

Topics

- Tender Requirements
- Advertised Tenders
- Register
- Sign in
- Registered user navigation
- View Tender Details
- Submit Intent to Bid
- My Intent Submissions
- Ask for Clarity / Submit query
- Submit Tender Bid documents

To access the Transnet E-Tenders Portal, enter the following URL in your browser: transnetetenders.azurewebsites.net

Tender Requirements

To become a Transnet supplier, please respond to the tender requirements as stipulated. Ensure that all information is completed before submission with the requested documentation. Transnet will assess whether your business complies with certain preset standards which are required in order to supply certain items or services.

Publication of tender

When Transnet needs to procure goods, services or works, it does so through one of its procurement mechanisms, usually either an open tender process or a call for quotes. In addition to this website (Transnet SOC Ltd Tenders, Transnet Port Terminals RFQ/Tenders, Transnet Freight Rail Tenders), you can access National Treasury's eTender Publication portal: www.etenders.gov.za or <https://registers.cidb.org.za/PublicTenders/TenderSearch> for construction tenders.

Regarding quotations, Transnet will normally approach at least 3 suppliers to quote for requirements or publish the requirement on this website and the eTender Publication portal.

Transnet does not have its own database of prospective suppliers. It makes use of National Treasury's Central Supplier Database (CSD). In order to be eligible to participate in Transnet's procurement processes, your company must be registered on the CSD. The CSD can be accessed on <https://secure.csd.gov.za/>.

Tender submission

Tenders must be placed in the prescribed tender box, or submitted electronically where instructed, at or before the closing time on the closing date. Late tenders will not be accepted.

Tender documents need to indicate contact details of person(s) who can be contacted regarding any clarification required.

Fake and fraudulent tenders (RFPs) and requests for quotation (RFQs) scams

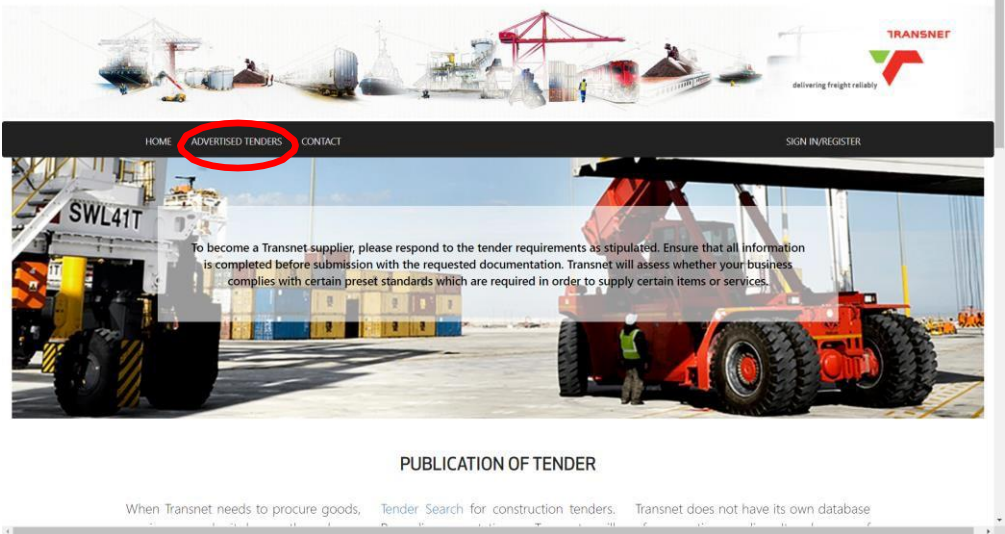
Prospective suppliers are warned that fraudulent Requests for Proposals and Quotations are sent to suppliers using the Transnet name and logo from time to time. Suppliers are advised to verify the authenticity of suspicious RFQs and orders by calling the respective Transnet Operating Division using the contact details listed below or on Transnet's website prior to responding to any RFQs or orders. Transnet will not be held liable for any delivery of goods for any fraudulent tenders or RFQs.

Division	Name	Email Id	Telephone No
TPT	Sindile Mxunyelwa	sindile.mxunyelwa@transnet.net	031 308 8389
TPR	Prudence Nkabinde	prudence.nkabinde@transnet.net	011 584 0821
TE	Nompilo Dlamini	tendercomplaints.transnetengineering@transnet.net	012 391 1374

- eTender Links
- Transnet SOC Ltd Tenders
 - Transnet Port Terminals RFQ/Tenders
 - Transnet Freight Rail Tenders

Advertised Tenders

- Click on the **ADVERTISED TENDERS** link to view all published tenders



NB: Do not wait for the last minute to register or to bid for a tender. Ensure you complete your process at least 1 day (24hours) before the closing date



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2. On the list of advertised tenders, click on the **View Details** button to view tender information

Open TendersOther Tenders

Show▼entries

Search:

Reference Number	Tender Name	Description	Briefing Session	Closing Date	Tender Status	
TE/2022/01/0012/RFQ	QA Public RFQ	APPOINTMENT OF PROFESSIONAL CONSULTANTS CORRIDOR 9 (REDAN TO UNION) SOUTH GAUTENG REGION FOR A PERIOD OF THREE (3) YEARS (FIXED TERM)		1/26/2022 12:00:00 AM	Open	View Details
TP/2022/01/0014/RFS	QA Public RFS	Tender for the repair and maintenance of swimming pools, and the supply, delivery, installation and commissioning of accessories: three-year period, as and when required		1/26/2022 8:00:00 AM	Open	View Details
TFR/2022/01/0012/RFI	QA Public RFI	SUPPLY AND DELIVERY OF RESEARCH / LABORATORY CONSUMABLES	1/26/2022 8:00:00 AM	1/26/2022 10:00:00 AM	Open	View Details
TCC/2022/01/0011/RFQ	QA RFQ for Performance Testing	QA RFQ for Performance Testing		12/31/2022 12:00:00 AM	Open	View Details
TPT/2022/01/17/RFP	QA RFQ for Performance Testing 2	QA RFQ for Performance Testing 2		12/31/2022 12:00:00 AM	Open	View Details

Showing 1 to 5 of 9 entries

FirstPrevious12NextLast

Activate

3. Click on the **Attachment** link to view documents attached to the tender

TRANSNET E-TENDERS

Tender Reference Number	T/89
Description	Cabling Tender
Tender Type	RFP
Contact Person	Kgotso Lesiba
Contact Person Email Address	KgotsoL@globalcomputing.co.za
Date Published	1/1/0001 12:00:00 AM
Closing Date	1/1/0001 12:00:00 AM
Briefing Date And Time	1/1/0001 12:00:00 AM
Briefing Details	TBA
Location Of Service	Transnet
Name Of Institution	TNPA
Tender Category	Services
Tender Status	Active
Tender Type	RFP
Attachments	test.pdf

Register

1. Click on the **SIGN IN/REGISTER** link on the Transnet E-Tenders landing page

delivering freight reliably

HOMEADVERTISED TENDERSCONTACT

[SIGN IN/REGISTER](#)

To become a Transnet supplier, please respond to the tender requirements as stipulated. Ensure that all information is completed before submission with the requested documentation. Transnet will assess whether your business complies with certain preset standards which are required in order to supply certain items or services.

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2. Enter your email address and click on the **Send Verification Code** button.

< Cancel



Send verification code

Organization Type

Organization Type

4. Verification notification is displayed. Complete all other fields.

E-mail address verified. You can now continue.

Change e-mail

Country/Region

Country/Region

3. Enter the verification code received via the email address provided then click on the **Verify Code** button

Verification code has been sent to your inbox. Please copy it to the input box below.

Verify code

Send new code

5. Click on the Create button

Country/Region

South Africa

Create

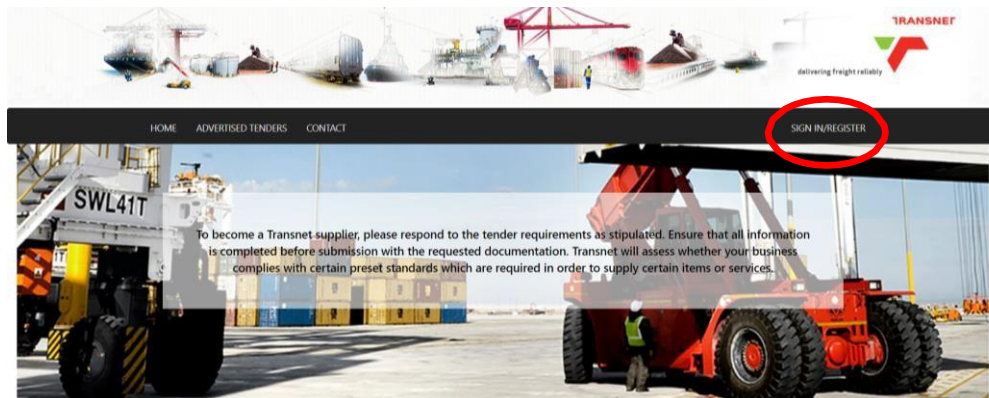


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Sign In

1. Click on the **SIGN IN/REGISTER** link on the Transnet E-Tenders landing page



2. Type the email address you entered and the password you created during registration and click on the **Sign In** button

Sign in with your email address

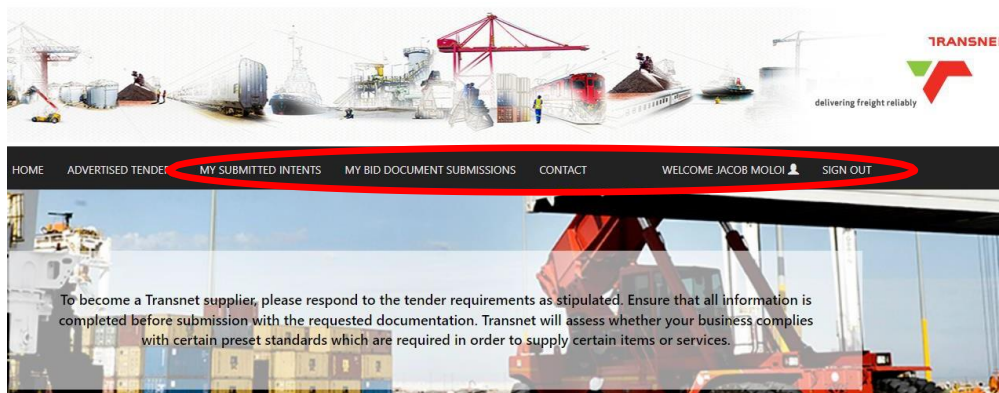
[Forgot your password?](#)

Don't have an account? [Sign up now](#)

Restricted tenders can only be accessed if you SIGN IN using the same email address that you were invited to. The tender will not be visible if you are using a different email address

Registered user navigation

1. Take note of the additional menu options available once you've registered. You are now able to Submit and intent by clicking on the **Advertised Tenders** menu option to view published tenders.



