PORTS REGULATOR OF SOUTH AFRICA

Record of Decision

Tariff Application by the National Ports Authority for the Tariff Years 2019/20-2021/22

- On 01 August 2018, the National Ports Authority applied to the Ports Regulator of South Africa in terms of Section 72 of the National Ports Act, 12 of 2005 for approval of the tariffs for services and facilities offered by the NPA of an average increase of 4.21% for the period 01 April 2019 to 31 March 2020, together with indicative tariffs for the periods 01 April 2020 to 31 March 2021 and 01 April 2021 to 31 March 2022.
- 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 adjustment in average tariffs for the financial year 2019/20 is a decrease of 6.27%. In particular:
  - Marine services and related tariffs (Sections 1-8 of the Tariff Book, excluding Section 7 that deals with cargo dues) are to remain unchanged at 2018/19 levels
  - Container cargo dues are to decrease by 10%
  - All RoRo tariffs are to decrease by 10%
  - Coal dry bulk export cargo dues are to increase by 10%
  - The following tariffs are to be reduced to upper limit caps applicable as follows:
    - All break-bulk cargo dues are to be capped at R31.50/ton
    - All dry bulk cargo dues are to be capped at R20.00/ton
    - All liquid bulk cargo dues are to be capped at R40.00/kl
    - The tariffs below these upper limit caps in the categories above will remain at 2018/19 tariff levels, excluding coal dry bulk export cargo dues as set out above.
- The incentive for South African flagged vessels will be extended for three years. 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 2019/20 will receive a 30% discount applicable year on year up to 31 March 2022. Vessels registered in South Africa in 2020/21 will receive a 20% discount up to 31 March 2022 and similarly a vessel registered in 2021/22 will receive a 10% discount up to 31 March 2022. The discount will thereafter 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 2020/21 and 2021/22 tariff years will be below the 6% inflation target band.**

1. The Tariff Application

The National Ports Authority ("NPA") submitted to the Port Regulator its Tariff Appliation ("the Application") on 01 August 2018. The Application requested an average tariff increase of 4.21% for the 2019/20 tariff year. In addition, and in line with the Tariff Methodology of March 2017, the NPA has applied for an indicative average tariff of 18.57% and 6.34% for 2020/21 and 2021/22 respectively. This follows an application for 2018/19 of 8.45% after which the Regulator considering updated information, approved a 2.5% average tariff increase.

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

Overview of NPA Tariff Application and Previous Decisions (R million as applicable)					
WACC	Previous Year (18/19)		Current Tariff Application		
Year	Application	ROD	2019/20	2020/21	2021/22
Risk-Free Rate (nominal)	8.33%	8.35%	8.58%	8.58%	8.58%
Real Risk-Free rate	2.78%	3.46%	3.31%	3.41%	3.31%
MRP	5.30%	5.30%	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	10.79%	9.68%	10.78%	10.78%	10.78%
Inflation forecast	5.40%	5.40%	5.10%	5.00%	5.10%
Tax Rate	28.00%	15.80%	15.42%	15.42%	15.42%
Real Vanilla WACC	6.23%	6.38%	6.80%	6.90%	6.80%
Revenue Requirements Calculation					
Return on Asset	5 020	3 090	3 511	3 835	4 119
Depreciation	2 166	1 948	2 279	2 458	2 675
OPEX	5 938	5 938	6 291	6 853	7 446
Tax	1 150	682	640	699	751
Total	14274	11 658	12 721	13 845	14 991
Claw- back	-1 531	-1 779	-1 353	-136	-
ETIMC	-81	345	-	-	-
Allowable Revenue	12 662	12 419	13 681	16 253	17 704
Y/Y growth	9.0%		10,16%	18,80%	8.93%
Real Estate	-3 025	-3 025	-3 284	-3 580	-3 849
Marine Business Income	9 637	9 394	10 398	12 673	13 854
Prior year's Revenue	8 469		9 706	10 398	12 673
Volume Increase	2.79%	3.05%	2.80%	2.80%	2.80%
Average Tariff Increase Required	8.45%	2.50%	4.21%	18.57%	6.34%

2. The Ports Regulator's Mandate

In considering the NPA's proposed tariffs, the Ports Regulator was guided by the National Ports Act, 12 of 2005 ("the Act"), the Regulations issued in terms of Section 80(1) of the Act, together with the Directives[1] and the Regulatory Tariff Manual (the Manual), including the Methodology for the Valuation of the NPA's Regulatory Asset Base published on 28 March 2018 as well as the Tariff Strategy applicable to the period up to 2020/21 (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 appropriate Tariff Methodology to be used. 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 guidance provided within the Tariff Methodology/Manual was 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 assists stakeholders in formulating responses to the application which in turn assists the Ports Regulator in decision-making. The publication of the methodology increased transparency, accountability, as well as regulatory certainty.

