering of the sections in this document is the same as the numbering in the draft pricing strategy for ease of reference.

The diagram below captures, in summary, the changes between the 2007 pricing strategy and the draft 2013 pricing strategy.



Existing pricing strategy

Proposed pricing strategy

# 1 INTRODUCTION

The introduction has been drafted to explain that this is a draft pricing strategy to be published for comment.

# 2 LEGAL MANDATE

Under the legal mandate two new provisions have been introduced in addition to what was in the 2007 strategy. These relate to the purposes of the water use charges and are:

providing for a differential rate for waste discharges, hereafter referred to as the WDCS, Section 56 (5) to enable the control and treatment of pollution of water resources

enabling the provision of financial assistance and the use of water pricing to support the redress of racial and gender imbalances in access to water and to support the redistribution of water for transformation and equity purposes.

# **3** THE OBJECTIVES THAT SHAPE THE PRICING STRATEGY

There are four overarching objectives that underpin the 2007 raw water pricing strategy. These are social equity, ecological sustainability, financial sustainability and economic efficiency. These still hold true and remain relevant.

However, there is a gap which has been addressed by including a fifth objective: *equitable economic development*. This will ensure that the pricing strategy supports equitable economic development and the use of water as a catalyst or enabled of economic development.

This fifth objective will serve focus attention on how the pricing of water furthers the aims of developing and growing the economy for the benefit of all South Africans. Though the four objectives thus far included address important aspects, none of them quite captures the importance of using water to enable new economic development as part of the process of significantly reducing inequality in South Africa. This principle is clearly in line with national water policy and national government policy in general.

In addition, several principles have been included in the strategy to guide the overall implementation of the strategy. These are:

Polluter pays and user pays

Equity and affordability, and

Take or pay principle.

# 4 CLAIMS ON WATER NOT SUBJECT TO PRICING

The paragraph in the 2007 pricing strategy that referred to the ecological reserve not be subject to pricing has been removed since the WRMC includes costs related to the determination and monitoring of the reserve, and planning and infrastructural costs relating to the provision of the ecological reserve are included under the capital and betterment charges for infrastructure.

#### 5 DEFINTIONS OF WATER USE

The definitions of water use remain unchanged from the 2007 strategy.

#### 5.1 REGISTERED WATER USE/ MEASUREMENT OF WATER USE

Currently the manner in which water use charges are implemented provides a disincentive for unmetered water users to use water efficiently. The current charge calculation set out in the raw water pricing strategy is done by taking the total cost of activities and dividing it by the registered water use volumes or yield – the higher of the two – to arrive at a unit charge. The unit charge is then multiplied by each user's *registered* water use volumes to arrive at the billed figure for each *unmetered* user – largely located in the irrigation sector. This approach incentivises the use of all registered water by irrigators and does not in any way incentivise water conservation or improved efficiency.

The draft pricing strategy advocates the use of registered water use for charging the WRMC for administrative ease and for stability of income, with measured water use being used where possible for abstraction related charges for development and use of government water works. This will serves to encourage more efficient use of water. This, however, requires the introduction of water metering/measuring across those water users that are currently unmetered (largely in the irrigation sector) through the finalisation and implementation of the regulations in this regard.

# 6 OVERVIEW

This section describes the three sets of charges contained in the pricing strategy:

Water Resources Management Charges, which cover the charges required to manage water resources within the nine water management areas determined in the NWRS-2;

Charges relating to the development and use of waterworks, which cover the charges related to planning, capital costs, operation and maintenance, depreciation, and RoA on government water schemes and

Waste Discharge Mitigation Charges which cover the charging for discharge of water containing waste into a water resource or onto land.

# 7 WATER RESOURCE MANAGEMENT CHARGES

The section on water resource management charges contains the following additions/ amendments:

 A clear statement is made that CMAs will not all be financially self-sufficient and that, for various reasons, money from the exchequer will be needed for establishment costs and to support ongoing operational costs in some areas, and for public interest functions that are to be performed by CMAs;

#### 7.1 BUDGETING OF ACTIVITY COSTS

This section is largely unchanged from the 2007 strategy.