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View Tender Details

1. Click on the **View Details** button to view tender information

Open TendersOther Tenders

Show▼ entriesSearch:

Reference Number	Tender Name	Description	Briefing Session	Closing Date	Tender Status	
TE/2022/01/0012/RFQ	QA Public RFQ	APPOINTMENT OF PROFESSIONAL CONSULTANTS CORRIDOR 9 (REDAN TO UNION) SOUTH GAUTENG REGION FOR A PERIOD OF THREE (3) YEARS (FIXED TERM)		1/26/2022 12:00:00 AM	Open	View Details
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TFR/2022/01/0012/RFI	QA Public RFI	SUPPLY AND DELIVERY OF RESEARCH / LABORATORY CONSUMABLES	1/26/2022 8:00:00 AM	1/26/2022 10:00:00 AM	Open	View Details
TCC/2022/01/0011/RFQ	QA RFQ for Performance	QA RFQ for Performance Testing		12/31/2022 12:00:00 AM	Open	View Details

Submit Intent to Bid

1. As a registered user, more details about the tender will be available. From this page you are able to view all the attachments and **Log An Intent To Bid** by clicking on the slider button.

Tender Details

Tender Reference Number

TE/2022/01/0012/RFQ

Name Of Tender

QA Public RFQ

Description

APPOINTMENT OF PROFESSIONAL CONSULTANTS CORRIDOR 9 (REDAN TO UNION) SOUTH GAUTENG REGION FOR A PERIOD OF THREE (3) YEARS (FIXED TERM)

Tender Type

RFQ

Contact Person

Sonwabile Mtatyana Transnet Corporate Johannesburg

Contact Person Email Address

Sonwabile.Mtatyana@transnet.net

Date Published

1/19/2022 1:51:25 PM

Closing Date

1/26/2022 12:00:00 AM

Briefing Date And Time

Briefing Details

Location Of Service

Carlton Centre

Name Of Institution

TE

Tender Category

Goods

Briefing Session

Closing Date

1/26/2022 12:00:00 AM

Attachments

Excel File.xlsx

JPEG File.jpg

PDF File.pdf

PNG File.PNG

PowerPoint File.pptx

Text File.txt

Log An Intent To Bid

Activate VGo to Setting

2. A notification will be displayed informing you that your **intent has been successfully submitted**.

Intent to Bid

Your request to log an intent to bid has been succesfully submitted.

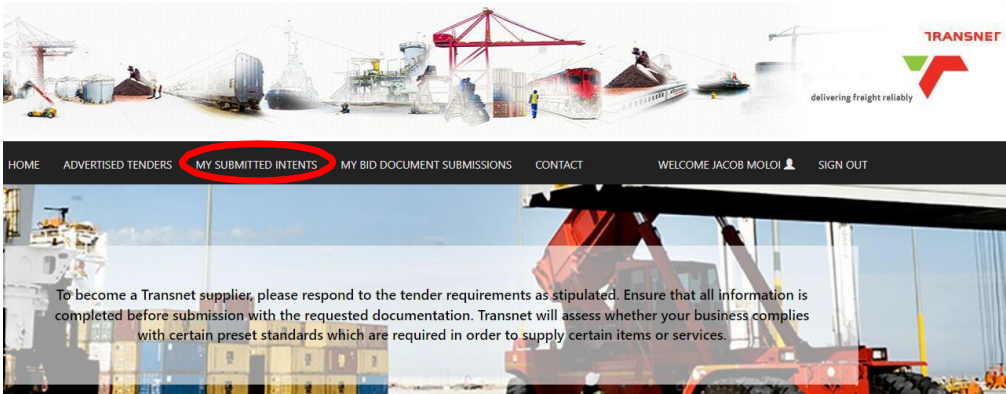
Close

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View Intent Submissions

1. On the landing page, click on the **My Submitted Intents** menu option.



2. From the list of submitted intents, click on the **View Details** button to view details about the item.

MY SUBMISSION INTENTS

Show 10 entries

Search:

Tender Reference Number	Name	Description Of Tender	Briefing Session Date	Closing Date	View Details
TCC/2021/12/0003/RFQ Non-Technical	Test Non Tech Tender QA At 12	Test Non Tech Tender QA At 12		12/23/2021 1:00:00 AM	View Details
TE/2021/12/0003/RFQ	test creation from app	tet		12/31/2021 12:00:00 PM	View Details
TE/2021/12/0004/RFQ	Test Approval Thulani	Test		12/10/2021 12:00:00 AM	View Details
TE/2022/01/0012/RFQ	QA Public RFQ	APPOINTMENT OF PROFESSIONAL CONSULTANTS CORRIDOR 9 (REDAN TO UNION) SOUTH GAUTENG REGION FOR A PERIOD OF THREE (3) YEARS (FIXED TERM)		1/26/2022 12:00:00 AM	View Details
TNPA/2021/12/0003/RFQ	Test Tender For Jacob	Test Tender For Jacob	12/6/2021 2:00:00 AM	12/8/2021 12:00:00 PM	View Details
TP/2021/12/0002/RFQ	QA Tender 10 - to be cancelled after it has been published	QA Tender 10 - to be cancelled after it has been published	12/7/2021 9:00:00 AM	12/28/2021 9:00:00 AM	View Details
TP/2021/12/0006/RFQ Non-Technical	App-Register new Non-Technical RFQ Tender with no briefing details-Mod	App-Register new Non-Technical RFQ Tender with no briefing details-Mod		1/20/2022 8:00:00 AM	View Details

3. Details and attachments can be viewed on this page. You can also **Ask for Clarity** (submit a query) from this page.

SUBMISSION INTENT DETAILS

Tender Summary

Ask For Clarity

Submit Tender Documents

QA Public RFQ

TE/2022/01/0012/RFQ

APPOINTMENT OF PROFESSIONAL CONSULTANTS CORRIDOR 9 (REDAN TO UNION) SOUTH GAUTENG REGION FOR A PERIOD OF THREE (3) YEARS (FIXED TERM)

Briefing Session

Closing Date

1/26/2022 12:00:00 AM

Attachments

Excel File.xlsx

JPEG File.jpg

PDF File.pdf

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Ask for Clarity (Submit Query)

1. On the Submission Intent Details pate, click on the **Ask for Clarity** tab.

SUBMISSION INTENT DETAILS

Tender Summary

Ask For Clarity

Submit Tender Documents

QA Public RFQ

TE/2022/01/0012/RFQ

APPOINTMENT OF PROFESSIONAL CONSULTANTS CORRIDOR 9 (REDAN TO UNION) SOUTH GAUTENG REGION FOR A PERIOD OF THREE (3) YEARS (FIXED TERM)

Briefing Session

Closing Date

1/26/2022 12:00:00 AM

Attachments

Excel File.xlsx

Under 'Submit Queries Below' type your questions in the fields.

- Click on the **Delete (trash can)** button to delete a field (row)
- Click on the blue **Add (+)** button to add another field (row)
- Click on the **Submit All Questions** button.

SUBMISSION INTENT DETAILS

Tender Summary

Ask For Clarity

Submit Tender Documents

Submit queries below

Q1

Q2

Q3

Submit All Questions

Cancel

Briefing Session

Closing Date

1/26/2022 12:00:00 AM

Attachments

Excel File.xlsx

JPEG File.jpg

PDF File.pdf

PNG File.PNG

PowerPoint File.pptx

5. Under the 'Ask for Clarity' tab, you will also be able to view responses from Transnet.

Tender Summary

Ask For Clarity

Submit Tender Documents

Q3

No Response From Transnet

Q1

No Response From Transnet

Briefing Session

Closing Date

1/26/2022 12:00:00 AM

Attachments

Excel File.xlsx

JPEG File.jpg

6. At the bottom of the screen you can **add additional questions**

Submit queries below

Submit All Questions

Cancel

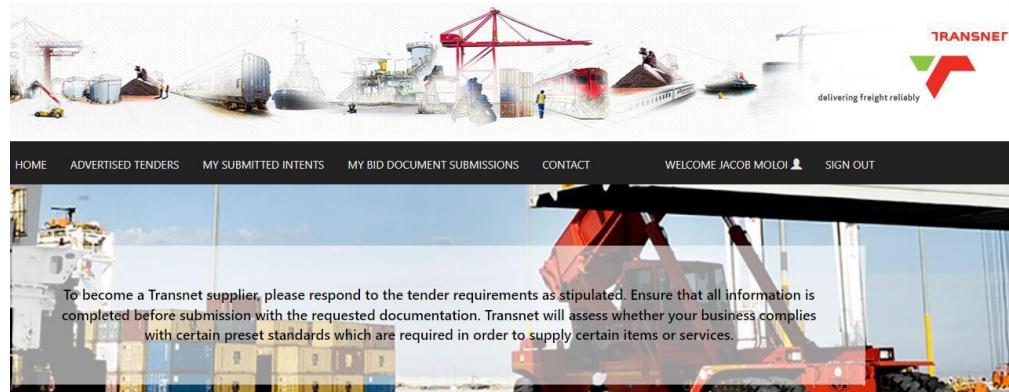


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Submit Tender Bid Documents

1. Click the **My Submitted Intents** menu option.



2. From the list of submitted intents, click on the **View Details** button to view details about the item.

Show entries

Search:

Tender Reference Number	Name	Description Of Tender	Briefing Session Date	Closing Date	View Details
TCC/2021/12/0003/RFQ Non-Technical	Test Non Tech Tender QA At 12	Test Non Tech Tender QA At 12		12/23/2021 1:00:00 AM	View Details

3. Details and attachments can be viewed on this page. Click on the **Submit Tender Documents** link.



4. Click the **Choose Files** button and select the files to upload.
5. Click on **Submit Bid**

QA Public RFQ
Closing Date: 1/26/2022 12:00:00 AM
TE/2022/01/0012/RFQ

APPOINTMENT OF PROFESSIONAL CONSULTANTS CORRIDOR 9 (REDAN TO UNION) SOUTH GAUTENG REGION FOR A PERIOD OF THREE (3) YEARS (FIXED TERM)

⚠ Duplicate documents are not permitted

Mandatory Essential Non Essential Other

Uploaded Documents
No files uploaded.

Drag & drop mandatory documents here

Choose Files

Upload Mandatory Documents

The system allows you to upload 30MB per file, you can upload multiple files. Ensure that your internet connection and speed is stable

Terms of Use

Information provided by the bidder through this portal constitute a binding bid submission/response and a commitment to deliver Transnet requirements. Kindly note that the system automatically ranks the outcome of the evaluation of price and BBBEE scoring based on the information provided. Pricing and BBBEE information provided is the responsibility of the bidder to ensure correctness and Transnet will only consider your latest submission made before the closing date.

[← Back](#)

[→ Submit Bid](#)

Certificate of Attendance of RFP Briefing

It is hereby certified that –

1. _____

2. _____

Representative(s) of _____ *[name of entity]*

attended the RFP briefing session in respect of the proposed Services to be rendered in terms
of this RFP on _____ 20____

TRANSNET'S REPRESENTATIVE

RESPONDENT'S REPRESENTATIVE

DATE _____

DATE _____

EMAIL _____



Port Tariff Methodology

Tariff Years 2024/25 – 2026/27

March 2023

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1. Introduction

In 2007, the Ports Regulator of South Africa ('the Regulator') was established through the promulgation of the National Ports Act, Act 12 of 2005 ('the Act') as '*an independent ports regulatory body*¹', with a mandate to "*exercise economic regulation of the ports system in line with government's objective*²". The Act also sets out the functions of the National Ports Authority ('the NPA / the Authority') as the landlord of South Africa's (SA) ports and requires that "*the NPA must, with the approval of the Ports Regulator, determine tariffs for services and facilities offered by the Authority and annually publish a tariff book containing those tariffs*³".

Subsequently, the Directives to the Act (as approved on 13 July 2009, gazetted on 06 August 2009 and amended on 29 January 2010) requires that when considering the proposed tariffs the Regulator must give due consideration to whether it is desirable that the tariffs which it approves enables the NPA to:

- Recover its investment in owning, managing, controlling and administering ports and its investment in port services and facilities;
- Recover its costs in maintaining, operating, managing, controlling and administering ports and its costs in providing port services and facilities; and
- Make a profit commensurate with the risk of owning, managing, controlling and administering ports and of providing port services and facilities⁴ if prudent.

This mandate, coupled with the history of both SA and the NPA, required regulatory intervention as well as various tools and mechanisms to ensure the ports system of SA is fair, transparent, and competitive.

In line with the functions of NPA, as defined in Section 11 of the Act, the revenue generated from NPA's services is utilised inter alia to:

- Provide and arrange for road and rail access within ports;
- Regulate and control port access (navigation within port limits; enhancement of safety and security);
- Provide and arrange for tugs, pilot boats, and other services and facilities for the navigation and berthing of vessels in the ports; and
- Provide, control and maintain vessel traffic services.

The Regulator's approval is required for the tariffs charged for services and facilities offered by the NPA in accordance with the National Ports Act, 12 of 2005 (the Act).

i. 1 Section 29 of the National Ports Act

² Section 30(1)(a) of the National Ports Act

³ Section 72(1)(a) of the National Ports Act

⁴ Directive 23(2)

In terms of Section 72(1) of the Act, and Chapter 7 of the Directives of 2009 promulgated in terms of Section 30(3) of the Act as amended in 2010, the NPA must submit to the Regulator an application regarding the tariffs it proposes to charge for the services and facilities that it offers. The Regulator's approval of such tariffs is subsequently required and therefore takes into consideration the Application, all subsequent submissions, written and oral comments received during the consultation process, including the responses thereto, as well as conducts its own research prior to publishing a Record of Decision (RoD).

Since the commencement of economic regulation with the 2009/10 RoD, the Regulator has issued, on an annual basis, a RoD for each application year in which an assessment of the NPA's compliance with the Regulatory Framework has been made. All RoDs have contained an outline of corrective action required and have made significant contributions to the maturity of regulation in South Africa.

Furthermore, the Regulator has formulated a long term Tariff Strategy (the 'Strategy') which is based on a 'use and benefit' approach to cost allocation. The Strategy (updated in 2019/20) depends on the adapted Revenue Requirement (RR) approach to allocate costs to specific user groups. Tariffs from 2017/18 onwards were adjusted in accordance with the consulted and adopted Tariff Strategy. The Act, its Regulations, and the Directives constitute the South African Ports' Economic Regulatory Framework which, amongst other instruments, allows for a transparent tariff setting process.

2. The Tariff Methodology

2.1. Background

Significant strides have been made since the first Regulatory decision in 2009/10. The multi-year tariff methodology was first developed in 2015/16 for the period 2015/16 – 2017/18. A review was conducted and additional versions were published for 2018/19-2020/21 tariff years and subsequently for the 2021/22 – 2023/24 tariff years. The refinements of the multi-year tariff methodology have contributed immensely to regulatory certainty, transparency of the process and consistency in the tariff setting process. The Methodology has allowed a significant smoothing of the Authority's return and at the same time, it has allowed the Regulator to establish a lower tariff trajectory whilst still ensuring the profitability of the NPA, as can be seen in Figure 1: Tariffs vs Inflation below.

The multi-year tariff methodology for 2021/22 – 2023/24 tariff years coincided with the transitioning of the NPA in terms of its corporate status. The process of corporatisation is currently underway which will result in a subsidiary of Transnet SOC Ltd ("Transnet"), as envisioned in government policy statements and the National Ports Act, including the following:

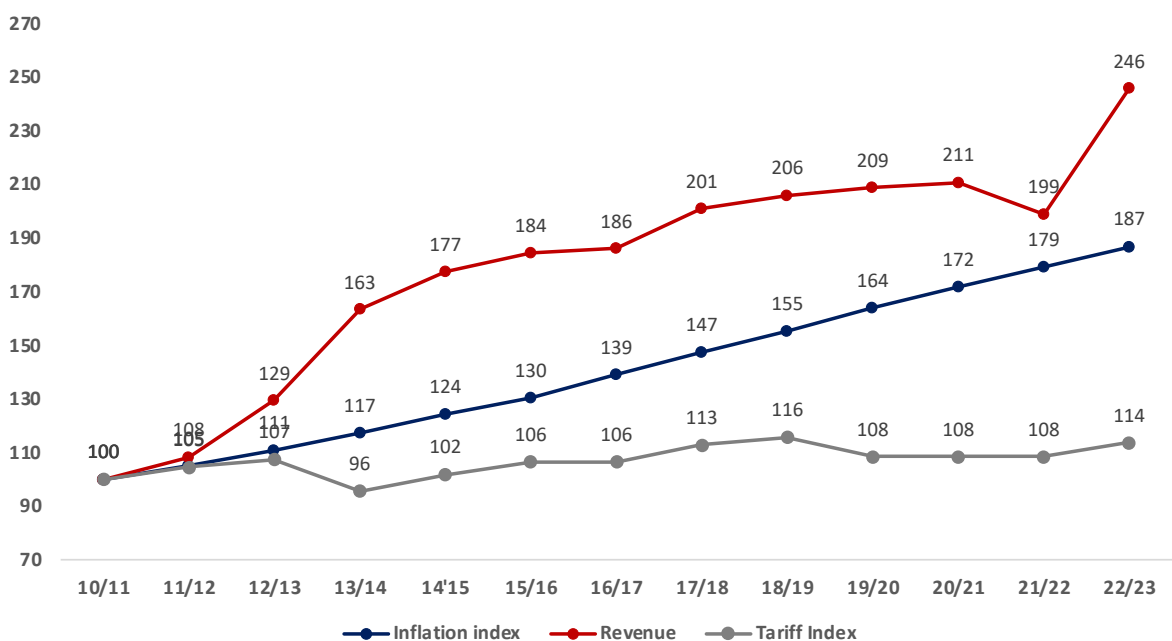
- a) Indication to Cabinet, by the Department of Public Enterprise that corporatisation was imminent (2018);
- b) Announcements by President Cyril Ramaphosa on 22 June 2021;
- c) Gazetting of the intent to corporatise by the Minister of Public Enterprises; and
- d) the public advertisement for nominations of members to serve on the Board of the National Ports Authority in line with section 14 of the Act (13th October 2021).