The methodology encapsulated by the Tariff Manual is based on the Revenue Required (RR) approach. In the evolution of ports regulatory architecture from the interim methodology to the subsequent multi-year methodologies, 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, the valuation of the Regulatory Asset Base (RAB) in the previous year, and a stricter interpretation with regard to

[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 treatment of divisional taxation has been implemented in this assessment of the NPA's Tariff Application.

In March 2018, the Regulator published a Valuation of Assets Methodology which sets out the calculations for the valuation of the Regulated Asset Base. The NPA did not initially implement the methodology and did not provide the relevant information. As discussed by the Regulator at the public roadshows held in September 2018, the Regulator requested a meeting with the Transnet board as well as a submission of the relevant information and at this meeting a confidential submission in line with the correct methodology, was made to the Regulator and taken into consideration in the assessment of the NPA's tariff application.

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 applied in arriving at a balanced decision that takes into account the need to address the re-valuation of the RAB, as well as the sustainability of the NPA and the port system of South Africa.

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 NPA's business.

The NPA 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 NPA with respect to either the methodology or its application, in particular with respect to the valuation of the Regulatory Asset Base.

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. In addition, after further consultation between the Regulator and the Transnet board the additional information requested by the Regulator was provided in confidence including a tariff submission (at the meeting) based on the Valuation of Assets Methodology as applied to the RAB as published on 28 March 2018.

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. The regulation of CAPEX will occur on an annual basis. In addition, in the next financial year, the Regulator will increase the level of scrutiny on the CAPEX preparation and implementation processes with the assistance of the Port Consultative Committees.

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.

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. The Authority provides port level financials to the Regulator for more accurate cost reflective analysis as well as segmented group information.

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 not publicly submitted the Tariff Application based on the requirements set out in the Regulatory Manual as pertaining to the valuation of the regulatory asset base, however, the Regulator assessed the application in line with the approved methodology, after the NPA at a Transnet Board meeting with the Regulator presented a compliant submission in confidence as per section 25 of the Directives to the National Ports Act of 2005. All tables and calculations of the NPA application will therefore reflect the initial public submission and not the subsequent confidential submission.

(b) fairness.

The Regulator, in conjunction with the Authority, has made great strides in achieving increased levels of fairness in the port tariff structure with the implementation of the Tariff Strategy, as published 31 July 2015. Through the tariff amendments included in this Record of Decision as well as in 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;

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 continued implementation 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 ± WEGO

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)

Table 2: NPA Regulatory Asset Base Calculation (R million)					
	Tariff Appli.	ROD	Tariff Application		
	2018/19	2018/19	2019/20	2020/21	2021/22
Opening RAB Value	80 766	80 241	84 473	91 131	98 380
Inflation Index	4 361	4 415	4 308	4 557	5 017
Trended RAB	85 127	84 656	88 781	95 688	103 397
Add Capex	3 053	3 053	4 513	5 026	6 849
Less Depreciation	2 166	2 099	2 279	2 458	2 675
Closing RAB value	86 179	85 610	91 245	98 380	107 746
Average Opening and Closing	83 473	82 962	87 859	94 755	103 063
Less Working Capital	-2 799	-2 452	-2 205	-2 363	-2 640
RAB Final	80 633	80 474	85 597	92 392	100 423

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 its 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 NPA's RAB valuation was therefore previously accepted. The Ports Regulator has since published an approved methodology for the valuation of regulated assets in order to inform all future assessments.

Based on the approved methodology the Regulator has determined that a "financial Capital Maintenance" approach will be applied to all future tariff assessments rather than a physical capital maintenance approach as represented by a DORC valuation. This shall be applied to all assets taking into account capitalisation dates and depreciation accrued.

