Regulatory Manual for the Tariff Years 2015/16 – 2017/18

Contents

Section		Page
	Abbreviations	**3**
1.	**Introduction**	**4**
2.	**The Regulator's Mandate**	**6**
3.	**Special notes on Compliance with the Directives, Regulations and National Ports Act**	**7**
4.	**The Multi-year methodology in context**	**10**
5.	**Tariff methodology overview**	**11**
6.	**Components of the Tariff Methodology**	**12**
6.1.	**Regulatory Asset Base**	**12**
6.2.	Calculation of the Regulatory Asset Base	**12**
6.2.1.	Depreciation	**13**
6.2.2.	Inflation trending	**13**
6.2.3.	Capital Works in Progress (CWIP)	**13**
6.2.4.	Working Capital	**13**
6.3.	**Weighted Average Cost of Capital (WACC) - Vanilla WACC**	**14**
6.3.1.	Cost of Equity	**14**
6.3.1.1.	Risk Free Rate	**14**
6.3.1.2.	Market Risk Premium	**15**
6.3.1.3.	Beta	**15**
6.3.1.4.	Gearing	**15**
6.3.2.	Cost of Debt	**16**
6.4.	**Taxation**	**16**
6.5.	**Operating Costs**	**16**
6.6.	**Claw-back**	**18**
6.7.	**Excessive Tariff Increase Margin Credit (ETIMC)**	**20**
7.	**Volume forecast**	**20**
8.	**Introduction of efficiency incentive**	**20**
9.	**Tariff application submission dates**	**21**

Abbreviations

AFS	Annual financial statements
CAPEX	Capital Expenditure
CAPM	Capital Asset Pricing Model
CPI	Consumer Price Index
CWIP	Capital Work in Progress
BER	Bureau of Economic Research
DIA	(old) Durban International Airport site
DMS	Dimson, Marsh and Staunton
DORC	Depreciated Optimised Replacement Cost
ETIMC	Excessive Tariff Increase Margin Credit
FY	Financial Year
IFRS	International Financial Reporting Standards
JSE	Johannesburg Stock Exchange
MRP	Market Risk Premium
NPA	National Ports Authority
NPCC	National Ports Consultative Committee
OPEX	Operating Expenses
PCC	Ports Consultative Committee
RAB	Regulatory Asset Base
RFR	Risk Free Rate
ROD	Record of Decision
RR	Required Revenue/Revenue Requirement
TOC	Trended Original Cost
TOPS	Terminal Operating Performance Standards
WACC	Weighted Average Cost of Capital
WC	Working Capital

1. Introduction

This Regulatory Manual outlines the mandate of the Ports Regulator of South Africa (the Regulator), the regulatory framework governing the National Ports Authority's (the Authority/NPA) tariff setting process and matters relating to compliance of the NPA with the Regulatory Framework.

Prior to the 2014/15 tariff application, the Ports Regulator issued a tariff manual for the 2014/15 tariff year after considering the NPA's proposed tariff methodology as well as the submissions received from interested parties.

Significant strides have been made since the first Regulatory decision and the determination of a multi-year tariff methodology is yet another step in this process towards regulatory certainty. Whilst retaining the fundamental elements of previous determinations, the present tariff methodology will be multi-year in its approach, applicable to the 2015/16-2017/18 tariff years, with the aim of continued improvement in the level of transparency and consistency in the tariff setting process.

The Regulator has allowed for an annual review and an annual adjustment of tariffs within the three year period as opposed to fixing the prices for the period as this protects users from possible large step changes in the tariff. In addition, unlike other regulated industries like electricity or oil and gas pipelines there are large variations in the users and usage of port infrastructure and services and an annual review allows adjustments in prices to be more efficiently and appropriately allocated/distributed to users than an adjustment after three years.