Furthermore, the NPA's Tariff Applications for the 2023/24 tariff year has been prepared on the basis of an entity that has become a subsidiary of Transnet, with the Authority stating that it has

noted progress in the incorporation of the NPA to an independent subsidiary. The Tariff Methodology, applicable to the 2024/25 – 2026/27 tariff years, seeks to regulate the independent subsidiary which will be fully capacitated to execute on the mandate of landlord and regulator of the port and its operations.

The Regulator, normally observes the economic climate within which tariff increases are requested and makes a consideration over the welfare of the ports system. However, the Regulator going into the 2024/25-2026/27 tariff years, has recognised that some of the drivers of costs will be investments in infrastructure capital assets and will continue to incentivise investments to ensure a reliable port system that will enable competitiveness of South Africa on a global scale.

Figure 1: Tariffs vs Inflation



2.2. In Context

The “multi-year” tariff methodology (the ‘Methodology’) in the current instance refers to the determination of tariffs over the period 2024/25 – 2026/27 based on a single methodology.

The Authority’s multi-year tariff application contains different calculations for each tariff year in the tariff period, consisting of forecasts and calculations of each of the components of the Required Revenue (RR) approach. Annual adjustments to the values of the components will be taken into account through a claw-back (or give-back) mechanism.

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

3. Port Tariff Methodology

3.1. Methodology Period

The Tariff Methodology is applicable for tariffs within the periods 2024/25, 2025/26, and 2026/27.

The Regulator allows for an annual review and an annual adjustment of tariffs within a three-year period as opposed to fixing the prices for the period as a whole. This is intended to protect users from possible large step changes in tariffs at the end of the three year period. In addition, unlike other regulated industries such as electricity or oil and gas pipelines, there are large variations in the users and usage of port infrastructure and services. Therefore, an annual review allows a more efficient and appropriate allocation / distribution of prices attributable directly to particular port users in the short term as opposed to adjustments only after three years.

Provision for an annual review and adjustment of tariffs within a three-year period is contained within the Methodology, and the NPA is required to apply for a fixed tariff adjustment for each year under review as well as to provide indicative tariffs for the two outlying years. This in turn allows the Regulator, and port users, to take a medium term view of the operational expenses, volume forecasts, and tariff trajectories, whilst at the same time provides the Regulator the flexibility to adjust for economic or other external impacts.

This Methodology will therefore apply until the end of 2026/27 tariff year. It incorporates future changes being introduced by Government including; changes in the corporate structure of the NPA in line with the National Ports Act, as well as the establishment of the Transport Economic Regulator. As such, the Regulator may, from time to time, make corrections or changes to the Methodology as required and the Regulator maintains discretion with regards to amending elements of the Methodology in the event of a change in the corporate structure of the regulated entity.

4. Separation of NPA

4.1. Ring Fencing of NPA business

The Ports Regulator, in its November 2018/19 RoD, allowed the implementation of a varied and hybrid valuation of assets approach pending the implementation of Section 3(2) of the Act. These variations and conditions were thereafter incorporated into the Tariff Methodology since then. The review of the Tariff Methodology is meant to reflect on the treatment of the Authority as a corporatised entity as per Section 3(2) of the Act. Although efforts have been made by the Regulator to encourage corporatisation, the corporate nature of the NPA is still not in compliance with the requirements of the Act.

When the NPA is corporatised, it will be expected to raise own financing separately. As a result, the NPA will be expected to manage its operations in an efficient manner to enable easy access to financing, capital and sources of liquidity on reasonable terms in order to lower its cost of capital and reduce the cost of doing business.

This Methodology must make provision for the treatment of NPA in the event that it continues to operate as a division of Transnet Soc Ltd or alternatively, when it becomes a corporatised entity.

5. The Elements

5.1. Rate of Return Regulation - Revenue Required (RR) Methodology

The Revenue Required⁵ methodology as adopted by the Ports Regulator embraces the Rate of Return principle as in the determination (and capping) of the overall revenue requirement annually for the NPA. It has enabled a reasonable return and full cost recovery. This approach has and continues to satisfy the requirements of the Directives to the Act, as set out in section 1.

In regulatory practice, tariffs for far-lying future years are based on forecasts of various considerations. As a general rule, the longer the forecast period is, the less accurate the forecasts towards the end of the period is likely to be. In time, forecasts can be replaced with actual data for the forecasted variables and when sufficient actual data is available for a tariff year, the tariff is recalculated. Claw-backs or give backs are then calculated to offset any differences. This calculation and subsequent claw-back will be completed during each year of a multi-year tariff decision, as has been the practice of the Regulator. As actual data for tariff year one will only be available in tariff year two, the applicable claw back or giveback, if any, will only be fully implemented in tariff year three.

Actual volumes will replace estimates for the calculation of claw backs or give backs. The use of a three-year period in the current Methodology includes a mid-period adjustment, that should, in theory, reduce the volatility over the period as a result of the claw-back.

The Regulator will apply the adapted Revenue Required approach for the 2024/25 – 2026/27 financial years, and the formula is as follows:

Revenue Requirement

$$\begin{aligned} &= \text{Regulatory Asset Base (RAB)} \\ &\times \text{Weighted Average Cost of Capital (WACC)} + \text{Operating Costs} \\ &+ \text{Depreciation} + \text{Taxation Expense} \pm \text{Clawback} \\ &\pm \text{Excessive Tariff Increase Margin Credit (ETIMC)} \\ &\pm \text{Weighted Efficiency Gains from Operations (WEGO)} \end{aligned}$$

The above formula reflects a standard building block approach to setting the revenue requirement of a regulated service provider and has been used by the Regulator in a similar manner in previous tariff determinations. This approach accords with the rate-of-return revenue requirement calculations by Regulators in SA as well as internationally (as modified in the ports regulatory practice over time) and has been used as the basis for assessments by the Regulator in preceding tariff periods. Due to the suitability of this method, and the maturity of regulation in SA, this method continues to be both relevant and applicable.

The Methodology requires that the NPA estimate its operating costs, depreciation, taxation expenses, and return on capital; a product of the Weighted Average Cost of Capital (WACC) as well as the value of assets in the RAB for the period under review. In addition, the Methodology contains a claw-back mechanism (that corrects for over or under recoveries in previous tariff periods) and

⁵ The inclusion of a claw back mechanism results in a Required Revenue approach which closely reflects a Revenue Cap approach. For purposes of consistency in terminology we continue to use the term Revenue Requirement (RR).

an Excessive Tariff Increase Margin Credit (ETIMC) facility. The ETIMC allows for large increases in required revenue and/or tariffs that may arise from volume volatility or substantial capital expenditure programmes in future years to be partly offset by moderately higher tariff increases in the short-term.

Whilst the Methodology as set out below contains an efficiency variable (the Weighted Efficiency Gains from Operations) and will continue to incentivise operational efficiencies, the Regulator still retains the right to include, at any time during this methodology period, positive incentives in support of any national objectives or positive operational or financial outcomes in the Records of Decision.

The exposition of the Revenue Requirement approach is:

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

Where:

<i>RR</i>	=	<i>Revenue Requirement</i>
<i>v</i>	=	<i>Value of the assets used in the regulated services</i>
<i>d</i>	=	<i>Accumulated depreciation on such assets</i>
<i>w</i>	=	<i>Working Capital</i>
<i>r</i>	=	<i>Regulated Return on Capital</i>
<i>D</i>	=	<i>Depreciation on the RAB accounted for in the tariff period</i>
<i>E</i>	=	<i>Operating Expenditure (OPEX)</i>
<i>T</i>	=	<i>Taxation expense</i>
<i>C</i>	=	<i>Claw-back</i>
<i>ETIMC</i>	=	<i>Excessive Tariff Increase Margin Credit</i>
<i>WEGO</i>	=	<i>Weighted Efficiency Gains from Operations</i>
<i>(v - d + w)</i>	=	<i>Regulated Asset Base (RAB)</i>

5.2. Regulatory Asset Base (RAB)

The RAB represents the value of those assets the NPA is allowed to earn a return on. As the return earned on these assets is expressed in real terms, the value of total assets in the RAB is indexed to inflation each year using the Trended Original Cost ("TOC") approach⁶. Each year, estimated capital expenditure (CAPEX) and depreciation is added to the closing balance for the previous year to arrive at an updated closing balance for the current year. The expected working capital balance is added to arrive at a total RAB estimate, which is averaged over the year to account for the progressive spending of capital works in progress (CWIP) over the period.

⁶ This excludes the pre-1990 assets, on which a Historical Cost approach to depreciation and a nominal WACC will apply.

5.2.1. Calculation and Adjustment of the RAB

The Regulator concluded that the appropriate (minimum) criteria elements, for the purpose of setting an appropriate RAB and asset valuation system must:

- be based on a principled and sound rationale;
- produce a reasonable asset value for existing assets;
- result in an acceptable price-path;
- ensure financial capital maintenance;
- encourage efficiency and caution with respect to new investment decisions on the part of the NPA;
- be reconcilable back to the NPA asset register, at least at a particular point in time; and
- minimise regulatory information asymmetry problems.

The Regulator concluded that the TOC approach (satisfying the principle of Financial Capital Maintenance) based on the capitalisation dates and values in the NPA asset register best meets the criteria. However, some concerns related to the older assets capitalised before 1990 were raised. Therefore, assets with capitalisation dates prior to 1990 will be treated on a historical cost (HC) basis. The underlying assumption is that assets in existence at 1990 have now been in existence for a long period of time and, for most of that time, have been depreciated on a trajectory following this method. The Regulator will therefore treat these assets with the HC method, while treating any assets created from 1990 onwards on the basis of the TOC approach.