# 7.2 WATER RESOURCE MANAGEMENT ACTIVITIES THAT MAY BE TAKEN INTO ACCOUNT FOR CHARGE SETTING INCLUDES

A revised and more detailed table of the activities that may be taken into account for charge setting has been provided.

## 7.3 DETERMINATION OF SECTORAL WATER RESOURCE MANAGEMENT (WRM) CHARGES PER WMA FOR ABSTRACTION RELATED WATER USES

This section remains largely unchanged from the 2007 pricing strategy.

#### 7.4 DETERMINATION OF SECTORAL WATER RESOURCE MANAGEMENT (WRM) CHARGES PER WMA FOR WASTE DISCHARGE RELATED WATER USE

This section has been substantially redrafted in order to simplify it and to take into account that the pricing strategy now includes the waste discharge mitigation charge. The waste discharge WRMC is to be calculated not on the basis of load discharged, as was previously stated, but on the basis of using the volume of waste water discharged. This is intended to simplify the calculation of this charge, recognising as well, that the charge is not sufficient to induce a change in behaviour, but is intended to fund the costs of managing waste discharge issues in the catchment.

It has also been redrafted to state that it will be implemented once waste discharge has been registered, not once compulsory licensing has been completed as per the 2007 strategy.

#### 7.5 OTHER FUNDING ARRANGEMENTS AND LIMITATIONS

Critically, this section under 7.5.1 and 7.5.2 moves from the capped charges approach of the previous pricing strategy to full cost charges for irrigation and forestry with targeted subsidies provided where appropriate. The reasoning behind this approach is that the full funding of the WRM costs must be achieved through a combination of user charges and fiscal support. The current capping of charges allows for a blurring of the augmentation or subsidy from National Treasury that is required to cover the shortfall.

The targeted subsidy approach means that DWA must assess and apportion the full costs, and then, with National Treasury and DAFF, calculate what subsidies are to be provided, to which sectors or parts of sectors, with motivation and an understanding of the rand value of the subsidies and where this money is to come from, be it the fiscus or cross-subsidisation.

The intention, therefore, is to enable a stricter business-oriented approach from DWA that directly balances actual costs, income from users, and income from the national exchequer.

It is proposed that the move from the cap to subsidies takes place over a five year period.

# 8 FUNDING OF WATER RESOURCE DEVELOPMENT AND USE OF WATERWORKS

Substantial changes have been made to the section relating to the funding of water resource development and the use of waterworks.

#### 8.1 GOVERNMENT WATERWORKS

The table outlined the charges that may apply for infrastructure funded under different circumstances has been updated to reflect the new approach.

#### 8.1.1 Operations and Maintenance

The charges for economic regulation have been included under the indirect operations and maintenance costs. This is done on the basis that economic regulation is a critical part of ensuring effective asset management and therefore effective maintenance over time, and it therefore makes sense to include the costs of economic regulation under this charge.

#### 8.1.2 Depreciation/Refurbishment

This section remains largely unchanged.

#### 8.1.3 Return on Assets (ROA)

The approach to the Return on Assets has been substantially revised. The approach contained in the draft pricing strategy is as follows:

- RoA must be related to actual costs of development, betterment or refurbishment of social or public interest works rather than the current 4% rate. This will enable DWA to assess the actual costs, predicted income, and identify any shortfall which will need to be filled with money from the exchequer;
- In order to achieve this, DWA will need to develop a costed ten year capital investment plan for social and public interest infrastructure. In consultation with National Treasury and after consultation with stakeholders, this plan will set out how much of the required funding will come from the RoA and how much from the fiscus. The funding requirements and charges will be divided according to the D&I requirements and the agriculture requirements, and the RoA charges wil be calculated against the volume of water used by each of these sectors resulting in a differential charge for D&I and irrigation.
- The charges will be calculated for a rolling three year period with the second and third year as estimates which can be amended either way within a 5% margin. Any proposed amendment outside this margin will require stakeholder consultation and special motivation to the economic regulator.
- The strategy recognises that this approach can only work if DWA can establish a ring-fenced reserve fund into which the RoA can be deposited and retained to be spent on against a multi-year budget.
- The RoA will not be charged on social schemes or social portions of mixed schemes.