The guidelines within this document will assist the NPA in submitting an application that will reduce regulatory uncertainty by narrowing the difference between what is requested by the NPA and subsequently granted by the Regulator. It also assists stakeholders in formulating responses to the NPA tariff application in a manner that will assist the Regulator in its decision making. The Regulator will, after assessing the NPA application and taking into account all public comments, publish a Record of Decision (ROD) with a fixed tariff for the 2015/16 tariff year and indicative tariffs for the 2016/17 and 2017/18 tariff years. The Regulator is of the view that this will create greater certainty from a planning and investment perspective, both for the NPA as well as for port users over the next three years. The Regulator believes that this provides the necessary certainty and space for adjustments until most of the elements of the tariff structure have matured and settled.

The approach decided upon is based on the Revenue Requirement (RR) methodology and the building blocks are set out in detail below. The Regulator, while attempting to increase regulatory certainty, must retain a degree of regulatory discretion to respond to unforeseen economic or other events, as well as anomalies and unintended consequences of a strict and autonomic application of the methodology that may impact on the sustainability of the South African Ports system. This is especially relevant to a multi-year tariff determination process and has been captured in the sections that follow.

2. The Regulator's Mandate

The Regulator's approval is required for the tariffs charged for services and facilities offered by the NPA in accordance with the Ports Act.

In terms of the National Ports Act, Act 12 of 2005 and the Directives of 2009 promulgated in terms of section 30(3) of the Act as amended in 2010, the NPA must submit an application on the tariffs it proposes to charge for services and facilities that it offers, to the Regulator for approval. The Act, Regulations and the Directives constitute the South African ports' economic regulatory framework. The South African ports economic regulatory framework, amongst others things, makes provision for a transparent tariff setting process with port users' consultations as a key requirement.

On an annual basis the NPA submits an application and the Regulator will consider the application and all subsequent submissions, written and oral comments received in the consultation process, including the responses thereto, and its own information and research.

In this regard it should be noted that the Ports Regulator has promulgated Directives in terms of section 30(3) of the National Ports Act (Government Notice 825, Gazette No. 32480, 6 August 2009). These were amended in the Directives Amendment Notice, promulgated in Government Notice 37, Gazette No. 32898, 29 January 2010.

The Regulator is also in the process of formulating a long term Tariff Strategy which is envisaged to be completed within the 2014/15 tariff year. Future tariffs from 2016/17 onwards may be adjusted in accordance with the outcome of the consulted and adopted tariff strategy.

Since economic regulation started with the 2009/10 tariff approval, the Regulator has issued an annual ROD for each application year in which an assessment of the NPA's compliance with the Regulatory framework has been made with an outline of corrective action required. These are discussed below as they will still apply over the tariff period.

3. Special notes on Compliance with the Directives, Regulations and National Ports Act

3.1. The following issues arising from previous Records of Decision are highlighted below and need to be addressed in this application:

3.1.1. Directive 22(3)(a) requires that the application sets out the manner in which the tariffs have been calculated and the financial model used, including the calculation of volume forecasts. The NPA did not fully adhere to this requirement in past applications, although increased engagements between the Regulator and the NPA have served to clarify uncertainties in the application. However, this requirement has to be met in this and subsequent applications. The Regulator provides an opportunity for the NPA (or any other party) to submit information marked as confidential to be treated as such in terms of section 30(3) of the National Ports Act and section 25 of the Directives.

3.1.2. Directive 22(3)(b) requires that all operating costs, expenses and revenues incurred or generated by a port service or port facility, as well as the value of the capital stock related to such services or facilities are declared in the application. In previous applications the NPA did not break down their application to the extent required by the regulatory framework. Capital Expenditure (CAPEX) programme information has previously not been provided with the level of detail necessary to make accurate assessments on these matters.

3.1.3. Despite extensive engagement in the Ports Consultative Committees (PCCs) and the National port Consultative Committee (NPCC), the Regulator requires a higher level of detail in the information provided, in particular with respect to what impact individual projects will have on throughput, efficiency, pricing, and revenue and what the demand case is for such projects. This is now applicable to the full period of the three years under consideration, as indicative average tariffs will be calculated and published for the outer years.