The following is the approach to be implemented:

- i. TOC values provide a viable approach to setting the value of the RAB and will be applied to newer (post 1990) assets.
- ii. The Regulator will differentiate between assets in existence in 1990 and those with capitalisation dates after 1990 and will treat the older (pre-1990) assets on a HC valuation basis.
- iii. On application by the NPA as part of its annual Tariff Application, the Regulator may, in considering the revenue impact of the implementation of the methodology decide to accelerate the depreciation period of the pre-1990 assets in order to smooth out the revenue impact thereof.
- iv. If during the period of this Tariff Methodology, the NPA is corporatised from a division of Transnet, into a subsidiary or stand-alone SOC with borrowing powers, the Regulator will, in order to ensure good credit ratings of the NPA, consider applying the TOC to both pre-1990 assets as well as post 1990 assets (as a deviation) until credit metrics like the cash-interest coverage ratio (not applicable to a non-borrowing division) have been proven to be within sustainable limits.
- v. *The Board/governing body of the NPA must write a motivation to the Regulator at least three months prior to the tariff application submission requesting a deviation on the RAB calculation, filing its Memorandum of Incorporation with the Regulator and providing all its credit metric calculations, or alternatively or citing significant progress on corporatisation, if any. On subsequent approval by the Ports Regulator, the NPA may make its tariff application on a RAB valuation calculation based on the decision of the Regulator. The NPA deviation letter as well as the Regulator's ROD on the RAB valuation calculation will be published.*

- vi. See Section 10 for more details on the implications and requirements with respect to corporatisation.

5.2.2. Rules for Inclusion in the Regulatory Asset Base (RAB)

The RAB covers all assets employed/owned by the NPA in the provision and supply of port capacity and services. The following are the conditions that must be met in order to include an asset in the RAB. The following rules set out the criteria for inclusion and valuation of assets and treatment of maintenance on the RAB:

Prudency tests are applicable to new and used assets for inclusion in the RAB.

The amount by which the capital base may be increased in any specific year is the amount of the actual project capital expenditure incurred in that specific year provided that:

- i. The amount does not exceed the amount that would be invested by a prudent landlord port owner acting efficiently in accordance with good industry practice to achieve the lowest sustainable cost of delivering the required services; and
- ii. At least one of the following conditions is satisfied:
 - a. The anticipated incremental revenue (subjected to the claw back mechanism in outer years if found to not be true) generated by the capital expenditure exceeds the investment cost;
 - b. The NPA can satisfy the Regulator that the new capital expenditure has system wide benefits that, in the Regulator's opinion, justify its inclusion in the capital base; or
 - c. The new capital expenditure is necessary to maintain physical safety and functional integrity of National Ports Authority infrastructure, installations and marine services equipment in the port system.
- iii. The fixed asset is long-term in nature and is operationally used and useable;
- iv. Fixed and other assets that are not in an operationally used and useable (useful) form will not be included in the RAB;
- v. The asset is used and useable and should be in a condition that makes it possible to supply demand for port services in the short to medium-term (within 12-36 months).

Additional conditions regarding assets include:

- New assets will be included in the RAB and subjected to the TOC methodology as set out if the expected life of the asset exceeds five years.
- If the asset's lifespan is five or less years (i.e. depreciation periods of five years or less at the acquisition of said assets) it will attract straight line depreciation to be included in the tariff calculation. Maintenance on these "short term assets" may have maintenance costs included if used beyond full depreciation.
- The NPA shall, with each tariff application, provide a list of temporary and long term unused assets (i.e. all assets not used operationally). This list will be published.
- All capital expenditure ("CAPEX") must be consulted on with the PCC and NPCC as per the requirements of the Act and Directives, the outcomes of which must be communicated to the Regulator.
- All CAPEX must be submitted to the Regulator as part of the annual Tariff Applications for consideration by the Regulator on 01 August.

- All CAPEX forming part of the annual tariff application to the Regulator must be accompanied by an approval letter signed by the Chairperson of the relevant Board/Governing body of the Authority, outlining capital expenditure approved in each port and all other business units of the Authority.
- Growth related CAPEX adding new capacity should be presented separately with the related (anticipated or actual) volume growth and the expected time when that growth will be realised in the port system.
- Asset replacement CAPEX must be presented separately indicating the capacity in the specific areas of the port system (with total volume replacement)
- The NPA should also share and indicate the approximate ages of assets due for replacement.
- Safety, Environmental and Compliance related CAPEX should be presented separately.

The tariff methodologies have over the years incentivised CAPEX in the ports sector even when the Authority has not successfully invested approved CAPEX.

5.2.3. Calculation of the RAB

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

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

$$RAB_{c,y} = RAB_{o,y}(1 + CPI_y) + (CAPEX_y \cdot (1 + CPI_y)) - D_y$$

Where:

RAB_y	=	value of the RAB used to determine the returns for period y
$RAB_{o,y}$	=	opening value of RAB for the period y
$RAB_{c,y}$	=	closing value of RAB for the period y
w_y	=	forecast average net working capital over period y
$CAPEX_y$	=	value of expected capital investment over period y
D_y	=	depreciation allowance for assets over review period y
CPI_y	=	annual rate of Headline CPI expected over period y

- Working capital will be included in the RAB for the purposes of calculating the return as per the Tariff Methodology.
- The return on capital will be based on the TOC value of the assets for assets with capitalisation dates post 1990, and HC value for assets predating 1990, to ensure financial capital maintenance.
- A *real* return will be applied in the case of assets that is valued on a TOC basis and a *nominal* return will be applied to the HC asset values in the RAB.
- The net TOC value is determined by calculating the accumulated and annual depreciation on a straight line basis over the elapsed life for those assets that are depreciated (with appropriate adjustments for refurbishments etc.).
- The historic asset base as at 31 March 1990 will be used as an opening asset base (This asset base will be used as a basis to determine the current trended net value of NPA's assets).
- Concession funded assets and prepayments (e.g. concessions that resulted in assets transferring back to the NPA) will be recorded on the regulatory asset base at R1 (One Rand).

5.2.4. RAB Depreciation

The fundamental contextual decision for the Regulator in determining the appropriate application of depreciation centres around the aim of regulation, specifically the intention to satisfy the principle of financial capital maintenance. Currently, to fully take into account capital expenditure and inflation, the following formula is used in the calculation of depreciation:

$$D_y = (RAB_{(o,y)} + (RAB_{(o,y)} \cdot CPI_{(y)})) / RUL$$

Where:

RAB_y	=	<i>value of the RAB used to determine the returns for period y</i>
$RAB_{o,y}$	=	<i>opening value of RAB for the period y</i>
$RAB_{c,y}$	=	<i>closing value of RAB for the period y</i>
D_y	=	<i>depreciation allowance for assets over review period y</i>
CPI_y	=	<i>annual rate of Headline CPI expected over period y</i>
RUL	=	<i>Remaining useful life in years</i>

It must be noted that the Tariff Methodology includes the use of asset specific depreciation rates as opposed to an average asset life. The treatment of those assets that have exceeded their expected lifespan and/or depreciation periods are dealt with in Annexure C.

Depreciation will only be allowed in the calculation of the tariff upon commissioning. Efficient implementation and management of capital projects, timely completion of infrastructure construction, and on-schedule acquisition of capital equipment is thereby incentivised.

The following provisions apply:

- i. The depreciation should be calculated on the historical cost of an asset (this is independent of the amortization of the trended portion) and be based on the remaining useful life of each asset; See Annexure B;
- ii. The total accumulated depreciation and accumulated amortisation is deducted from the TOC cost of the RAB to obtain the RAB on which the return is calculated. See Annexure B;
- iii. Mothballed and/or impaired assets will not earn a return although the maintenance of mothballed assets with a definite plan for future use, will be allowed in the OPEX;
- iv. Similarly, the maintenance on assets still in use, but fully depreciated, will be allowed in the OPEX; and
- v. A complete list of assets in this category must be compiled and updated on an annual basis by the NPA. The required information must be supplied to the Regulator.

5.2.5. Maintenance

- i. Maintenance to be treated as *operational expenditure* (i.e. not capitalised and included in the RAB) for purposes of tariff calculation and will be defined as: “work undertaken within the port system with the intention of:
 - a. re - instating the physical condition of an asset to its original specified/design standard (e.g., dredging to the specified/design depth);
 - b. preventing pre-mature deterioration or failure in order to ensure functionality for the duration of the asset’s designed useful life;
 - c. restoring correct operation within specified parameters;

- d. replacing *components* of assets at the end of their useful/economic life with modern engineering equivalents;
 - e. making temporary repairs or servicing for immediate health, safety and security reasons; and/or
 - f. assessing assets for maintenance requirements (e.g., to obtain accurate and objective knowledge of physical and operating condition, including risk and financial impact, for the purpose of maintenance).
- ii. Expenditure on assets or projects that **may be included** in the RAB as *capital expenditure* when it results in the following:
 - a. an increase in the asset's useful function or service capacity (e.g. dredging to a greater than specified depth);
 - b. an extension of the useful life of an asset;
 - c. an improvement to the quality of the service(s) delivered through utilisation of the asset, or resolving the unintended consequences of a poor engineering design (e.g. the installation of a mooring system in Ngqura);
 - d. a reduction in future operating costs; and/or
 - e. the upgrade or enhancement becoming an integral part of the asset.
- iii. Maintenance dredging must be subjected to the criteria above.

Annexure C summarises the treatment of different assets descriptions in the RAB.