Whilst the approved methodology has set out a specific treatment of historical assets, the Regulator has deemed it appropriate to amend the specific application of the "financial capital maintenance" approach on all assets included on the RAB prior to 1990 as well as those capitalised post 1990. The methodology specified that a historical cost approach should be used and a nominal WACC applied to all assets capitalised pre 1990. However, the Regulator, has decided to use a Trended Original Cost (TOC) methodology applied to all assets both pre 1990 as well as post 1990 in its application of the financial capital maintenance principle. This is because it is aware of the pending intention of the state to incorporate the NPA into a wholly owned subsidiary of Transnet in fulfilment of Section 3(2) of the National Ports Act. As such, the NPA is likely to be assessed on a standalone basis from a credit rating perspective rather than as a division, giving credence to its sustainability concerns as substantiated in the relevant tables provided in the Transnet public submission. The Regulator has therefore adopted this prudent approach for the 2019/20 year in which it will:

- over the 2019/20 financial year, re-assess the impact of the specific approach adopted in the valuation of the RAB in relation to the sustainability concerns expressed by the NPA
- consult further with port stakeholders as well as the NPA on the applicability of the historical cost component of the RAB valuation in the context of the implementation of S3(2)
- assess the actual progress of the implementation of S3(2) of the National Ports Act
- finalise the specific approach of RAB valuation within the next multi-year tariff methodology (MYM3) which the Regulator will be conducting in 2019/20.

The Regulator however retains the right to implement the HC approach pending a detailed assessment of all the historical pre-1990 assets as well as the full impact thereof on the NPA's financial position in relation to its corporate structure. The cooperation of the NPA as well as Transnet will be critical in finalising this matter.

As such, Ports Regulator has applied a number of adjustments (correcting for the actual CAPEX adjustments) for the subsequent years, to arrive at an opening balance for the 2018/19 year of R 69 732 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 R 2 074 million as opposed to the NPA's application of R 2 279 million.

Based on previous tariff assessments and adjustments thereto, information in the Application and the Ports Regulator decision to utilise the Trended Original Cost approach in the treatment of the regulatory asset base, the RAB is as per the Table below:

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

Regulatory Assessment of the Regulatory Asset Base (R million)	
FY 2019/20	RAB
Opening Net Book Value	68 740
Indexing	3 712
Less: Depreciation	-2 074
Add: CAPEX	4 513
Closing NBV	75 135
Average Opening and Closing	71 937
Less: Working Capital	-2 205
RAB Final	69 732

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 6.80% for 2019/20, and 6.93% and 6.83% respectively for the following years.

The Ports Regulator has determined the real vanilla WACC be 6.55% when applying its determinations to the elements below. Furthermore, the Ports Regulator has determined provisional WACC variables for the outer years to be 6.36% and 6.55% respectively. The differences can mainly be ascribed to the difference in the inflation forecast.

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

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

Where:

k_d = pre-tax cost of debt

k_e = post tax cost of equity

g = gearing, which is debt over total capital

Cost of Equity

The real post-tax cost of equity requested in the Application is 8.20%. The Ports Regulator has determined that the real post-tax cost of equity be 8.00%, 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 2 790 million available to the NPA as profit/maximum dividend as opposed to the R 3 511 million requested.

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

$$k_e = R_f + \beta(MR - R_f)$$

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

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 2019/20 application is a nominal number of 8.58%.

The latest data available to the Regulator is from September 2018, with an average five-year period commencing in May 2013. The resultant nominal risk free rate is 8.63%.

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 is used to re-lever the beta taking into account the equitable tax rate of the National Ports Authority.

Market Risk Premium

The Ports Regulator, in line with regulatory consistency, and the medium-term tariff methodology, has calculated a market risk premium of 5.35%, 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.

Gearing

As set out in the Regulatory Manual, the Ports Regulator in its assessment has used a Gearing of 50%.

Cost of Debt

The Ports Regulator calculated the real Cost of Debt (Pre-tax) to be 5.10%.

Inflation

The National Treasury inflation forecast, as per the Medium Term Budget Policy statement October 2018 for the period was used, viz. 5.4% for 2019/20, 5.6% for 2020/21, and 5.4% for 2021/22.

6.3. Operating Costs

The National Ports Authority has applied for R 6 291 million in operating costs. Port users have expressed concern regarding the need for the Authority to implement cost saving measures under the current economic conditions. The Regulator supports the views of port users.