3.1.4. Directive 22(3)(c) requires that the amounts to be invested and revenues that are to be utilized in port development, safety, security and environmental protection must be provided; as well as the manner in which these tariffs will affect the cost of doing business in the ports.

3.1.5. Directive 22(6) requires that the NPA shall maintain such accounting and financial systems that are necessary to provide the Regulator with sufficient information to verify the pricing principles, models and information used by the NPA to calculate tariffs.

3.1.6. Directive 23(1) requires that the Regulator must consider whether the requested tariffs reflect and balance a range of considerations:

I. 23(1)(a) - ***a systematic tariff methodology that is applicable on a consistent and comparable basis***. The NPA has submitted a Tariff Strategy that aims to address this shortcoming. Included in this is their acknowledgement that their current pricing structure as articulated in the current tariff book is flawed. The Regulator will in due course issue guidelines that address the immediate responses that will be required in the implementation of the tariff strategy.

II. 23(1)(b) - ***fairness***. The Regulator will provide guidance to the NPA in order to attempt to address the concerns through finalisation of the Tariff Strategy.

III. 23(1)(c) - ***the avoidance of discrimination, save where such discrimination is in the public interest***. As in the clauses above, although there are certain flaws in the tariff structure, the processes related to the tariff strategy will address these concerns.

IV. 23(1)(f) - ***the avoidance of cross-subsidisation, save where in the public interest.*** The comments with respect to the Tariff Strategy have reference under this provision.

V. 23(1)(g) - ***promotion of access to ports and efficient and effective management and operation of ports***. The information provided in previous applications was not sufficient to determine the performance under this provision. Although this was not clearly articulated in past applications, the internal processes of the NPA and the engagement by the NPA in the PCCs addresses some, but not all, of the concerns that arise under this provision. Specific rules for filing, information requirements and information standards shall be engaged in due course.

3.2. Further specific concerns stemming from previous applications:

3.2.1. Detailed estimations of any internal transfers or payments within the Transnet group that affect the NPA are required. For example, calculation of the benefit that is gained by Transnet (or any of its other operating divisions) from NPA cash that is held by Transnet during any tariff period is required.

3.2.2. A review of the NPA's depreciation policies and their compliance to regulatory norms is required. Although the financial accounting policies may be correct, in certain areas (depreciation included) the Regulator may require the information to be reported on a different basis from the established accounting practice of the regulated entity.

3.2.3. Clarity on the cash holdings and resulting benefits must be provided and fully accounted for.

3.2.4. The annual CAPEX projections of the NPA over the seven year cycle must be better articulated and tied to demand and traffic forecasts as articulated in paragraph 5.1.2 and in line with Directive 22(3)(b) where applicable.

3.2.5. The applicant in past applications only included high level data on the real estate business. The data was adequate for purposes of calculating the tariff level. However, the requirement of the Regulator as stated in the 2011/12 ROD is that full disclosure is required for all NPA business – i.e., both the Marine and the Real Estate business. The real estate information should be provided to a similar level of detail as is provided for the marine business of the NPA. This must be addressed in the 2015/16 and subsequent applications.

4. The multi-year methodology in context

The “multi-year” tariff methodology in this instance refers to the calculations of tariffs for the period 2015/16 - 2017/18 based on a single methodology.

The Regulator will publish a tariff determination applicable to the 2015/16 tariff year and indicative average tariff changes for the subsequent two tariff years will be published on a rolling annual basis and may continue beyond the current three year period subject to the adoption of the proposed tariff strategy and review of this methodology. In this respect a ROD after public consultation (as has been the established practice by the Regulator) will be published in each year.

The multi-year tariff application will have different calculations for each tariff year in the tariff period, consisting of forecasts and calculations of each of the components of the RR approach. Annual adjustments to the values of the components will be taken into account through a claw-back (or give-back) mechanism as discussed in section 6.6.