#### 8.1.4 Water resources development charge

This section remains largely unchanged.

#### 8.1.5 Government schemes funded off budget

This section remains largely unchanged.

#### 8.1.6Lump sum user contribution

A section has been introduced that refers to situations where water users pay their capital contribution to infrastructure development or betterment in a lump sum up front and that they will not, in this case, be charged the CUC. They will, however, be responsible for paying the WRDC once any loan has been paid off, or after an equivalent time period if there is no loan. This is in response to water users expressing a desire for this to be a funding option open to them.

#### 8.1.7 Betterments

This section remains largely unchanged.

#### 8.1.8 Methodology in determining unit cost

This section remains largely unchanged except that it specifies that the RoA will not be payable on social schemes or the social portion of mixed schemes.

#### 8.1.9 Phasing in of consumptive charges

This section removes the capping of charges for commercial irrigation and forestry as currently exists, and replaces them with full cost charges supported by targeted subsidies, with this process to be phased in over a five year period.

The reasoning behind this approach is that the full funding of the infrastructure development, betterment, refurbishment and O&M costs must be achieved through a combination of user charges and fiscal support. The current capping of charges allows for a blurring of the augmentation or subsidy from National Treasury that is required to cover the shortfall.

The targeted subsidy approach means that DWA must assess and apportion the full costs, and then, with National Treasury, DAFF and other relevant departments, calculate what subsidies are to be provided, to which sectors or parts of sectors, with motivation and an understanding of the rand value of the subsidies and where this money is to come from, be it the fiscus or cross-subsidisation.

The intention, therefore, is to enable a stricter business-oriented approach from DWA that directly balances actual costs, income from users, and income from the national exchequer.

The time period for which operation and maintenance charges and depreciation charges will be waived for resource poor farmers has been extended to ten years as follows: charges will be waived entirely for five years from the date of registration of the water use. Thereafter the costs will be phased in over five years starting at 20% of the full costs in the first year, 40% in the second year, etc. After this ten year phasing in the charges will be as for commercial farmers. Capital costs for new development for resource poor farmers will be subsidised by the fiscus or through the RoA. This approach has been adopted because the previous five year period was not sufficient to give resource

poor farmers time to establish themselves effectively before being subject to the full water charges. Ten years is considered more realistic.

#### 8.1.10 WUAs as Billing Agents

The draft pricing strategy sets out that WUAs acting as billing agents will be entitled to a 15% management fee to be subtracted from the collected revenue.

#### 8.1.11 Treatment of Reserve Funds

This section remains largely unchanged.

#### 8.1.12 Hydropower

Hydropower power schemes using state owned infrastructure will pay the D&I charges based on the volume of water passing through the turbines, except in the case of pump storage schemes where the charge will be based on the volume of water removed from the system i.e. additional evaporation due to the pump storage scheme over and above normal evaporation from the dam.

#### 8.1.13 Interbasin transfers

A section has been introduced here to state how infrastructure charges will be dealt within in the case of interbasin transfers. Water to be imported via an inter-basin transfer scheme will reduce the potential for generating funds in the donor WMA through water use charges and increase the potential in the receiver area. This loss in income in the donor WMA must be funded by water use charges raised in the receiver WMA. The receiver CMA must reimburse a fixed portion of the infrastructure costs of the donor CMA, based on the yield transferred calculated as a fraction of the total available yield in the donor WMA at 98% assurance of supply, in accordance with the NWRS.