The Ports Regulator takes into account various considerations when analysing the operational expenditure of the Authority. Whilst the gap between applied for and actual spend on the various OPEX items has minimised over time, the Regulator urges the Authority to implement cost-saving measures as well as implement its maintenance plans in order to maximise port efficiency and minimise downtime.

The Regulator further wishes to express concern regarding the 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 NPA's total operational cost amounts to R 6 291 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 R 629 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 NPA's 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.

6.4. Depreciation

The Regulator's assessment has resulted in an allowance of R 2 074 million as a depreciation allowance, as opposed to the applied for amount of R 2 279 million. The difference is due to the implementation of a "financial capital maintenance approach" methodology in the valuation of assets including the use of actual remaining useful life of asset in the depreciation calculation.

6.5. Taxation Expense

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 2019/20 and 2020/21, whilst the corrected "equitable tax rate of 14.06% was calculated for the 2017/18 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.

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

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

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.

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. See Section 12 on information requirements.

The above methodology for the determination of allowable revenue for taxation will remain applicable while the NPA does not separately pay tax to the South African Revenue Service.

6.6. Volume adjustments

The Ports Regulator adjusted the volume forecast for the 2019/20 tariff year taking into account the latest estimates available market assessments and intelligence. In particular, the Regulator adopted a conservative assessment expecting a slightly more subdued volume outlook of 2.0% for the 2019/20 tariff year. This resulted in a revised tariff book revenue forecast of R9 900 million for 2019/20. This, as in the past, has included the decision to exclude all bilateral contracts in the calculation of revenue.

6.7. Claw-back

As the 2017/18 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 R 1 419 million.

Table 4: Claw-back Calculation (R million)

Claw Back Calculations	R'm
Re-computed Revenue Requirement 2017/18 (adjusted for the equitable tax rate)	11 144
Clawback: 2017/18	(1 168)
NPA application 2017/18 AFS Revenue	12 203
Bilateral Agreements	(109)
2017/18 AFS Revenue (adjusted for bilateral Agreements)	12 094
Return on Claw back FY 2017/18	(114)
Provisional allowed in ROD FY 2018/19 for 2017/18	(6)
Final Claw back FY 2017/18	(1 283)
Allowed Revenue per ROD FY 2018/19 (adjusted for equitable tax rate)	12 419
Latest Estimate Revenue	12 691
Estimated Claw back	(272)
50% Claw back Adjustment in FY 2019/120	(136)
Claw back FY 2017/18	(1 283)
Net Claw back FY 2019/20	(1 419)

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

An interim claw-back (in favour of the NPA) was made in the 2018/19 tariff year (R - 6 million), resulting in a residual claw-back of R 1 289 million. The return on the residual claw-back in terms of the WACC rate for that period totals R 77 million.

The expected claw-back calculated for the 2018/19 FY is R 272 million. A provisional claw-back of R136 million, as well as the residual claw-back of R 1 785 million for FY 2016/17, results in a total claw-back of R 1 419 million in the 2019/20 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
2019/20 WACC Return on ETIMC	156
2019/20 ETIMC Retained	539
2019/20 ETIMC Total	3 153

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 NPA's 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 2019/20 Tariff Application has the following result:

Table 6: Assessment Results (R million)

Assessment Results (R million)	
Transaction Type R Million	2019/20
WACC Return	4 570
Depreciation	2 074
Operating Expenses	6 291
Tax Expense	509
Claw Back	-1 419
ETIMC Added	539
NPA Required Revenue 2019/20	12 563
Real Estate Business Income	3 284
Required Revenue from Marine Tariffs	9 279
Marine Business Income	9 900
Total Estimated Revenue	13 184
Revenue Surplus 2019/20	621

The forecast calculates a revenue surplus of R 621 million translating into a tariff decrease requirement of -6.27%.

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 2.0% for all cargo types and marine services for the period.

The following assumptions are included in the tariff assessment:

Risk Free Rate	8.63%
Market Risk Premium	5.35%
Gearing	0.5
Beta Coefficient (unlevered)	0.5
Revenue Effect of Volume growth 2019/20	2.0%
Inflation	5.4%

Tariff Differentiation

The NPA requested specific tariff increases in addition to the general adjusted tariff increase of 4.21%,

"An average 8.00% increase for Marine Services tariffs applicable to shipping lines with:

An average 2.74% increase for cargo dues tariffs with:

- 5.00% on liquid bulk and break bulk cargoes
- 1.79% on containers
- 0% on automotives
- 5% on dry bulk cargoes differentiated further as follows:
  - Coal to increase by 8.00%; and
  - Ores and Minerals: Magnetite to increase by 8.00%.
  - Other dry bulk cargo dues to increase by 3.75%."