The NPA will publish a revised tariff book of all prices reflecting the decisions of the Regulator as set out in the Record of Decision, for the first year of each rolling multi-year period. In addition, the NPA is required to submit as part of the application any proposed changes to the existing tariff book that will reflect increases (or decreases) different from the average tariff increase applied for.

5. Tariff methodology overview

The Required Revenue (RR) approach has been used in the past by the Regulator for determining the tariff amendments in response to the NPA's annual tariff applications since the inception of the current regulatory regime. The Regulator has decided, for the 2015/16-2017/18 financial years, to continue with this approach. The formula for the RR methodology is as follows:

$$\begin{aligned}&\mathit{Revenue\ Requirement}\\&\qquad = \mathit{Regulatory\ Asset\ Base}\ (\mathit{RAB}) \times \mathit{Weighted\ Average\ Cost\ of\ Capital}\ (\mathit{WACC})\\&\qquad + \mathit{Operating\ Costs} + \mathit{Depreciation} + \mathit{Taxation\ Expense} \pm \mathit{Clawback}\\&\qquad \pm \mathit{Excessive\ Tariff\ Increase\ Margin\ Credit}\ (\mathit{ETIMC})\end{aligned}$$

The above formula reflects a standard building block approach to setting the revenue requirement of a regulated service provider and has been used in a similar way in all previous tariff determinations. This approach accords with rate-of-return revenue requirement calculations by Regulators in South Africa and internationally (as modified in the ports regulatory practice over time) and has been used as the basis for assessments by the Regulator in the preceding applications.

The methodology requires that the NPA estimate its operating costs, depreciation, tax expense and return on capital (a product of the weighted average cost of capital and the value of assets in the Regulatory Asset Base (RAB) for the period under review).

In addition the methodology provides for a claw-back mechanism that corrects for over or under recoveries in previous tariff periods, as well as the excessive tariff increase margin credit (ETIMC). The ETIMC mechanism allows for large increases in required revenue and/or tariffs that may arise from volume volatility or substantial capital expenditure programmes in future years to be partly offset by moderately higher tariff increases in the short-term.

The standard exposition of the Revenue Requirement approach is:

RR = (v – d + w)r + D + E + T ± C ±ETIMC

Where:

RR	=	*Revenue Requirement*
v	=	*Value of the assets used in the regulated services*
d	=	*Accumulated depreciation on such assets*
w	=	*Working capital*
r	=	*Regulated return on capital*
D	=	*Depreciation accounted for in the period of the tariff*
E	=	*Operating costs*
T	=	*Taxation expense*
C	=	*Claw-back*
ETIMC	=	*Excessive Tariff Increase Margin Credit*
(v – d + w)	=	*Regulated Asset Base*

6. Components of the Revenue Required Tariff Methodology

6.1 Regulatory Asset Base (RAB)

The RAB represents the value of assets that the NPA is allowed to earn a return on. As the return earned on these assets is expressed in real terms, the value of total assets in the RAB is indexed to inflation each year - the Trended Original Cost ("TOC") approach. Each year, estimated capital expenditure and depreciation is added to the closing balance for the previous year to arrive at an updated closing balance for the current year. The expected working capital balance is added to arrive at a total RAB estimate, which is averaged over the year to account for the progressive spending of capital works in progress (CWIP) over the period.

6.2 Calculation of the RAB

In the previous tariff determinations, the Regulator accepted the Depreciated Optimised replacement Cost (DORC) method used by the applicant in certain assets to determine a starting RAB. The Regulator did state, that it had a low level of confidence in the RAB determined through the 2008 DORC method, which gave rise to a steep increase in the asset values, but regulatory certainty was required in the absence of any alternative. The Regulator retains these concerns and has commenced a process to assess the application and appropriateness of these valuations for major assets to inform subsequent assessments of RAB.