The revenue from the recipient WMA must be paid to DWA which will transfer the money to the TCTA where the scheme has been funded off-budget.

#### 8.1.15 Clearing of Invasive Alien Plants (IAP's)

The full cost of control of certain IAP's will be charged to affected water users where this is the most cost effective solution for making more water available in the catchment. In this regard the DWA or the CMA, in consultation with affected stakeholders, will recommend that the control of IAPs in a particular catchment as necessary for water security and, from the range of options available, the control of IAPs is the best and most cost effective action possible to increase long term water security and availability. Once agreement is reached on the method of control IAPs, and before going ahead with clearing, the total cost of control must be communicated to all affected stakeholder organisations. These costs may be supported by subsidy where available and appropriate.

The agreed upon cost of control will then be allocated to all water user sectors in proportion to their registered abstraction related water use.

#### 8.2 SCHEMES OWNED BY CMA'S AND WUA'S

This section remains largely unchanged.

# 9 ECONOMIC CHARGES (S56 (2) (C))

This section remains unchanged.

# 10 THE WASTE DISCHARGE CHARGE SYSTEM

#### **10.1 THE BASIS FOR A WASTE DISCHARGE CHARGE SYSTEM**

A completely new section has been included here which sets out the proposed waste discharge system for the mitigation charge.

The WDCS will be applied at a catchment level, not necessarily at a Water Management Area (WMA) scale. The catchment area will be defined as those areas that have a significant impact on or are impacted by the specific water quality problem. This may therefore be an entire catchment in which a wide-spread water quality problem exists or may be a sub-catchment within a larger basin, which is bounded by reservoirs and/or sub-catchments with insignificant contaminant loading. The potential impact of waste disposal on groundwater resources is recognised, but the WDCS will only be applied to groundwater resources in a future edition of the pricing strategy.

The WDCS may be implemented in catchments for which Resource Quality Objectives (RQOs) are either exceeded or threatened. In the absence of a class and associated resources quality objectives (RQO), Resource Water Quality Objective (RWQO) will be refined and set as part of the WDCS implementation in that catchment. The setting of RWQO must be through a process of consensusseeking amongst waste dischargers, water users and other relevant stakeholders, with the public trust placing the responsibility on Government to make sure that environmental interests are represented.

The Waste Mitigation Charge is a user charge established in terms of the pricing strategy to recover the costs of mitigating the impacts of waste discharge on the surface water resources. It is intended for application where mitigation measures provide an economically efficient approach to support the achievement of resource (water) quality objectives in a catchment, in comparison to the costs of waste discharge reduction at source. It must be planned, developed and implemented in terms of a water resources management (and rehabilitation) plan developed to address a water quality problem in a catchment.

#### **10.2 PRINCIPLES FOR THE WASTE MITIGATION CHARGE**

The following principles apply to implementation of the Waste Mitigation Charge in terms of the WDCS.

- The Waste Mitigation Charge will be based on load discharge as it avoids the dilution of effluent to avoid cost reduction.
- A constant charge rate will be applied to the waste discharge load, and will not vary against concentration.
- Only registered waste discharge related water use in terms of Sections 21 (e), (f), (g), and (h) of the NWA will be liable for waste mitigation charges.
- Government will be responsible for the costs associated with load that cannot be charged to registered water users.
- The load or concentration associated with the intake of water supplied to the discharger may be deducted from the waste discharge charge.

- The WDCS may be applied to all discharges contributing to the load in an upstream catchment where downstream resource quality objectives are threatened or exceeded, even where incremental upstream resource quality objectives are met.
- The mitigation measures and thus the associated waste discharge charges may be phased in to enable planning by dischargers and to allow adaptive setting of charges as conditions change.
- Minimum load thresholds for charging may be specified on the basis of administrative cost considerations.

