Record of
Decision 2018/19

Tariff Application by the National Ports Authority for the Tariff Years 2018/19-2020/21

- **On 1 August 2017, the National Ports Authority (the NPA) applied to the Ports Regulator of South Africa (the Ports Regulator) in terms of Section 72 of the National Ports Act, 12 of 2005 (the Act) for approval of the tariffs for services and facilities offered by the NPA of an average of 8.45% increase for the period 1 April 2018 to 31 March 2019, together with indicative tariffs for the periods 1 April 2019 to 31 March 2020 and 1 April 2020 to 31 March 2021.**
- **After considering the application and the submissions by all stakeholders during the consultation period, and based on latest available data, the Ports Regulator has concluded that an appropriate overall increase in average tariffs for the financial year 2018/19 is 2.5%.**
- **The Ports Regulator further concluded that all cargo dues for 2018/19 are to increase by 5.4%, except for marine services and related tariffs (Sections 1-8 of the Tariff Book, excluding Section 7 that deals with cargo dues) that are to increase by 8.5%, export bulk coal cargo dues that are to increase by 8.5% and container and all RoRo cargo dues tariffs are to remain unchanged at 2017/18 levels. All break-bulk cargo dues are to be capped at R100/ton.**
- **In line with previous years' decision, all marine tariffs (Sections 1-8 of the Tariff Book, excluding Section 7 that deals with cargo dues) for existing commercial South African flagged vessels as well as commercial vessels registered in South Africa in 2016/17 will receive a 30% discount applicable year on year up to 31 March 2019. Vessels registered in South Africa in 2017/18 will receive a 20% discount up to 31 March 2019 and similarly a vessel registered in 2018/19 will receive a 10% discount up to 31 March 2019. The discount will hereafter be reviewed.**
- **In line with the Multi-Year Tariff Manual of March 2017 the Ports Regulator projects that the indicative overall average tariff adjustment for the 2019/20 and 2020/21 tariff years will be within the 6% inflation target band.**

1. The Tariff Application

The National Ports Authority (NPA) requested an average tariff increase of 8.45% for the 2018/19 tariff year. In addition, and in line with the revised Tariff Manual, the NPA has applied for an indicative average tariff of 24.82% and 2.09% for 2019/20 and 2020/21 respectively. This follows an application for 2017/18 of 8.02% after which the Regulator, considering updated information approved a 4.8% average tariff increase. A revised tariff application was submitted on the 19th of October 2017 to correct an error contained in the original 1 August 2017 application. The revised submission by the Authority again requested a tariff increase of 8.45%, however with a larger drawdown of R346 million from the Excessive Tariff Increase Margin Credit.

Table 1: Overview of NPA Tariff Application and Previous Decisions (R million as applicable)

Year	**Previous Year**	**17/18**	**Current Tariff Application**		
WACC	**Tariff Application**	**ROD**	**18/19**	**19/20**	**20/21**
Risk-free rate (nominal)	8.58%	8.58%	8.33%	8.33%	8.33%
Real risk free rate	2.05%	3.46%	2.78%	3.07%	2.88%
MRP	5.40%	5.40%	5.30%	5.30%	5.30%
Asset Beta	0.50	0.50	0.50	0.50	0.50
Equity Beta (using Hamada)	0.86	0.86	0.86	0.86	0.86
Gearing	0.5	0.5	0.5	0.5	0.5
Debt/equity ratio	100%	100%	100%	100%	100%
Cost of Debt	10.81%	9.68%	10.79%	10.79%	10.79%
Inflation forecast	6.40%	6.10%	5.40%	5.10%	5.30%
Tax rate	28.00%	28.00%	28.00%	28.00%	28.00%
Real Vanilla WACC	**5.42%**	**5.42%**	**6.23%**	**6.52%**	**6.32%**
Revenue Requirements Calculation					
Return on Asset	4 037	4 417	5 020	5 660	5 988
Depreciation	2 015	2 031	2 166	2 333	2545
OPEX	5 961	5 961	5 938	6 258	6 616
Tax	969	1 050	1 150	1 288	1 370
Total	**12982**	**13459**	**14274**	**15539**	**16519**
Claw- back	-774	-681	-1 531	106	-
ETIMC	-98	-593	-81	-	-
Allowable Revenue	12 110	12 185	12 662	15645	16519
Y/Y growth			9.0%	22.93%	10.87%
Real Estate	-2 798	-2 798	-3 025	-3 279	-3 542
Marine Business Income	9 312	9 387	9 637	12366	12977
Prior year's Revenue	8 469	8 759	8 469		
Volume Increase	1.8%	2.97%	2.79%	2.79%	2.79%
Average Price Increase Required	**8.02%**	**5.97%**	**8.45%**	**24.82%**	**2.09%**

2. The Ports Regulator's Mandate

In considering the Applicant's proposed tariffs, the Ports Regulator was guided by the National Ports Act, 12 of 2005, the Regulations issued in terms of Section 80(1) of the Act, together with the Directives[1] and the Regulatory Tariff Manual applicable to the period up to 2020/21 (the manual) (hereinafter jointly referred to as the 'Regulatory Framework').