The Regulator has previously determined that the 2010/11 ROD value establishes the starting point for trending the RAB in future tariff determinations. Nonetheless, the Regulator applied a number of adjustments to arrive at an opening balance for the 2013/14 financial year and a subsequent calculated and updated closing balance of R62 888 million for the 2013/14 financial year. The Durban Internal Airport (DIA) site purchase price remains excluded, as the site has not been **legislatively** incorporated and established as a port within the ambit of the National Ports Act. This approach will remain in place until such time as the legal status of the DIA changes.

The RAB value for the period under review may be determined using the following formulas:

$$RAB_y = \frac{1}{2}\left[RAB_{c,y} + RAB_{o,y}\right] + w_y$$

$$RAB_{c,y} \;=\; RAB_{o.y}(1 + CPI_Y) + CWIP_Y - D_y$$

Where:

RAB_{y}	=	*value of the RAB used to determine the returns for the period y*
$RAB_{o,y}$	=	*opening value of RAB for the period y*
$RAB_{c,y}$	=	*closing value of RAB for the period y*
w_y	=	*forecast average net working capital over period y*
$CWIP_Y$	=	*value of expected capital investment over the period y*
D_y	=	*depreciation allowance for assets over the review period y*
CPI_Y	=	*annual rate of general inflation expected over the period y*

6.2.1 Depreciation

In order to satisfy the principle of financial capital maintenance to fully take into account capital expenditure and inflation, the following formula should be used in the calculation of depreciation:

$$Depreciation = (RAB_{(o,y)} + (RAB_{(o,y)}.CPI_{(y)}) + (Capex_{(y)}/2.CPI_{(y)}))/40$$

6.2.2 Inflation trending

The inflation rate for calculating the trend in the value of assets will be the Consumer Price Index (CPI) forecast for each FY during the tariff period as at the latest forecast published by the National Treasury, which if unavailable by the time of calculation will be substituted with the latest reputable forecasts from leading independent institutions such as the Bureau of Economic Research (BER). The same inflation rate will be used in the calculation of the weighted average cost of capital.

6.2.3 Capital Works in Progress (CWIP)

Detailed projections for the tariff period, including tariff year 2014/15, per asset class, service and project as well as monthly planned expenditure schedules must be provided to motivate the CWIP to be included in the RAB. All capital expenditure approved and not fully implemented will be taken into account as part of the claw-back process and the RAB and its return adjusted accordingly.

6.2.4 Working Capital

The estimate of working capital, equates to the actual *net* working capital as per the latest available NPA annual financial statements (not the change in working capital as per previous applications), consisting of accounts receivable plus inventory less accounts payable (i.e. operating cash is excluded), adjusted by forecast volume growth and CPI inflation for the following year. In addition, CWIP *payables*, which are estimated at 1/12th of the capital expenditure projected for that year is included. Volume and CPI forecasts used in the calculation of outer years' working capital will be updated as and when these numbers become available as part of the claw-back mechanism.

6.3 Weighted Average Cost of Capital (WACC) - Vanilla WACC

In general, the WACC represents the risk adjusted opportunity costs of capital and is the minimum return for an investment in order to continue to attract capital, given the risks.

A real WACC (the cost of equity and the cost of debt) will be applied and expressed in Vanilla terms (i.e. post-tax cost of equity and pre-tax cost of debt). Accordingly, a separate allowance for tax expense in the revenue requirement formula is required.

$$\boldsymbol{WACC_{vanilla} = k_d \cdot g + k_e(1 - g)}$$

Where:

k_d = *pre-tax cost of debt*
k_e = *post tax cost of equity*
g = *gearing, which is debt over total capital*

6.3.1 Cost of Equity (k_e)

The post-tax cost of equity is calculated with reference to the capital asset pricing model (CAPM), which is expressed as:

$$\boldsymbol{k_e = r_f + \beta \times MRP}$$

Where:

rf = *Real risk free rate*
B = *Measure of NPA's exposure to market (non-diversifiable) risk*
MRP = *The market risk premium measuring the premium over and above the risk free rate that investors might expect to earn*

6.3.1.1 Risk Free Rate (r_f)

The twenty year government bond is an appropriate measure of the RFR, and, in particular, the R186 bond instrument (yield) as it adequately reflects the market's perception of sovereign risk and inflation going forward. The average RFR is calculated over a five year period (from August 2009 to July 2014 for the first tariff year, August 2010 to July 2015 for the second and from August 2011 to July 2016 for the final tariff year in the period).