# **10.3 CALCULATING THE MITIGATION CHARGE RATE**

The Waste Mitigation Charge for:

- Registered point source dischargers will be calculated as the product of the Waste Mitigation Charge rate and the monitored (or registered) waste load from that point source.
- Registered discharge or disposal to land or facilities (representing non-point sources) will be calculated as the product of the charge rate and a proportion of the monitored (or estimated) waste discharge or disposal – related to the source management system.
- For the (DWA) government contribution related to other non-registered nonpoint sources will be the product of the charge rate and the total remaining nonpoint sources load in the catchment.

#### **10.4 INSTITUTIONAL ARRANGEMENTS**

Setting, collection and disbursement of Waste Mitigation Charges are the responsibility of the catchment management agency (CMA) in terms of the WDCS business plan developed in consultation with stakeholders. The DWA acts as the CMA in water management areas in which the CMA is not yet established and functional. This must comply with the requirements of the Public Finance Management Act and this Pricing Strategy, and should align with the Catchment Management Strategy, where this has been established.

#### **10.5 IMPLEMENTATION OF THE WDCS**

The Waste Mitigation Charge will be implemented from 2015/16 financial year, after testing the system during the 2013/14 financial year. The WDCS will be applied in suitable priority catchments throughout South Africa, where resource water quality objective are not being met or are threatened.

# 11 APPLICATION OF PRICING STRATEGY TO DIFFERENT CATEGORIES OF WATER USE/USER SECTORS

#### **11.1 SUMMARY OF WATER USE CHARGES PER SECTORS**

The summary of water use charges per sector in this section has been updated to reflect all of the changes outlined above.

In the section on drought charges, a clause has been introduced that "When less that 50% of water is available, DWA will approach National Treasury for the shortfall in income to be recovered from the fiscus."

#### **11.2 NATURAL DISASTERS**

This section remains unchanged.

#### **11.3 PURCHASE OF "EXTRA WATER"**

This section remains unchanged

#### **11.4 INTEREST ON ARREAR WATER CHARGES**

This section remains unchanged.

#### **12 MULTI-YEAR CHARGES**

A section has been introduced setting out that the Department of Water Affairs and CMAs will introduce with the implementation of this Pricing Strategy a system of multi-year charges. Charges will be set for a period of three years. For the first three years, these charges will be reviewed annually on a rolling-three year basis to ensure that the mechanisms and tools work effectively. Thereafter, i.e. in year four after the implementation of this strategy, the charges will be set for three years, with the first year fixed and the outer years subject to up to 5% variation. Should a greater than 5% variation be required DWA or the CMA will need to provide substantive motivation to the economic regulator, and water users.

The implementation of the economic regulator for water will assist to ensure that these charges are appropriate.

#### **13 TRANSPARENCY AND ACCOUNTABILITY**

In establishing the pricing strategy, every attempt will be made to control costs by the application of sound financial management principles such as strict budgetary control. The revised pricing strategy embraces the principle of transparency, which of itself should promote cost control.

In terms of this principle, the forthcoming three-year sectoral charges that are developed during the budgetary process for each water management area will be forwarded to regional offices for dissemination and discussion with interested parties. Final sectoral charges will then be formalised

and disseminated through the accounts receivable system to the water users prior to the commencement of the financial year and in accordance with the multi-year charges process outlined above.

# 14 IMPLEMENTATION DATE

This section will be drafted once consultation has been completed and the final pricing strategy is ready for publication.

#### **15 NATIONAL OR SYSTEM CHARGES**

This is not a section contained in the pricing strategy, but is a note on a question that has been raised as to whether there should be one national charge for raw water use, along the lines of the Eskom tariff. There are two other approaches that can also be considered, one being the current scheme-based approach, and the other being the possibility of using system based charges.

In this regard, some analysis has already been done on the relative merits of the three approaches to setting tariffs as contained in Appendix A. The result of this analysis is that the approach in the 2007 pricing strategy, of using a combined schemes based and system based approach has been continued, without the adoption of a national tariff, except for the calculation of the RoA which would be based on a national tariff for D&I and a national tariff for irrigation.