Further, the Ports Regulator considered the submissions contained in the Application and all subsequent submissions, written and oral comments, received in the consultation process, including the responses thereto, as well as its own information and research. It must be noted that the information at the disposal of the Ports Regulator postdates the Application and as such some differences in calculation are due to the updating of data and forecasts.

3. The Methodology

In order to continuously improve the level of transparency and consistency in the tariff setting process, the Ports Regulator has since its establishment, undertaken extensive consultations with all port stakeholders, including the NPA, through consultation hearings (road shows), meetings, and the receipt of submissions, on the NPA's proposed Tariff Methodology. This mandated interim methodology, published on 13 August 2013, was applicable to the 2014/15 tariff year. Subsequently the first multi-year tariff methodology, applicable to the tariff period 2015/16-2017/18, was published in August 2014 and thereafter the second multi-year tariff methodology applicable to the 2018/19-20/21 tariff years was published in March 2017

The guidelines within the Tariff Methodology/Manual were aimed at assisting the NPA with submitting an application with a three-year view that will provide greater certainty to the NPA in its investment decisions and the ports sector as a whole. In addition, it assisted stakeholders in formulating responses to the application which assisted the Ports Regulator in decision-making. The publication of the methodology increased transparency, accountability, as well as regulatory certainty.

The approach encapsulated by the Tariff Manual is based on the Revenue Required (RR) approach. The Ports 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 corrections, 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 has been captured in the guidelines and taken into consideration. In the evolution of ports regulatory architecture from the interim methodology to the second multi-year methodology, changes and future provisions have been made in the approach to, and calculation of various items, specifically with regards to the methodology for determining the Market Risk Premium as well as the calculation of Depreciation in the previous year, and a stricter interpretation with regard to the treatment of divisional taxation has been implemented in this assessment of the NPAs Tariff Application. In addition provisions dealing with performance incentives (WEGO), as well as the valuation of assets are under development for implementation in future tariff years.

[1] The Directives were promulgated in terms of Section 30(3) of the Act in Government Notice 825, Gazette No. 32480 dated 6 August 2009, and as amended in the Directives Amendment Notice, promulgated in Government Notice 37, Gazette No. 32898 on 29 January 2010.

The NPA used the Tariff Manual to calculate and submit the application as set out below:

$$\textbf{\textit{Revenue} Requirement}$$

$$= Regulatory\ Asset\ Base\ (RAB) \times Weighted\ Average\ Cost\ of\ Capital\ (WACC) + Operating\ Costs + Depreciation + Taxation\ Expense \pm Clawback \pm Excessive\ Tariff\ Increase\ Margin\ Credit\ (ETIMC)\ \pm WEGO$$

4. Compliance with the Directives, Regulations and National Ports Act

Although the Application achieved formal compliance with the Act, Regulations, Directives and the Manual, components of the Application do not yet fully comply as there has not been full disclosure. The data was adequate for purposes of calculating the over/under-recovery. However, the requirement of the Ports Regulator, as articulated in the 2011/12 Record of Decision, is that full disclosure is required for all NPA business; that is, both marine and real estate business as well as a port by port differentiation of revenues and costs. The Ports Regulator's view on this matter has not changed, although a higher level of compliance has been achieved compared to previous years, future applications must include disaggregated information on all elements of the NPAs business.

The Applicant submitted its Tariff Application based on the Rate of Return methodology, as outlined in the Manual (the 'Revenue Requirement' approach). The Ports Regulator therefore decided to accept, in this Application, the general methodology that has been used by the Applicant in this instance; however, in some of the parameters, the Ports Regulator differed from the Applicant with respect to either the methodology or its application.

Further important key areas include: -

Directive 22(3)(a) requires that the NPA shall set out the manner in which the tariffs have been calculated, and the model used by the NPA for determining and calculating the tariffs. This has been fully complied with in this Application.

Directive 22(3)(b) requires that all operating costs, expenses and revenues incurred or generated from a port service or port facility, as well as the value of the capital stock related to such services or facilities, are to be declared in the Application. Greater disclosure than in previous applications was apparent, including the submission of confidential data, allowing the Ports Regulator to conduct a more thorough assessment.

The CAPEX programme information provided by the Applicant was sufficiently detailed to make an assessment. As the CAPEX information is the subject of further extensive processes that are to be engaged by the Ports Consultative Committees (PCC) and the National Ports Consultative Committee (NPCC), the Ports Regulator accepts the information provided for the purposes of this tariff application as an outcome of the PCC and NPCC processes, as well as a higher level of compliance by the Applicant. In this regard, continued information requirements, as set out in Item 8 of the 2015/16 ROD and Section 7 of this ROD, will continue to apply on a quarterly basis.

Directive 22(3)(c) requires that the amounts to be invested and revenues that are to be utilised in port development, safety, security and environmental protection, must be provided, as well as (i) the manner in which the tariffs will affect the cost of doing business in the ports; and (ii) the proposed profit margin or rate of return, together with the motivation to show why this margin or return is commensurate with risk.