The *Real* RFR is deduced by using the Fisher Equation.

$$\mathbf{1} + \boldsymbol{i} = (\mathbf{1} + \boldsymbol{r})(\mathbf{1} + \boldsymbol{E}(\boldsymbol{I}))$$

Where:

i	=	*Nominal rate*
r	=	*Real rate*
E(I)	=	*Expected inflation*

6.3.1.2 Market Risk Premium (MRP)

The MRP is in essence forward-looking and, as such, it cannot be observed but must be forecast. For the tariff period, the Regulator will use the latest available Dimson, Marsh and Staunton (DMS) estimate of the geometric mean MRP as measured against bonds for South Africa to determine an MRP for the NPA cost of equity calculation. The use of the DMS dataset over the full 113 year period requires the use of the geometric mean to better address concerns related to correlation in excess returns and mean reversion.

6.3.1.3 Beta (β)

Because the NPA is not a traded company, there is no beta (β) published reflecting its risk relative to firms listed on the Johannesburg Stock Exchange (JSE). A beta has to be set to reflect the risks faced by the NPA under the RR methodology. This must ensure an appropriate return for the risk faced.

The inclusion of a claw-back mechanism reduces exposure to systematic risk and the existence of an interventionist regulatory regime requires the Regulator to use a Beta substantially lower than large firms listed on the JSE such as the JSE top 40.

For the tariff period covered in this guideline, the Regulator will use the 0.50 asset beta as decided upon and motivated in the previous Records of Decision.

The Hamada equation is used to re-lever the beta resulting in an equity beta of 0.86.

6.3.1.4 Gearing (*g*)

The Regulator, taking into consideration previous applications, previous patterns of variation in the applications, various submissions and its own analysis of the NPA's gearing, determined that an appropriate gearing for the entity for the period is 50%.

6.3.2 Cost of Debt (k_d)

NPA's actual, embedded debt costs should be used to determine the cost of debt applied within the WACC. The average embedded Transnet group cost of debt *(pre-tax nominal)* of Transnet Ltd should be used for the 2015/16 tariff year as no current alternative exists. The NPA is required to submit the initial calculation of the variable as well as revised average embedded debt costs based on the average embedded Transnet group cost of debt on a group level, on an annual basis on 1 September every year following the initial application.

6.4 Taxation Expense (T)

The Regulator will accept the current corporate tax rate of 28% (*t*) for the period. The Regulator will use the pass-through tax approach, where the vanilla WACC will be applied to the average RAB for the period under consideration, less the interest cost of debt and wear and tear, and other tax allowances. The corporate tax rate will be used to determine the tax liability, which will be treated as an expense in the RR calculation as follows:

*Tax allowance = (Net revenue before tax allowance)/(1-t)*t*

"Net revenue before tax allowance" is the revenue after all costs including interest and tax allowances have been accounted for; i.e. it is the net return to equity before being grossed to make allowances for taxation. The calculation of the tax allowance must also reflect the flow of funds related to any claw-back calculated as well as ETIMC allowances to ensure adequate tax cover for the NPA.

Any changes in the corporate tax rate will be taken into consideration as and when required and the claw-back mechanism will adjust the taxation expense as per the Annual Financial Statements (AFS) as these become available.