5.3. Inflation Trending

The inflation rate for calculating the trend in the value of assets between rebasing periods will be the Headline Consumer Price Index (CPI) forecast in each financial year during the tariff period. The same inflation rate is used in the calculation of the Weighted Average Cost of Capital (WACC).

Due to the Regulator finalising a RoD by 01 December, it will utilise a final National Treasury published CPI forecast from the National Treasury's October/November Medium Term Budget Policy Statement (MTBPS) and if deemed necessary, also estimates published by the South African Reserve Bank, the Bureau of Economic Standards, other institutions, and its own economic forecasts in its assessment of future price changes.

5.4. Capital Works in Progress (CWIP)

CAPEX implementation since the publication of the last multi-year Tariff Methodology has been dismal. Therefore the Regulator will require the following from the NPA with every tariff application:

- i. CWIP projections for the tariff period detailed as follows:
 - a. per asset class;
 - b. per service;
 - c. per project; and
 - d. monthly planned expenditure schedules.

All CAPEX which has been approved and not fully implemented shall be taken into account as part of the claw-back process and the RAB, and its return shall be then adjusted accordingly. In addition,

no depreciation allowance will be included until commissioning of the relevant asset. The Authority shall officially inform the Regulator of the commissioning of each asset in writing in each year as part of its Tariff Application supplying the date of commissioning, final expenditure value, and any other information the Regulator deems necessary.

The Regulator has in the past relied on the PCCs to “in principle” consider or support the NPA’s CAPEX requirements, however, the NPA’s ability to implement projects, recent CAPEX implementation record, as well as the relevance and appropriateness of the CAPEX plan will be taken into consideration in future. In addition, each project in the application⁷ must contain the underlying motivation (business case) for all CAPEX projects, including volume projections etc. (See Annexure A). Whilst the NPA will be allowed to approach the Regulator to amend the RAB within the cycle, any amendments will require the same rigorous probity assessment. This is particularly important during the ramp up of capital expenditure phase as guided by the business case submissions.

As such, the assessment of determining the final closing balance at the end of the CAPEX period will require an assessment of actual achievement of the approved CAPEX plan. This will require an assessment of the various construction elements including disbursements, actual outputs, and cumulative project specific Engineer’s payment certificates and completion certificates.

5.5. Working Capital

The regulatory purpose of the RR approach is to determine the revenue required by the NPA to recover its costs and an appropriate return. This must include the concept of the time value of money as the time at which a particular cost is incurred may not necessarily be matched with the associated tariff. Therefore, capital is required to cover the time delay, however there is a cost associated with the additional capital requirement. In order to correct for the inherent assumption in the RR approach (that expenses and revenues occur at the same point in time), an allowance for the time difference is included.

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

⁷ In excess of R10 million

5.6. Weighted Average Cost of Capital (WACC) - Vanilla WACC

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

A real WACC⁸ (the cost of equity and the cost of debt) will be applied and expressed in Vanilla terms (i.e. post-tax cost of equity and pre-tax cost of debt) to the post-1990 assets and a nominal WACC will be applied to pre-1990 assets. Accordingly, a separate allowance for the tax expense in the RR formula is required.

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

Where:

$$\begin{aligned} k_d &= \text{pre-tax cost of debt} \\ k_e &= \text{post tax cost of equity} \\ g &= \text{gearing, which is debt over total capital} \end{aligned}$$

5.7. Cost of Equity (k_e)

The post-tax Cost of Equity is calculated with reference to the Capital Asset Pricing Model (CAPM), which is expressed as:

$$k_e = r_f + \beta \times MRP$$

Where:

$$\begin{aligned} R_f &= \text{Real risk free rate} \\ \beta &= \text{Measure of NPA's exposure to market (non-diversifiable) risk} \\ MRP &= \text{The market risk premium measuring the premium over and above the risk free rate that investors might expect to earn} \end{aligned}$$

The exclusion of the return on equity rate from the claw back calculation ensures that the use of a CAPM calculation establishes a clear and consistent determined risk premium above the RFR, significantly reducing the NPA's revenue risk as well as additional tariff volatility.

5.8. Risk Free Rate (r_f) (RFR)

In establishing a risk profile for a regulated entity like the NPA involved in the development of billions of Rands of infrastructure through debt, one of the main risks facing the business is that of the volatility of interest rates and other associated borrowing costs. In addition, over-runs, lack of engineering and project management skills, cost uncertainty, and regulatory risk further contributes to their risk profile. With regards to the latter two risks, namely cost uncertainty and regulatory risk, the RR methodology, as implemented by the Regulator in this instance, adequately covers the perceived risk. In the first instance, the granting of operational expenditure as a revenue item and the inclusion of a claw back, together with a transparent tariff methodology sufficiently compensates the NPA for the associated risk. To compensate for the interest rate risk, regulators are generally in agreement that longer dated government bonds should apply for two reasons, firstly to retain consistency in the calculations, the RFR should be set on a basis that is consistent with other variables in CAPM, notably the MRP. Secondly, to ensure alignment with the average length of remaining life of an asset in the RAB or at least the remaining debt maturity periods.

⁸ Adjusting for inflation will use Fisher's Equation: $(1 + \text{nominal WACC}) = (1 + \text{real WACC}) * (1 + \text{cpi})$

This Methodology utilises the South African Reserve Bank’s published time series KBP2003M “Yield on loan stock traded on the stock exchange: Government bonds - 10 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.

As such the Regulator will retain the use of the geometric mean of the KBP2003. The calculation of the RfR average is done over the full period available in the SARB dataset as the cost associated with the larger standard error of a shorter period surpasses any advantages of using a more recent shorter period RfR.

The Real RfR is deduced by using the Fisher Equation.

$$1 + i = (1 + r)(1 + E(I))$$

Where:

$$\begin{array}{lll} i & = & \text{Nominal rate} \\ r & = & \text{Real rate} \\ E(I) & = & \text{Expected inflation} \end{array}$$

5.9. Market Risk Premium (MRP)

The MRP is in essence forward-looking and therefore cannot be observed but must rather be forecasted. A general consensus exists that the historical premium is, in fact, the best estimate of the forward looking MRP. For this purpose, the Regulator uses the latest available Dimson, Marsh and Staunton (DMS) estimate of the mean MRP as measured against bonds for SA to determine an MRP for the NPA’s cost of equity calculation. The existence of negative serial correlation in the returns on South African equities results in an overestimation of the MRP when using the arithmetic mean. In addition, the relative (and recent) changes in terms of market diversification, improvements in the regulatory and legal frameworks safeguarding investors points to the appropriate risk premium forecast to be at the lower end of the long term view.

As such the Regulator will retain the use of the geometric mean of the DMS MRP. The calculation of the MRP average is done over the full period available in the DMS dataset as the cost associated with the larger standard error of a shorter period surpasses any advantages of using a more recent shorter period MRP.

5.10. Beta (β)

As the NPA is not a traded company, there is no published beta (β) which reflects its risk relative to firms listed on the market. Therefore, a β has to be set in order to reflect the risks faced by the NPA under the RR methodology that will ensure an appropriate return (for the risk faced).

The inclusion of a claw-back mechanism reduces exposure to systematic risk and the existence of an interventionist regulatory regime ensuring future returns to a state-owned monopoly with no competitors to its business in SA, requires the Regulator to use a β substantially lower than that of large firms listed on the market such as the JSE top forty. The unique nature of the NPA as a regulated monopoly with an implied government guarantee, makes any comparison with other private sector port companies impossible as by definition, they cannot be in the same business as a monopoly.

The consistent returns allowed by the Regulator and the claw back mechanism that effectively removes systematic risk (mainly through decreasing volumes) combined with the view that the β must be considered as endogenous to the methodology applied, argues for a lower beta. Due to the complexity of establishing the correct β , the Regulator will apply an asset beta of 0.35 over the period. The lower asset beta value (as opposed to the 0.5 previously applied) responds to the slow-down of CAPEX by the NPA over the last Tariff Methodology period relative to CAPEX applied for in tariff applications over the period. This signals relatively lower risk hence a lower beta, the risk adjusted equity returns on the RAB are reduced, however increased delivery of CAPEX will lead to higher values of the RAB and in turn higher returns. Efficient implementation and management of capital projects, re-establishment of engineering capacity in the NPA, timely completion of infrastructure construction, and on-schedule acquisition of capital equipment is thereby incentivised, and if such results are not achieved, the Regulator may again revise the beta downwards in future years. The Hamada equation will be used to re-lever the beta to result in an equity β .

5.11. Gearing (g)

The Regulator, taking into consideration previous applications, previous patterns of variation in the applications, various submissions, and its own analysis of the NPA's gearing, has determined that an appropriate gearing for the entity (an infrastructure heavy landlord monopoly) for the period is (at least) 50%. Further, this reflects a median position within a sample of ports as well as adequately signals a required re-investment of profits into the port system whilst balancing costs with a lower cost of debt.

If the NPA is corporatised with an independent Board, independent financial disclosure, borrowing powers, and control of its own cash flow bank account, the Regulator will consider using the actual gearing calculated through a due diligence process. The Regulator has not changed its position on Gearing given the inability to observe the level of gearing for a stand-alone, separate NPA.

5.12. Cost of Debt (k_d)

Currently the NPA's *actual*, embedded (adjusted for an *effective weighted*) debt costs as allocated by Transnet is used to determine the cost of debt applied within the WACC. The cost of debt, as per the Annual Financial Statements, and the ability of the Authority to raise finance through the strength of its books should be used in the determination of the WACC. However, the actual embedded debt should be considered provided it reflects debt funding and credit risk of the NPA as a separate entity. Alternatively, the Regulator reserves the right to benchmark the NPA's cost of debt for the purposes of determining WACC.