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 implementation of the valuation of assets methodology has on the required revenue, 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 remain unchanged at 2018/19 levels**
- **Container cargo dues are to decrease by 10%**
- **All RoRo tariffs are to decrease by 10%**
- **Coal dry bulk export cargo dues are to increase by 10%**
- **The following tariffs are to be reduced to upper limit caps applicable as follows:**
  - **All break-bulk cargo dues are to be capped at R31.50/ton**
  - **All dry bulk cargo dues are to be capped at R20.00/ton**
  - **All liquid bulk cargo dues are to be capped at R40.00/kl**
  - **The tariffs below these upper limit caps in the categories above will remain at 2018/19 tariff levels, excluding coal dry bulk export cargo dues as set out above.**

The incentive for South African flagged vessels will be extended for three years. 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 up to and including 2019/20 will receive a 30% discount applicable year on year up to 31 March 2022. Vessels registered in South Africa in 2020/21 will receive a 20% discount up to 31 March 2022 and similarly a vessel registered in 2021/22 will receive a 10% discount up to 31 March 2022. The discount will thereafter 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 2020/21 and 2021/22 tariff years will be below the 6% inflation target band. Due to the expected subdued economic activity over the tariff period, the Ports Regulator will, if required, use the ETIMC to maintain overall average tariffs close to the upper 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.

The implementation of the Valuation of the regulatory Asset base Methodology has subsequently seen an adjustment in the targeted cost reflective rates, of which estimates are published below. These tariffs provide an indication of the tariff trajectory during the 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 R6.01 in today's prices.

Table 7:Tariff Strategy Base Rates

Tariff Strategy	Updated Tariff Strategy "base rate"	2019/20 ROD based NPA tariff book rate	
Cargo Type	i.e. target tariff to be achieved over ten year implementation	Import	Export
Break bulk	R 31.50	R 8.98 - R 31.50	R 4.27 - R 31.50
RoRo's (p/m)	R 75.39	R 168.94	R 66.65
Liquid bulk	R 18.95	R 7.06 - R 40.00	R 3.60 - R 40.00
Dry bulk	R 6.01	R 6.32 – R20.00	R 4.27 – R20.00
Containers	R 175.57	R 1 931.40	R 635.40

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.

9. Changes to the Tariff Book

The Tariff Application proposed changes to the wording in the Tariff Book. These proposals that were contained in Annexure E of the Application (Page 60), are approved.

10. Weighted Efficiency Gains from Operations (WEGO)

The WEGO measures in place for the 2019/20 period will be measured at the end of the financial year. The financial effects of same will be determined at the end of the period. The Regulator will issue a WEGO Record of Decision in due course with the relevant outcomes.

11. Information and Reporting Requirements

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. All CAPEX projects (infrastructure and capital acquisitions) underway (to include, but not limited to, information pertaining to project stage, tender specifics, construction progress etc.); Itemisation of Contractors and Consultants with regard to project under the auspices of TGC/TCP;

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

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

11.4. Lease Register setting out all lease information;

11.5. List all land funded through port tariffs, transferred to Transnet properties or any other division within Transnet.

11.6. 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);

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

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

11.9. Itemized maintenance schedules for the next three years for all planned and unplanned maintenance projects above R1 million, categorized as OPEX as well as "capitalized maintenance".

11.10. 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.

11.11. All Group policies relating to the allocation and quantification of debt to the NPA.

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

11.13. All due diligence and other information pertaining to the implementation of S3(2), and S26 and S27 of the National Ports Act.

11.14. All infrastructure assets on the NPA RAB, not operated by the NPA and for which the NPA does not charge an operator or a division of Transnet for rental / lease.

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 (where applicable) provided to the NPA by the Ports Regulator. 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.

Annual Financial Statements

As per current practice, a full set of audited annual financial statements must accompany all future tariff applications to the Regulator, as well as port level financials. A full set of segmental financial statements of the Transnet Group must be included.

Please note: All information as stipulated in Section 11 must be provided to the Regulator in electronic format.

.... 26 November 2018

Mr. Thabadiawa Mufamadi

Chairperson of the Ports Regulator of South Africa