The safety, security and environmental expenditure submitted were more detailed than in past applications; the Application, in line with the methodology as set out in the Regulatory Manual, fully complied with 22(3)(c)(ii).

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

The generalised corporate level of information, including audited financial statements, was adequate for the purposes of the analysis. Furthermore, the credibility of the information provided has continued to increase markedly over the tariff periods. Notwithstanding that the generalised corporate level information was adequate, greater breakdown of cost and revenue information on port and activity levels will be required in future for tariffs to be more accurately cost reflective.

Directive 23 (1): In considering the proposed tariffs in terms of Directive 22, the Regulator must have regard to whether the proposed tariffs reflect and balance the following considerations: -

(a) A systematic tariff methodology that is applicable on a consistent and comparable basis;

The Applicant has submitted the Tariff Application based on the requirements set out in the Regulatory Manual.

(b) ***fairness****.*

Whilst the tariff structure in the South African port system does not currently reflect international best practice with regards to the allocation of costs, it is the focus of the Tariff Strategy, published on the 31st of July 2015 with implementation to commence on 1 April 2017. By the reductions and increases granted in this and previous tariff determinations, the Ports Regulator attempts to address some of the most glaring of these imperfections; however, the full implementation of the tariff strategy will give effect to Directive 23(1)(b) more comprehensively.

(c) The avoidance of discrimination, save where discrimination is in the public interest;

By the reductions and increases (differentiated pricing) approved by the Ports Regulator in this ROD, as well as previous determinations, the Ports Regulator continues to address this. See comment on Directive 23(1)(b) above.

(d) Simplicity and Transparency;

The NPA have made significant strides in improving their levels of transparency. The requirement has been met.

(e) Predictability and stability;

The application matches previous forecasts in numerous aspects. This requirement has been met.

(f) the avoidance of cross-subsidisation save where cross subsidisation is in the public interest; and

The Tariff Strategy has set out the manner in which cross subsidisation will be addressed. The Regulator will continue to guide the NPA in this regard, including the introduction of a Port Tariff Incentive Programme (PTIP) which sets out a framework for the application and approval of cross-subsidies and the level thereof that would be considered to be affordable and in the public interest.

(g) The promotion of access to ports and efficient and effective management and operations in ports.

The information provided in the application was not sufficient to determine compliance with this provision. Although this is not clearly stated in the Application, the internal processes of the Applicant, including the Section 56 and 57 processes in terms of the Act and the processes that the Applicant is undergoing in the PCCs, address some, but not all, of the concerns that arise under this provision. The other issues that remain outstanding will be addressed in the disclosure components of the Regulatory Manual referred to above, as well as in the Ports Regulator's compliance and monitoring processes. In this regard, Item 12 outlines future information reporting requirements by the NPA to the Ports Regulator.

5. The Application Specifics

The Application submitted is based on the Required Revenue methodology. The Ports Regulator assessed the Application on this basis, and used the methodology outlined in the Regulatory Manual, except where the Manual was incorrectly applied; or in the opinion of the Ports Regulator, a deviation was necessary.

In effect, the NPA used the following formula in its calculations for the Required Revenue:

Revenue Requirement = (cost of capital x Regulatory Asset Base (RAB) + operating costs + depreciation + taxation expense ± claw-back ±ETIMC

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 Ports Regulator in the preceding applications.

The standard exposition is:

$$RR = (v - d + w)\ r + D + E + T +/- C +/- ETIMC +/- WEGO$$

Where:

RR	=	*Revenue Requirement*
v	=	*value of the assets used in the regulated services*
d	=	*accumulated depreciation on such assets*
w	=	*working capital*
r	=	*return on the capital reasonably expected*
D	=	*depreciation accounted for in the period of the tariff*
E	=	*operating expenses*
T	=	*taxation expense*
C	=	*Claw-back*
ETIMC	=	*Excessive Tariff Increase Margin Credit*
WEGO	=	*Weighted Efficiency Gains from Operations*
(v – d + w)	=	*Regulatory Asset Base*

6. The Regulated Asset Base (RAB)

The RAB submitted by the NPA was as follows:

Table 2: NPA Regulatory Asset Base Calculation (R million)

RAB Elements	ROD	NPA Tariff Application	
	2017/18	**2018/19**	**2019/20**
Opening RAB Value	**77 365**	**80 766**	**85 625**
RAB trended	**76 235**	**85 210**	**90 506**
Add Capex	3 055	3053	7 377
Less Depreciation	**-1 948**	**-2166**	**-2 355**
Closing RAB value	78 134	86 097	95 528
Average Opening and Closing	**74 773**	**83 432**	**90 577**
Less Working Capital	-927	-2 799	-1 374
RAB Final	**73 846**	**80 633**	**89 203**

6.1. RAB determined by the Ports Regulator

In the previous tariff determinations, the Ports Regulator accepted the Depreciated Optimised Replacement Cost (DORC) method used by the Applicant to determine a starting Regulatory Asset Base. The Ports Regulator maintains it previous position in that it retains a low level of confidence in the RAB value as determined by the 2008 DORC conducted by the NPA as the process gave rise to a steep increase in asset values. However, regulatory certainty was required in the absence of any alternative and the RAB was therefore accepted. The Ports Regulator has commenced a process to assess the application and appropriateness of these valuations for major assets in order to inform subsequent assessments of the RAB.