6.5 Operating Costs

The Regulator will analyse the operating cost estimates for the period on a detailed line by line item basis. The NPA is requested to provide detailed and complete motivation for each of the expenses applied for, especially on large items like labour and energy costs. This will include:

- The number of posts in the approved establishment (organogram)
- Current employees(number and cost)

- Vacant posts (number and cost) as well as the reasons for vacancy rates above 5%
- The percentage of posts of the total for each of the years that have been vacant over the last 5 years(number and cost)
- The split in labour costs between overtime, salaries and bonuses
- The actual remuneration increases granted over the last five years (percentage and value)
- The spread between budgeted and actual labour costs for every year of the last five years
- The value of services/labour that is "purchased" from Transnet group or any of its divisions
- The value of services/labour that is provided by the NPA to Transnet or any of its divisions without recovery of the costs of providing such labour/service
- The split between expenditure on electricity and other kinds of energy (liquid fuels etc)
- All and any information that would allow the regulator and stakeholders to assess the necessity and appropriateness of budgeted expenditure.

The Regulator will only continue to allow the inclusion of the Transnet group costs in the total allowed expenses subject to the requirement that the NPA submits detailed explanations and motivations for the amount to be transferred to the Transnet group. This will be expected on a level of detail that will allow assessment of its necessity, as well as the actual services/goods received, and for which function of the NPA it was utilised. Adjustments may be required on an annual basis if and when the Regulator determines any group cost component to be inappropriate based on audited reports. As such the Regulator will further require that, in line with the 2014/15 ROD, an externally audited financial report (with all supporting documentation and detailed explanations including basis of allocation, services/goods received and policy documents that support such allocation) on all line items that form part of the group costs that have been expended for the first half of the NPA FY be submitted to the Regulator no later than 1 December of the same financial year.

In addition, the NPA shall provide an externally and independently audited financial report (with all supporting documentation and detailed explanations including basis of allocation and policy documents that support such allocation) on all line items that form part of the group costs that have been expended for the NPA FY each year in the year after the close of the financial year or until an alternative methodology or amendment of this methodology is published.

The Regulator reserves the right to claw-back all or any portion of the amount in future tariff decisions, should the Regulator not be satisfied that the expenditure is within the scope and mandate of the NPA, and that the amounts are reasonable, or reasonably allocated to the NPA.

6.6 Claw-Back

The key purpose of applying claw-backs is to ensure that the NPA or any port user is fairly treated and is not subjected to unfair gains or losses that are the result of incorrect forecasting, inaccurate information and system shocks. This includes reducing and sharing risks faced by all port system participants including the NPA. Its main application is to reduce the impact of differences between allowed Revenue (based on a number of forecasts and assumptions) calculated at the time of the tariff application and actual audited figures, to ensure the coherence and integrity of the regulatory regime. The volatility of trade volumes and the difficulty in forecasting imports and exports accurately, presents significant problems, especially as pertains to the prediction of volumes in outer years of a multi-year tariff period.

However, the following variables that will be estimated in line with the regulatory manual, annually, prior to the start of the following tariff year for claw-back purposes are the:

- RAB (including CAPEX)
- Depreciation
- Tax allowance
- Volumes
- Inflation (CPI)

The forecast or estimation of these variables will be conducted annually and actual data will be used in determining the claw-back pertaining to the previous tariff year where the 50% rule will apply and the final claw-back determined in the following year when actual numbers are available.