# **16 APPENDIX A: NATIONAL OR SYSTEM CHARGES**

# National vs System Charges

#### **1** INTRODUCTION

The Department of Water Affairs (DWA) is in the process of reviewing the pricing strategy for raw water use charges as per the requirements of the National Water Act. As part of the review process that is now underway, discussion has begun on the merits and demerits of a national water charge and those of a system level water charge. The pricing strategy as it currently stands allows for operation and maintenance (O&M), the capital unit charge (CUC), depreciation, return on assets (ROA) and economic charges to be recovered on a scheme or system basis.

The purpose of this document is to outline some of the advantages and disadvantages associated with each of the two levels at which the charges could be set.

# 2 ADVANTAGES

#### 2.1 NATIONAL TARIFF

A nationally administered tariff is one that is determined and applied on a national scale with total costs of the country's water infrastructure divided by the total water use volumes. This tariff can take on a number of forms – a single national tariff, a sector specific national tariff or charge specific tariffs. What we find is that each of those approaches yields a different figure for the national tariff because it is dependent on the water volumes and the costs associated/assigned to each unit of analysis.

#### 2.1.1 Easier to Administer

Regardless of which approach to the national tariff is chosen, the use of a national tariff result in a reduced level of complexity in terms of tariff calculation, billing and assignment of tariffs to the correct users.

#### 2.1.2 Increased Cross-subsidization

Due to the fact that everybody pays the same tariff, schemes that formally had tariffs above the national tariff get cross-subsidised by those who would have been previously been paying tariffs below the national tariff. Although cross-subsidization usually refers to the practise of charging one group higher prices in order to subsidize lower prices for another, in the case of a national tariff it is done by charging users with higher costs the same tariff as users with lower costs. This can be positive if those who get cross-subsidized are formally disadvantaged and could not afford their scheme specific tariffs.

#### 2.2 SYSTEM TARIFF

A system tariff is one that is administered to all users within a pre-defined water system comprising of various schemes which ultimately form a single water supply system however so defined. This tariff is designed such that the total cost of all the schemes is summed as one and divided by the total capacity of that system. This tariff can also be a single system tariff for all users, be apportioned by water use sector or by differing charges.

#### 2.2.1 More Cost Reflective

The principle of user pay supports the idea of horizontal equity, which states that those in similar wealth and income positions should be treated equally by the tax system. The basic idea is that those who do not use a service should not be obligated to pay for it. This principle works perfectly with the consumption of private goods whose benefits and costs can be exactly determined and separated. With public goods this is more difficult to do. However, there is always an attempt to align costs and benefits as closely as possible. A system level tariff tends to be a closer approximation of costs directly attributable to users than a national tariff.

#### 2.2.2 Increased Water Use Efficiency

Accurate market signals lead to efficient market outcomes. Prices and tariffs serve as market signals that inform/impact on market outcomes. The close alignment of system tariffs to user attributable costs makes these a better market signal for efficient allocation of water as a resource than a national tariff. The fact that the system level tariff more closely reflects the true cost of delivering water to the end user is what makes it result in more efficient water use.

#### 2.2.3 Improved WCDM

Water Conservation and Demand Management is an important component of the South African water sector because of the low average rainfall. The closer a tariff reflects both the costs of water delivery and the water usage the more likely it is to lead to improved WCDM. The system tariff better reflects user attributable costs and can therefore lead to improved WCDM.

#### 2.2.4 Reduces Economic Distortions

Although neither the national nor the system tariff reflects the true economic value of water, one (the system tariff) is a better representation of the value of water than the other (the national tariff). In order for tariffs and/or prices to not distort economic outcomes they need to accurate representations of the economic values of the goods and services for which they generated for. They need to reflect the scarcity values, the productive usefulness and the presence or lack of close substitutes for the good or service among other things. The price which most closely reflects all these leads to fewer distortions. The system level tariff is a better representation of the above than the national tariff.