The Ports Regulator has previously determined that the 2010/11 ROD value establishes the starting point for trending the RAB in future tariff determinations. Nonetheless, the Ports Regulator has applied a number of adjustments (correcting the actual CAPEX resulted adjustments) for the subsequent years, to arrive at an opening balance for the 2018/19 year of R80 241 million.

The RAB value for the period under review was determined using the following formulae:

$$\boldsymbol{RAB_y = \frac{1}{2}\left[RAB_{c,y} + RAB_{o,y}\right] + w_y}$$
$$\boldsymbol{RAB_{c,y} \ = \ RAB_{o.y}(1 + CPI_Y) + CWIP_Y - D_y}$$

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 the review period;*
$CWIP_Y$	=	*value of expected capital investment over the review period;*
D_y	=	*depreciation allowance for assets over the review period;*
CPI_Y	=	*annual rate of general inflation expected over the review period*

The calculation of depreciation resulted in a depreciation allowance of R2099 million as opposed to the NPAs application of R2 166 million. Depreciation calculated by the Ports Regulator for the outer years total R2 276 and R2 481 million respectively.

Based on previous tariff assessments and adjustments thereto, information in the Application and the Ports Regulator decisions for the current application as well as application of the above equations, the RAB is as per the Table below:

Table 3: Regulatory Assessment of the Regulatory Asset Base (R million)

FY 2018/19	**RAB**
Opening Net Book Value	80 241
Indexing	4 415
Less: Depreciation	-2 099
Add: CAPEX	3 053
Closing NBV	85 610
Average Opening and Closing	82 962
Less: Working Capital	-2 452
RAB Final	**80 474**

6.2. Cost of Capital

The NPA's Application follows the Capital Asset Pricing Methodology (CAPM) in order to determine the cost of capital, as per the requirements of the Regulatory Manual. The Applicant has utilised the Vanilla Weighted Average Cost of Capital (WACC) approach in line with the methodology. Furthermore, the Application requested the real vanilla WACC be assessed as being 6.23% for 2018/19, and 6.52% and 6.32% respectively for the following years.

The Ports Regulator has determined the real vanilla WACC be 6.38% when applying its determinations to the elements below. Furthermore, the Ports Regulator has determined provisional WACC variables for the outer years to be 5.90% and 5.93% respectively. The differences can mainly be ascribed to the inclusion of an "equitable" tax rate on a 5 year average basis in order to reduce the future differentials on the claw back.

The formula for calculating the WACC under the CAPM is as follows:

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

Where:

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

6.2.1. Cost of Equity

The real post-tax cost of equity requested in the Application is 7.34%. The Ports Regulator has determined that the real post-tax cost of equity be 7.73%, which was then used to determine using the subsidiary elements listed below. This in turn has resulted in a total calculated return on equity of R 3 090 million available to the NPA as profit/maximum dividend as opposed to the R2 953 million requested.

The CAPM cost of equity methodology used by the Application is as follows:

$$\boldsymbol{k_e = R_f + \beta(MR - R_f)}$$

Where:

k_e	=	*cost of equity*
R_f	=	*risk free rate*
MR	=	*market return*
$(MR - R_f)$	=	*Market Risk Premium calculated over long term*
β	=	*beta coefficient*

6.2.2. Risk Free Rate

The methodology stipulates that the South African Reserve Bank's published time series KBP2003M "Yield on loan stock traded on the stock exchange: Government bonds - ten years and over" in order to avoid anomalies in single data series bond as an appropriate measure of the RFR, and is seen to adequately reflects the market's perception of sovereign risk and inflation over the regulatory period. The average RFR is calculated as a monthly average over a five-year period.

The RFR used in the NPA 2018/19 application is a nominal number of 8.32%.

The latest data available to the Regulator is from October 2017, with an average five-year period commencing in August 2012. The resultant nominal risk free rate is 8.35%.

6.2.3. Beta Co-efficient

The Ports Regulator used an asset beta of 0.5, as set out in the Regulatory Manual, which equates to an equity beta of 0.93. The Hamada equation was used to re-lever the beta. And the "equitable tax rate" of the long term average (5 years) was used, as opposed to the corporate tax rate of 28%. See section 6.5 on taxation. This also resulted in a higher calculated return on equity than that applied for by the NPA.

6.2.4. Market Risk Premium

The Ports Regulator, in line with regulatory consistency, and the medium-term tariff methodology, has calculated a market risk premium of 5.3%, as published in the latest available Dimson, Marsh and Staunton (DMS). It is an estimate of the geometric mean MRP as measured against bonds for South Africa to determine an MRP for the NPA's cost of equity.

6.2.5. Gearing

As set out in the Regulatory Manual, the Ports Regulator in its assessment has used a Gearing of 0.5.

6.2.6. Cost of Debt

The Ports Regulator calculated the real Cost of Debt (Pre-tax) to be 5.02%.