5.13. Taxation Expense (T)

The Regulator proposes the use of corporate tax rate (t) subject to the actual tax payment to the tax authorities. This will serve as ex ante tax allowance. A claw back should be applied on allowances for tax which were not paid over to the tax authorities. With the continuation of the status of a Transnet OD, the Regulator will continue to apply claw back using Equitable Tax Rate which is a proxy for actual tax.

The equitable tax rate is calculated as that rate which will result in the proportional sharing of the Transnet Group taxation liability by each of its profitable divisions/segments/business units. The equitable tax rate is thus the rate which if applied to the profits of each profitable division/segment,

will amount, if added together, to the full corporate tax payable by Transnet to the South African Revenue Services (SARS) on its pre-tax net profit in any one financial year.

The Equitable Tax Rate is calculated as follows:

$$te = t \left(\frac{Pg}{\sum Pi} \right)$$

Where:

- te = equitable tax rate,
- t = 27% or the corporate tax rate,
- Pg = Transnet Group pre-tax net profit for the year,
- $\sum Pi$ = Sum of pre-tax profits of profitable divisions/segments/units for the year

The equitable tax rate to be applied will be the average equitable tax rate over the previous 5 years. The clawback will remain as a mechanism to be used to correct for the actual equitable tax rate in any year when appropriate audited segmental financial statements are published. All fair value and similar once-off accounting adjustments on segmental profits will be not be considered in the calculation of the equitable tax rate in future and in the retrospective 5 years forming part of the calculation.

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.

5.14. Operating Expenditure (OPEX)

The Regulator currently analyses the operating cost estimates for the period on a detailed, line by line item basis. The NPA is requested to provide detailed and complete motivation for each of the expenses applied for, especially on large items such as labour, energy costs, and sundry costs. The Regulator will also consider the efficiency of the costs and will develop a regulatory framework for inclusion and treatment of the various OPEX line items.

The OPEX of the Authority is expected to reflect the events in the economy and country as a whole and should the required increases not be reflective or considered prudent, the Regulator may exclude portions of OPEX from the required revenue.

The Regulator has consistently applied a cost pass-through on allowances for costs incurred by the NPA which it has limited, to no control over and are considered reasonable for the full costs to be recoverable. The most prudent approach is to align the cost base with the inflationary expectations. The Methodology will allow the Authority to adjust OPEX where the scope of work has changed of which creates value-add to port users.

Furthermore, over and above the OPEX budget submitted in the Tariff Application, the Regulator will analyse drivers of OPEX which the forecast thereof could further be split into:

- a) Ports related;
- b) Business support which includes IT & telecoms, Head Quarters, Office equipment etc.;
- c) Employee costs, renewal, additions etc.; and
- d) Real price effects.

The Regulator is concerned regarding the efficiency of the Authority's OPEX and intends, together with the Authority, on developing a measure for efficiency.

The Regulator continues to allow the inclusion of the Transnet Group Costs ("TGC") in the total allowed expenses, subject to the requirement that the NPA submits detailed explanations and motivations for the amounts to be transferred to Transnet. When the NPA becomes a corporatized entity, it will be expected that some of the costs will be undertaken by the Authority and as a result, the TGC must reduce. Where Transnet continues to service NPA, it should be at a reasonable market cost of which the NPA will be expected to compare to transactions of similar nature in the open market.

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

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

Comprehensive information requirements must be met with for each application. See Annexure A.

5.15. Claw-Back

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

However, the following variables that are estimated (in line with the Regulatory Manual) on an annual basis, prior to the start of the following tariff year, for claw-back purposes are the:

- RAB (excluding CAPEX): The RAB is adjusted annually to reflect actual working capital requirements in line with audited AFS numbers and inflation trending;
- Depreciation: Re-calculated based on the adjusted RAB;
- Volumes: Actual volume numbers are used to calculate the clawback;
- Inflation (CPI): Whilst the return on equity is not changed, the actual inflation rate is used in the recalculation of a number of variables, including the trending of the RAB, working capital forecasts, and other latest estimates during the assessment; and
- Taxation: The taxation allowance will be corrected to the actual taxation cost as per the audited Annual Financial Statements.
- WEGO penalties or incentives should be considered as part of clawback recalculation.

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

As noted in section, the Return on Equity (rate) will be fixed upon assessment for claw-back purposes – the amount included in the claw-back will still depend on RAB corrections.

Detailed steps for the calculation of the Clawback can be found in Annexure D.

5.16. Excessive Tariff Increase Margin Credit (ETIMC)

The Regulator regulates in the long term interest of the maritime sector and the SA economy. This requires that the Regulator not only confine itself to the immediate tariff decision, but also considers ways to ease any future shocks to the system. It is generally accepted that CAPEX may spike at some point in the foreseeable future, but that these projects have not as yet been specified to a level of detail that allows for accurate prediction. In addition, external market related factors such as unexpected (or expected) fluctuations in volumes, inflation, the RFR etc. may result in significant spikes to the tariff as well.

As such, the Regulator has, in the past, considered it prudent to avoid excessive future tariff changes by retaining and increasing the NPA's Excessive Tariff Increase Margin Credit (ETIMC), in order to allow the smoothing of unaffordable tariff spikes over multiple periods in the future or to apply a countercyclical tariff decision in time of depressed economic activity.

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

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

"The Regulator may authorise the release of part, or the whole, of the value of the ETIMC facility only when conditions require an influence on tariff levels including, but not limited to, spikes in tariffs (defined as an average tariff increase in excess of the CPI inflation forecast) due to a sharp increase in capital expenditure, volume volatility, or any market related factor. Further, the Regulator may consider national objectives when making decisions to add to, or to utilise the ETIMC facility to adjust tariffs."

The ETIMC facility is not intended to be used for the Authority's inefficiencies.

6. Volume Forecast

The NPA is required to submit detailed volume forecasts with reasons as well as revenue calculations based on the forecast volumes and current tariff levels as well as proposed tariffs for the period. The level of detail will be agreed to with the Authority. Prior to the finalisation of the Record of decision, the Authority is required to submit the Latest Estimates with regards to current volumes, as well as any changes to forecasts etc.

The Regulator, based on the submission of the Authority, its own calculations and estimates, and various engagements and submissions from port users, will determine the final volume forecast. Any deviations from the NPA's submitted volumes will be set out in the RoD.

7. Weighted Efficiency Gains in Operations (WEGO)

The incentives built into the RR methodology do not favour increased efficiency or competitiveness as the claw back mechanism takes away the gains from higher efficiency with additional market volume effects. This is therefore be addressed in an integrated manner through the inclusion of an efficiency measure within the Methodology.

Whilst the introduction of efficient pricing through the Tariff Strategy is intended to have positive effects, these will only impact over the long term. The response is thus to identify and differentiate between volume gains (or volume losses) due to efficiency impacts and market effects and to incentivise or disincentivise these respectively, as an increase or decrease on profit earned by the NPA.

WEGO presents the measurement of the operator performance standard and apply an incentive or punitive measure on the outcomes measured. WEGO continues to evolve and the Regulator has been discussing with the industry on areas requiring improvements.

In particular, the inclusion of an efficiency variable Weighted Efficiency Gains from Operations (WEGO) is proposed as set out in the RR formula (page 7). The formula for calculating the WEGO is as follows:

$$WEGO_t = EG_{t-1} \times 0.075 \times Re_{t-1} - \text{Downtime Adjustment}$$

Where:

Efficiency Gain (EG) = Agreed efficiency gain through operations, excluding the effect of market driven volume growth.

Return on Equity (Re) = Return on equity as determined in the ROD.

t = Current financial year under review

Composite Ports System Efficiency Gain % as calculated	EG for inclusion in the WEGO formula
≥15%	1
12%	0.9
10%	0.8
8%	0.7
6%	0.6
5%	0.5
4%	0.4
3%	0.3
2%	0.2
1%	0.1
0%	0
-1%	-0.1
-2%	-0.2
-3%	-0.3
-4%	-0.4
-5%	-0.5
-6%	-0.6
-8%	-0.7
-10%	-0.8
-12%	-0.9
≤-15%	-1

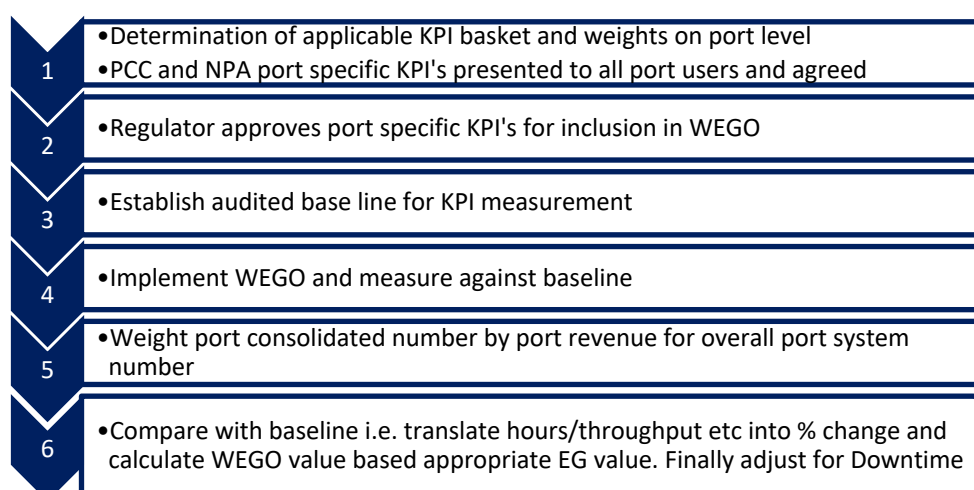
EG will be a weighted average growth rate of a selected group of audited performance results on a port by port basis. These key performance indicators, as well as the appropriate weightings for every port, will be selected by the Regulator in consultation with port users through the PCC process as well as with the NPA. It will be required that the WEGO TOPS and MOPS results be signed off by PCC representatives at a port level, and agreed to with the Regulator.