Illustrative application and claw-back process						
Tariff year	**14/15** (Tariff based on previous one-year methodology)	**15/16** (Tariff based on multi-year methodology)	**16/17** (Tariff based on multi-year methodology)	**17/18** (Tariff based on multi-year methodology)	**18/19** (If multi-year approach is continued)	**19/20** (If multi-year approach is continued)
Process in 14/15 pertaining to future tariff years	Provisional claw-back for 14/15 calculated Total claw-back for 13/14 calculated	Fixed tariff for 15/16 calculated and published Tariff to include finalisation of Claw-back for 13/14 and 50% of provisional claw-back for 14/15	Indicative tariff for 16/17 calculated and published including 50% of provisional claw-back for 14/15	Indicative tariff for 17/18 calculated and published		
Process in 15/16 pertaining to future tariff years	Total Claw-back for 14/15 calculated	Provisional Claw-back for 15/16 calculated	Fixed tariff for 16/17 calculated and published. Tariff to include finalisation of total claw-back for 14/15 as well as 50% provisional claw-back for 15/16	Indicative tariff for 17/18 calculated and published Tariff to include 50% provisional claw-back for 15/16	Indicative tariff for 18/19 calculated and published	
Process in 16/17 pertaining to future tariff years		Total Claw-back for 15/16 calculated	Provisional Claw-back for 16/17 calculated	Review of Tariff methodology published and Fixed tariff for 17/18 calculated and published. Tariff to include finalisation of total claw-back for 15/16 as well as 50% provisional claw-back for 16/17	Indicative tariff for 18/19 calculated and published Tariff to include 50% of provisional claw-back for 16/17	Indicative tariff for 19/20 calculated and published
Process in 17/18 pertaining to future tariff years			Total Claw-back for 16/17 calculated	Provisional Claw-back for 17/18 calculated	Fixed tariff for 18/19 calculated and published. Tariff to include finalisation of total claw-back for 16/17 as well as 50% provisional claw-back for 17/18	Indicative tariff for 19/20 calculated and published Tariff to include 50% provisional claw-back for 17/18

6.7 Excessive Tariff Increase Margin Credit (ETIMC)

The Regulator regulates in the long term interest of the industry. This requires that the Regulator not only confine itself to the immediate tariff decision, but also considers ways to ease any future shocks to the system. It is generally accepted that capital expenditure may spike at some point in the foreseeable future, but that these projects have not as yet been specified to a level of detail that allows for accurate prediction. In addition, external market related factors such as unexpected (or expected) fluctuations in volumes, inflation, the RFR etc. may also result in significant spikes in the tariff. As such, the Regulator considers it prudent to avoid excessive future tariff changes by retaining and increasing the NPA's Excessive Tariff Increase Margin Credit (ETIMC), to allow the smoothing of unaffordable tariff spikes over multiple periods in the future.

Because the ETIMC is revenue collected from port users before the NPA is entitled to it, it should yield a return for users to compensate them for the opportunity cost of their capital. The ETIMC will therefore earn a return which is equal to the WACC allowed by the Regulator. The return on the ETIMC will be factored into the balance and the calculation of the total available under the ETIMC facility will be published annually.

The Regulator further deems it necessary to define the use of the ETIMC facility in the following way:

The Regulator may authorise the release of part or the whole of the value of the ETIMC facility to influence tariff levels whenever it deems necessary including, but not limited to spikes in tariffs (defined as an average tariff increase in excess of the inflation forecast) due to a sharp increase in capital expenditure, volume volatility, or any market related factor. The Regulator may also consider national objectives in any decision to add to, or to utilise the ETIMC facility to adjust tariffs.

7 Volume forecast

The NPA is required to submit detailed volume forecasts with reasons as well as revenue calculations based on the forecast volumes and current tariff levels as well as proposed tariffs for the period.

8 Introduction of efficiency incentive

The introduction and continued evolution of the Terminal Operator Performance Standards (TOPS) as well as the Marine Operators Performance Standards, is of high interest to the Regulator as the measurement and monitoring role that the system will produce may be used as an input into the tariff system to establish more transparent and concrete incentive targets with benefits to the port owner as well as port users.

The Regulator will continue to monitor progress in this regard and will introduce an efficiency component to the tariff determination when the regulator is satisfied that a credible efficiency monitoring system has been established.

9 Tariff application submission dates

The National Ports Authority will submit its application in line with this manual on 1 September 2014 and on 1 August in subsequent years.

Mrs. Gloria Tomatoe Serobe'

Chairman

Ports Regulator of South Africa