6.2.7. Inflation

The National Treasury inflation forecast, as per the Medium Term Budget Policy statement October 2017 for the period was used, viz. 5.4% for 2018/19, 5.5% for 2019/20, and 5.5% for 2020/21.

6.3. Operating Costs

The Ports Regulator accepted the operating cost estimate for 2016/17. However, the Ports Regulator wishes to express its concern regarding the impact of continued under spending of CAPEX. Whilst the underspending on maintenance has narrowed over the last few years, continued capex under-expenditure impacts on efficiencies, as well as capacity requirements and service delivery and remains a concern. Whilst some of the underspending on operational expenditure is as a result of cost savings and higher operational and management efficiency, an apparent inability to implement projects will in the long run impact on the sustainability of the ports system. The Ports Regulator will further address any over allowance on operational expenses through the claw-back mechanism in the next tariff year.

The NPAs total operational cost amounts to R5 938 million, including Group overhead costs relating to the NPA. The split of costs into different operations of the NPAs business, such as marine costs and lighthouse costs per port, has not been provided. Whilst the Port Regulator analysed the operational expenditure of the NPA in detail, any under spending during the tariff period under consideration will, as per existing practice, be clawed back; whilst any over run on costs must be motivated in detail.

The Ports Regulator allowed the inclusion of the R629 million Group Costs in the total allowed expenses, subject to the conditions in the Manual. Whilst the Ports Regulator allows the Group cost component on the basis that the NPA, as a division of Transnet, will continue to depend on centralised services, the Ports Regulator will continue to monitor this allowance and claw back any under spending that may occur, or unfair loading to the detriment of port users.

Specifically, with regards to the Group cost component of the NPAs operational expenses, the Ports Regulator considered the following in allowing the request: Was the allocation from the NPA to Group in terms of the applicable policy? The Ports Regulator deemed it to comply with the policy as submitted to the Ports Regulator. Are the share allocations in the policy a fair reflection of the services rendered by the Group to the NPA? Based on available information, the Ports Regulator is largely satisfied with the fairness of the share allocations in the policy.

However, the Ports Regulator will, in due course, address the applicability of some of the line items in the policy, finding that further assessment is necessary; this will be addressed in a set of regulatory accounts over the medium-term.

The Ports Regulator thus approves the Group cost allowance for 2018/19 and gives conditional approval for the 2019/20-2020/21 tariff years based on the conditions set out in the Regulatory Manual, which allow for future claw-back if deemed necessary.

6.4. Depreciation

The Regulator's assessment has resulted in an allowance of R 2 099 million as a depreciation allowance, as opposed to the applied for amount of R 2 015 million.

Estimated depreciation calculated by the Ports Regulator for the outer years totals R 2 221 and R2 441 million respectively.

6.5. Taxation Expense

It has been observed that a tax allowance of 28% on NPA profit as a part of the required revenue calculation, has been disproportionately large as compared to the calculated 28% of Transnet net profit, over the period of regulation of the NPA.

The continued revenue allowance of 28% of profit for NPA taxes can only be fair for a stand-alone authority paying its taxes directly to SARS. For as long as the NPA remains one of the profit making divisions of Transnet among other such divisions, an equitable tax rate for the fair sharing of the group tax payable in any year has to be calculated proportionally for all profit making divisions/segments/business units.

If the Transnet net profit is less than the sum of profits of profitable divisions or segments, then the equitable tax rate will be less than 28%. If the Transnet net profit is equal to the sum of profits of profitable divisions or segments, then the equitable tax rate will be 28% for all divisions/ segments/business units.

The equitable tax rate is thus the rate which if applied to the profits of each profitable segment, will amount, if added together, to the full 28% tax payable by the group to SARS on its net profit in any one financial year.

The calculation of the equitable tax rate (t_e) applicable to any profit-making division in any financial year will thus be 28% x (Transnet net profit/ sum of profits of profitable divisions or segments), ie:

$$t_e = t\left(\frac{P_g}{\sum P_i}\right)$$

Where:
t_e = equitable tax rate,
t = 28% or the corporate tax rate,
P_g = Transnet Group net profit for the year
$\sum P_i$ = Sum of profits of profitable divisions/segments/business units for the year

Note that this calculation has nothing to do with deferred taxes or any other tax liability or tax arrangement that the group has with SARS. The calculation of t_e only covers tax on net profit for any one year applicable to profit making segments/divisions/business units.

The equitable tax rate will be applied by the Ports Regulator in its tax calculation (for the NPA as a profitable division) in the revenue required model as the average equitable tax rate over 5 years and the clawback mechanism will be used to correct for the actual equitable tax rate in any year when appropriate audited segmental financial statements become available. A 5 year average equitable tax rate of 15.80% was used in the calculations for the years 2017/18 and 2018/19, whilst the corrected "equitable tax rate of 14.06% was calculated for the 2016/17 tariff year and corrected through the claw back mechanism. The equitable tax rate was also applied in the cost of equity (see section 6.2.3), resulting in this instance in a higher return than what was applied for.