#### 2.2.5 Decreased Cross-subsidization

In comparison to the level of cross-subsidization that occurs when a national tariff is in place, the cross-subsidization that occurs with a system level tariff is of a reduced nature. If a single charge is applied to all users across a pre-defined system that comprises of a number of different schemes there will be cross-subsidization, however the number of subsidised users and the amount of money involved will likely be reduced. This can be an advantage if the people that benefit from the cross-

subsidization can afford to pay the full cost and are therefore being subsidized by the poor and indigent.

# **3 DISADVANTAGES**

# 3.1 NATIONAL TARIFF

#### 3.1.1 Less Cost Reflective

A national tariff effectively disregards user specific costs and focuses on ensuring equality among users. Due to the fact that all users pay the same tariff, the tariff does not reflect the actual cost of delivering water to the users "individually". Reduced cost reflectiveness impacts on water use efficiency and WCDM.

#### 3.1.2 Decreased Water Use Efficiency

The reduced cost reflection will likely lead to decreased water use efficiency due to the inaccuracy of the market signal that the national tariff will be.

#### 3.1.3 Increased Demand Requiring Increased Capacity

The fact that a national tariff reduces the cost reflectiveness of the water tariff could lead to a major distortion in the water demand patterns in the country if billing was to be done based on water use volumes instead of registered volumes. The majority of users whose tariffs would be decreased as a result of a shift to the national tariff would likely demand more water than they did before for the various activities they use the water for. Though the profile of users whose tariffs are likely to decrease if a national tariff was implemented remains unknown, this is a potential negative impact of the national tariff that must be stated. Increased demand could result in the desire for increased capacity within the water sector which would require funding.

#### **3.1.4** Potentially Subsidises Larger Consumers

The level of cross-subsidisation with a national tariff is higher than at all other levels at which the tariff could potentially be set. What is unclear is which way that subsidization will align. There is a possibility that users in poor areas who were previously paying low tariffs as a result of the type of scheme they had in place could end up subsidizing economically well-off users who had big schemes in place before the tariff. The use of one tariff ignores scheme level costs, and therefore becomes blind to the type of user being charged. This could have a very negative impact on the ability of poor users to afford the tariffs.

#### 3.2 SYSTEM TARIFF

#### 3.2.1 Increased Administration

Given that the number of systems is yet to be determined, it is yet unknown just how many different tariffs would likely be put in place. However, given that there is no national grid that could be taken a single national system, it is safe to assume that there administration of a system level tariff will be involved an increased level of administration. The calculation of multiple tariffs and the associated processes of accurate billing, delivery and collection involves more administration than that of just one.

#### 3.2.2 Decreased cross-subsidization

In comparison to the level of cross-subsidization that occurs when a national tariff is in place, the cross-subsidization that occurs with a system level tariff is of a reduced nature. If a single charge is applied to all users across a pre-defined system that comprises of a number of different schemes there will be cross-subsidization, however the number of subsidised users and the amount of money involved will likely be reduced. This is can be a disadvantage if the users that get subsidised with a national tariff are the poor and indigent. Reducing the level of cross-subsidisation therefore results in more of the poor having to pay for their costs.

#### 4. **RECOMMENDATION**

Arising from the above analysis it is clear that adopting a national tariff does not necessarily benefit historically disadvantaged or poor communities, but may increase costs to some such communities, while decreasing costs to some advantaged communities, and vice versa. It is, therefore, not an appropriate tool to ensure affordability of water to historically disadvantaged and marginalised communities. A more effective tool to achieve this is the introduction of clear and targeted subsidies as proposed in the drafting pricing strategy.

It therefore recommended that the approach of using either scheme or system based tariffs, with appropriate subsidies provided to ensure affordability and inclusive economic development is adopted rather than the use of a national tariff.