For any year under review, if a 28% taxation rate is allowed in the Revenue Requirement calculation (instead of the 5 year average equitable rate), it may result in excessive volatility in claw backs in future years. As such, the Ports Regulator has determined that the 5 year moving average of the equitable tax rate be used and the claw back mechanism be used to correct to the actual equitable tax rate in the following year when audited segmental financial statements become available. The resultant taxation expense for 2018/19 is R 682 million

The calculation of the equitable tax rate is contingent on Transnet publishing (or providing the Ports Regulator) audited segmental financials each year that shows the group net profit as well as the profits and losses, costs and revenues, for each division/segment/business unit as well as any adjustments. Failure to do this will result in the regulator not providing for taxation in the revenue required calculation, and revenue required for tax will be deemed to be a part of the allowed return on equity. Also see section 12 on information requirements.

6.6. Volume adjustments

The Ports Regulator adjusted the volume forecast for the 2017/18 tariff year taking into account the latest estimates available (including actual data for 7 of 12 months and latest estimates for the full year) market assessments and intelligence. This resulted in a revised tariff book revenue forecast of R8 893 million for 2017/18. This, as in the past, has included the decision to exclude all bilateral contracts in the calculation of revenue. A volume based revenue growth forecast of 3.05% was used for 2018/19, resulting in estimated tariff book revenue for 2018/19 of R9 164 million, resulting therefore in an average tariff shortfall of 2.5%, which is the increase required.

6.7. Claw-back

As the 2016/17 tariff year is now complete, the Ports Regulator can make the final adjustments to the impacts of any forecasts and recoveries for that year, resulting in a revised total claw-back of R1 639 million.

Table 4: Claw-back Calculation (R million)

Claw Back calculations	**R'm**
Re-computed Revenue Requirement 2016/17 (adjusted for the equitable tax rate)	10 473
Less: Claw back taken	(681)
Plus: ETIMC	
Gross recomputed revenue 2016/17	9 792
NPA application 2016/17 AFS Revenue	11 307
Bilateral Agreements	124
2016/17 AFS Revenue (adjusted for bilateral Agreements)	11 431
Claw back FY 2016/17	(1 639)
Provisional allowed in ROD FY 2017/18 for 2016/17	(13)
Final Claw back FY 2016/17 (Adjusted in FY 2018/19)	(1 652)
Estimated Claw back for 2017/18	
Allowed Revenue per ROD FY 2017/18 (adjusted for equitable tax rate)	11 683
Latest Estimate Revenue	11 672
Estimated Claw back	11
50% Claw back Adjustment in FY 2016/17	6
Total Claw back due to customers FY2018/19	
Claw back FY 2016/17	(1 652)
Return on Claw back FY 2016/17	(133)
Estimate FY 2017/18	6
Net Claw back FY 2018/19	**(1 779)**

Note: (-) indicates claw back to users (+) indicates claw back to NPA

An interim claw-back (in favour of the NPA) was made in the 2017/18 tariff year (R -13 million), resulting in a residual claw-back of R1652 million. The return on the residual claw-back in terms of the WACC rate for that period totals R133 million. The total residual claw-back for 2016/17 is therefore R1 785 million.

The expected claw-back calculated for the 2017/18 FY is R11 million. A provisional claw-back of R6 million, as well as the residual claw-back of R1 785 million for FY 2016/17, results in a total claw-back of R1779 million in the 2018/19 tariff year. (Please note: Differences due to rounding).

The claw back calculated includes an adjustment for actual taxation expense through the calculation of the "equitable" tax rate as per section 6.5.

6.8. ETIMC

Table 5: ETIMC Calculation (R million)

Transaction type	R million
2012/13 ETIMC retained	900
2012/13 WACC return on ETIMC (average ETIMC across year)	20
2013/14 ETIMC opening total	920
2013/14 Estimated ETIMC retained in 2013/14	1 378
2013/14 ETIMC closing total	2298
2013/14 Average ETIMC	1609
2013/14 WACC return on Average ETIMC	60
2013/14 ETIMC closing balance	2 358
2014/15 Average ETIMC	2 358
2014/15 WACC return on average ETIMC	*108.3*
2014/15 ETIMC closing balance	2 466
2015/16 ETIMC Utilised	-150
2015/16 WACC Return on ETIMC	108.5
2016/17 WACC return on ETIMC	112
2016/17 ETIMC Total	2 537
2017/18 WACC Return on ETIMC	110
2017/18 ETIMC Utilised	-681
2017/18 ETIMC Total	**1 966**
2018/19 WACC Return on ETIMC	147
2018/19 ETIMC retained	345
2018/19 ETIMC Total	2 458

The Ports Regulator regulates in the long-term interest of the industry. This requires that the Ports Regulator not only confine itself to the immediate tariff decision, but also consider ways to ease any future shocks or tariff spikes to the system which can be managed sustainably within the space that is available for such intervention. The Ports Regulator considers it prudent to continue to retain the Excessive Tariff Increase Margin Credit (ETIMC) inside of the NPA through an adjustment to revenue allowed in the year it is either added to required revenue or through a reduction in required revenue to offset against future large, but justified, tariff increases resulting from the capital expenditure increases envisaged in the NPAs Long Term Port Planning Framework but not as yet articulated to a level of detail and phasing for accurate prediction.

Table 5 above sets out the calculation of the ETIMC and the resultant value at the end of the tariff year.

It is important to note that the expected tariff increase for the outer years may or may not require the use of the ETIMC facility through an adjustment of required revenue to ensure tariffs are in line with the below inflation trajectory as set out in previous Records of Decision. The ability of the NPA to implement their allowed CAPEX, maintenance and other operational expenses together with realised volumes may materially impact on the final tariffs and will be taken into consideration by the Ports Regulator in outer years.

7. Required Revenue and Tariff Increase

The application of the above amendments and adjustments to the NPA 2016/17 Tariff Application has the following result:

Table 6: Assessment Results (R million)

Transaction Type R Million	2018/19
WACC Return	5134
Depreciation	2099
Operating Expenses	5938
Tax Expense	682
Claw Back	-1779
ETIMC Added	345
NPA Required Revenue 2018/19	12419
Real Estate Business Income	3025
Required Revenue from Marine Tariffs	9394
Marine Business Income	9164
Total Estimated Revenue	12189
Revenue (Shortfall)/Surplus 2017/18	**-230**

The forecast calculates a revenue shortfall of R230 million translating into a tariff increase requirement of 2.5%.

The marine business income that is forecast above is the current tariff book marine revenue modelled for a weighted average revenue volume growth rate of 3.05% for all cargo types and marine services for the period.

The following assumptions are included in the tariff assessment:

Risk Free Rate	8.35%
Market Risk Premium	5.3%
Gearing	0.5
Beta Coefficient (unlevered)	0.5
Revenue Effect of Volume growth 2018/19	3.05%
Inflation	5.4%

Whilst the NPA did request specific tariff increases in addition to the general adjusted tariff increase of 8.45%, the application more specifically requested a 10% tariff increase in marine charges to shipping lines, 9% increase in bulk exports, with coal and magnetite to increase by 10% and 8.45% on all other cargo dues the details of which are as follows:

"An average 10.00% increase for Marine Services tariffs applicable to shipping lines with:

- Port Dues tariff to increase by 14.05%;
- Berthing Services tariff to increase by 11.15%; and

- Other including Pilotage, Towage, VTS to increase by 7.04%.

An average 7.88% increase for cargo dues tariffs with:

- FULL containers import and export tariffs to increase by 7.50%;
- Automotive converted to unitary based tariff structure increasing by 5.00%;

Bulk tariffs increasing by 9.00% except:

- Coal to increase by 10.00%; and
- Ores and Minerals: Magnetite to increase by 10.00%.

Other cargo dues to increase by 8.45%."

Based on the Ports Regulator's own research, which raised significant concerns about specific anomalies regarding tariff imbalances evident in the tariff book, as well as the cost levels facing other users, and the impact that the recent depreciation of the South African Rand has on costs, the Ports Regulator decided to approve the following specific changes applicable to the tariffs as set out in the Tariff Book:

- Marine services and related tariffs (Sections 1-8 of the Tariff Book, excluding Section 7 that deals with cargo dues) are to increase by 8.5%
- coal export cargo dues that are to increase by 8.5%
- container cargo dues are to increase by 0%
- all RoRo tariffs are to increase by 0%
- all other cargo dues are to increase by 5.4%. All break-bulk cargo dues are to be capped at R100/ton.

In line with previous decision, all marine tariffs (Sections 1-8 of the Tariff Book, excluding Section 7 that deals with cargo dues) for existing commercial South African flagged vessels as well as commercial vessels registered in South Africa in 2016/17 will receive a 30% discount applicable year on year up to 31 March 2019. Vessels registered in South Africa in 2017/18 will receive a 20% discount up to 31 March 2019 and similarly a vessel registered in 2018/19 will receive a 10% discount up to 31 March 2019. The discount will hereafter be reviewed.

Furthermore, in line with the Multi-Year Tariff Manual of March 2017, the Ports Regulator projects that the indicative overall average tariff adjustment for the 2019/20 and 2020/21 tariff years will be within the 6% inflation target band. Due to the expected subdued economic activity over the tariff period, despite some areas of optimism in cargo volumes, the Ports Regulator will, if required, use the ETIMC to maintain overall average tariffs close to the inflation target band, as defined by the South African Reserve Bank's mandate.

Due to the ongoing Tariff Strategy implementation process and taking into consideration the various comments of stakeholders, the Ports Regulator has determined that the specific changes for certain commodities will be implemented. It is the Ports Regulator's view that, in due course, the comprehensive restructuring through the full implementation of the ten-year Tariff Strategy more accurately deals with the price anomalies evident in the tariff structure in order to further realign the Tariff Book.

8. Tariff Strategy Implementation

The Tariff Strategy sets out guiding principles for setting the base tariff for different port users. These guiding principles aim to introduce a more flexible approach to facilitating pricing in the ports sector than what has been proposed earlier, in order to establish an appropriate level of tariffs that better reflects the underlying costs based on use and benefit. These principles are aimed at enforcing transparency and certainty.

The implementation of the Strategy and its principles are meant to bring real benefits to customers through charging cost reflective tariffs. On that basis, those customer categories currently over-charged would see tariffs reduced, whereas those categories that are currently subsidized (under charged) would see their tariffs rebased to a fair level. These principles must be taken into consideration during the gradual adjustment of the Tariff Book over the period up to and beyond 2026/27.

In order to provide a continuous update of the implementation of the Tariff Strategy and the changes to base tariffs due to changes in port structure, asset values and volume forecasts etc., the Ports Regulator will publish updated base rates for the coming financial year in every ROD. These tariffs provide an indication of the tariff trajectory during the estimated ten-year implementation period in current terms. Over the implementation period, tariffs will thus converge towards these annually updated base rates. For example, a dry bulk tariff above the dry bulk base rate will gradually, as conditions allow, converge towards the R5.73 in today's prices.

Table 7:Tariff Strategy Base Rates

Tariff Strategy		**Updated Tariff Strategy "base rate"**	**2018/19 ROD based NPA tariff book rate**	
Cargo Type	**Unit**	**i.e. target tariff to be achieved over ten year implementation**	**Import**	**Export**
Break bulk	R/Tons	R 28.08	31.50	31.50
RoRo's	R/m	R 58.40	187.70	74.06
Liquid bulk	R/Tons	R 15,83	30.83	30.83
Dry bulk	R/Tons	R 5.73	7.40	7.40
Containers	R/TEU	R 184.97	2146	706

No distinction is made between inbound and outbound tariffs in the tariff strategy base rate as any deviation from the base rate should clearly indicate whether a tariff rate is subsidising other rates, i.e. above the base rate, or being subsidised, i.e. below the base rate. A new category "Other" will be implemented in the Tariff Book for all commodity types at the base rate.

9. Changes in Tariff design

As part of the process in simplifying the tariff design in the tariff book, the cargo dues tariff for roro cargo has been changed to reflect a per meter rate, as opposed to the current per ton based tariff that was calculated as a rate per ton with every meter equals to 2 tons. The cost reflective rate will also be published as a per meter rate.

10. Changes to the Tariff Book

The tariff application proposed a number of changes to the wording in the Tariff Book. These proposals that were contained in Annexure G of the application (Pages 80 to 84), are approved.

Weighted Efficiency gains from Operations (WEGO)

The Regulator is currently considering the submissions on the appropriate KPI's to be included in the WEGO calculations as per page 16 of the Tariff methodology. As the Regulator is of the intention to commence measuring of the selected KPI's in the 2018/19 tariff year, the announcement on the specific KPI's will be made through a ROD in due course.

11. Information and Reporting Requirements

11.1. Quarterly Reporting

The Ports Regulator continues to expand its monitoring role and as such requires quarterly progress reports from the NPA (as per the Ports Regulator's templates). Based on the Provisions of Regulation 16, as well as Directive 22, the NPA is required to submit to the Regulator the following:

11.1.1. All CAPEX projects (infrastructure and capital acquisitions) underway (to include, but not limited to, information pertaining to project stage, tender specifics, construction progress etc.);

11.1.2. All acquisition of land and other capital assets (including motivation thereof);

11.1.3. All disposal/or removal of land and assets (including motivation thereof);

11.1.4. Lease Register setting out all lease information;

11.1.5. Copies of all new agreements and licences entered into or issued in the quarter, as well as the supporting documentation thereof, including Sections 79s, 72s, 56s, 57s, and lease agreements (inclusive of all annexures, including but not limited to updated rentals and terminal operator tariffs);

11.1.6. All applicable B-BBEE certificates for the abovementioned licences and agreements;

11.1.7. Data, results and progress applicable to the implementation and monitoring of operator performance standards, as per TOPS/ MOPS/ ROPS/ HOPS;

11.1.8. Key performance indicators relating to port capacity, port performance, volumes and maintenance programmes per port.

All quarterly progress information must be submitted to the Ports Regulator by no later than the end of the month after the end of the applicable quarter, based on the reporting templates provided to the NPA by the Ports Regulator on the 16th March 2016. The Ports Regulator reserves the right to amend these on an ongoing basis.

The Ports Regulator remains bound by the confidentiality provisions of the Act.

11.2. Historical Information required

All NPA relevant annual debt stock levels as well as annual debt redemption payments itemised, as well as the relevant debt instruments and applicable interest/coupon rates since the inception of regulation.

All historical information referred to above, not yet submitted, must be submitted to the Regulator by no later than the end of the first quarter of 2016/17. The Regulator remains bound by the confidentiality provision of the National Ports Act.

11.3. Annual Financial Statements

As per current practice, a full set of annual financial statements must accompany all future tariff applications to the Regulator. This must include a full set of segmental financial statements of the Transnet Group.

Please note: All information as stipulated in Section 12 must be provided to the Regulator in electronic format.

....

Mr. Thabadiawa Mufamadi

Chairperson of the Ports Regulator of South Africa

01 December 2017