For the calculation of operational efficiency, port revenue contribution will establish the weighted contribution on a per port basis to calculate the overall EG, however, all ports' PCC's must present signed off results to the Regulator for consideration and inclusion in the Tariff Assessment.

Efficiency gains in individual KPI's per port will be capped for calculation purposes at 20%, similarly, reductions in efficiencies will be capped at 20%. Measured performance of a particular KPI in a port will be compared against a WEGO historical best measured performance (the Baseline) to produce a percentage efficiency gain or loss (EG) for that KPI in that port, and contribute towards and overall/composite port level efficiency gain or loss (EG).

A declining or negative value of EG_{t-1} will result in an increased claw back over period t .

8. Operational Performance Calculations



KPI's and their relative weights will be annually consulted per port and the NPA and port users are free to propose new weights as well as new KPI's including land-side measures, as well as the formulation of KPI's and the proposed measurement methodology. The Regulator is consulting with the industry on the list of KPIs for the NPA to measure and report on over the following period.

The process, and the requirements of the different role-players in establishing the KPIs for inclusion in the tariff setting process, is outlined below.

Process	Y1	Y2	Y3 etc.
Process for port users	- Port by Port KPI determinations presented to port users by PCC	- Port by Port KPI determinations presented to port users by PCC	- Port by Port KPI determinations presented to port users by PCC
Process for NPA	- Port by Port KPI determinations presented to port users by NPA - Report on achieved performance to PRSA by year end to establish an annual result and baseline	- Application to include report on actual audited KPI performance in previous year - Report to PRSA on actual performance - Port by Port KPI determinations presented to port users by NPA	- Application to include report on actual audited KPI performance - Port by Port KPI determinations presented to port users by NPA
Tariff Setting Process	- Regulator to approve final Port by Port and national KPI's - Implement WEGO as per audited KPI performance through the claw-back mechanism.	- Regulator to approve final Port by Port and national KPI's - Implement WEGO as per audited KPI performance through the claw-back mechanism.	- Regulator to approve final Port by Port and national KPI's - Implement WEGO as per audited KPI performance through the claw-back mechanism

9. WEGO Downtime Adjustment / Disincentive

The unacceptable levels of downtime resulting from breakdowns due to lack of maintenance and other concerns in container terminals in mainly 2019/20, has forced the Regulator to respond to the tariff risk faced by port users as a result thereof (the clawback mechanism will compensate for any under recoveries). As such, the Regulator is of the view that shifting the tariff risk from the port users to the NPA incentivises stronger regulatory oversight on terminal operators, and allows the NPA to play its legislated “Authority” role as the regulator of operators.

The adjustment of the WEGO allowance for downtime due to mechanical breakdown, unavailability of equipment, labour related incidents, or any other similar unplanned occurrence resulting in a services not being rendered, (excluding weather delays and ‘force majeure’), will be calculated on the basis of previous (3 year moving average) revenue streams as a ratio of the collected Cargo Dues per port and terminal. These ratios will be applied to the number of days of operational delay applicable at each terminal of each port and the resulting calculated reduction in cargo dues will be used as an adjustment to the WEGO calculated revenue amount (i.e. it will be an adjustment to profit or the Return on Equity).

$$\text{Operational Profit Reduction Ratio (OPRR)} = \frac{1}{365} \sum_{i=1}^p [PR_i \sum_{j=1}^n (D_j \times TR_{i,j})]$$

$$\text{Downtime adjustment} = \text{OPRR} \times \text{TCD}$$

Where:

D_j	=	Days lost per terminal j due to, mechanical breakdown, labour action or similar*
PR_i	=	Port Revenue Ratio- Proportional cargo dues per commercial port i **
TR_{ij}	=	Terminal Revenue Ratio- Proportional cargo dues per terminal j in port i ***
TCD	=	Total cargo dues collected in port system
i	=	Individual port reference
j	=	Individual terminal reference
n	=	Total number of Terminals in each port
p	=	Total number of Ports

- *Days lost will be based on recorded downtime due to equipment failure or unavailability, or labour strike. In the case of a ‘go-slow’ every day recorded as a “go-slow” strike action, 0.5 days will be assumed lost. Downtime due to weather delays and force majeure will not be taken into consideration.
- **The proportional cargo dues revenue ratio will be based on all cargo dues revenue collected from the individual ports as a share of total cargo dues revenue collected (moving average of the previous 3 years).
- ***The proportionally cargo dues revenue ratio will be based on all cargo dues collected per terminal as a ratio of total cargo dues revenue collected per port. (Moving average of the previous 3 years).

Information requirement to be submitted to the Regulator by the NPA (quarterly):

- a) All Cargo Dues per terminal per port; and
- b) All recorded operational delays per terminal per port with reasons for delays.

10. Corporatised Entity

The exact corporate structure, dividend policies, transitional arrangements, debt allocation, and other related matters of separate NPA as per the National Ports Act remains unknown at the time of publishing this Tariff Methodology (March 2023). The Regulator needs to consider the sustainability of the NPA on an ongoing basis, and as a corporatized entity may require consideration of assessment of the entity from a credit rating perspective as a standalone borrowing entity (in the future). As such, the following arrangements with regard to the application of the Tariff Methodology will apply:

- Three months prior to the date of the Tariff Application, the Governing Body / Board of the NPA is required to engage with the Regulator in order to determine the applicable methodology under which to apply. See section 5.1 for details/requirements.
- In the instance of an announcement by the Minister of Public Enterprises on the corporatisation of the NPA in terms of section 3(2), or alternatively section 3(2) and section 4(1) of the Act, the following information must be submitted to the Regulator within 30 days of announcement or incorporation as applicable:
 - o Memorandum of Incorporation;
 - o Proof of Registration (Registration/Enterprise number, registration certificate, etc);
 - o Due Diligence analysis conducted;
 - o All other assessments completed by the Department of Public Enterprises / Transnet / NPA;
 - o Full audited Annual Financial Statements;
 - o Full debt portfolio with conditions and other attached requirements;
 - o Debt Allocation Policy – transitional process;
 - o Complete and updated (to date) Asset Register;
 - o Comprehensive report on services provided by Transnet Group including value of services;
 - o Detailed plan to acquire cost competitive replacements; and
 - o Dividends Policy that will apply (if relevant).

11. Confidentiality

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

The Ports Regulator strives to assure that all information, including internal, third party, personal and electronic data, is treated with complete confidentiality; maintain integrity of all such information; ensure that our information system and the information contained therein meet the needs of our core and supporting business operations; comply with all applicable statutory and regulatory requirements and perform reliable access control to protect our information system against unauthorised access.

12. Annexure A: Information Requirements

The following information requirements must accompany the annual application of the NPA.

CAPEX

- 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 Authority projects undertaken by TGC/TCP in the prescribed CAPEX Register;
- Business cases must be provided on all CAPEX projects in excess of R10 million
 - The nature of the content and detail of business will be further defined and developed between the Authority and the Regulator. Further, the nature and content of the business case submissions would be summarised to focus on the more salient aspects including:
 - Objective of project;
 - Demand to be addressed
 - Alignment to Port Development Plans
 - Solution alternatives
 - Project Costing
 - Financial Returns and Payback periods
 - Timing of Delivery
 - Key Risks
- All acquisition of land and other Capital Assets (including motivation thereof);
- All disposal/or removal of land and assets (including motivation thereof);
- All costs associated with CWIP that resulted in no commissionable assets or assets that have been (or expected to be) written off. A detailed list is required per project;
- An Asset Replacement Schedule detailing those assets to be replaced in the next three years; and
- Itemized maintenance schedule for the next 3 years for all planned and unplanned maintenance projects above R1 million, categorized as OPEX as well as “capitalized maintenance”.

Real Estate

- Completed, updated Lease Register (as per agreed to template) setting out:
 - All port lessees;
 - Leased area;
 - Tenure of leases;
 - B-BBEE levels; and
 - Rental received
- All infrastructure assets on the Authority’s RAB, not operated by the NPA, and for which the NPA does not charge an operator for rental / lease.
- All information relating to lease improvements and the associated financial implications and incurred taxes.

Operational

- Data, results and progress applicable to the implementation and monitoring of Operator Performance Standards, as per TOPS/ MOPS/ ROPS/ HOPS.

Financial

- Audited Financial Statements as well as port level financials. A full set of segmental financial statements of the Transnet Group must be included;
- Historical information: 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;
- Current debt cost information including estimated debt costs (calculation and forecasts) for the current tariff year (i.e. the year that the application is made in) as well as the outlying tariff year. Schedule to reflect the estimated annual change to the relevant debt stock levels of the NPA; itemized annual debt redemption payments, as well as the relevant debt instruments and applicable interest/coupon rates.

Other

- Compliance Risk Management Plans (CRMP's) and its quarterly progress report for all mandatory legislative provisions in the National Ports Act; and
- All due diligence and other information pertaining to the implementation of Sections 3(2), 26, 27 and 28 of the National Ports Act.

The following information must be submitted by the NPA to the Regulator on a quarterly basis:

- Lease Information
 - 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); and
 - All applicable B-BBEE certificates for the abovementioned licences and agreements;
 - Schedule of vacant properties available for lease.
- 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 NPA projects undertaken by Transnet Group Capital / Transnet Capital Projects, and B-BBEE certificates;
- List all land paid for by the NPA/port users funds, transferred to Transnet properties or any other division;
- Key performance indicators relating to port capacity, port performance, and volumes per port and all WEGO information requirements as per template;
- All due diligence and other information pertaining to the implementation of Sections 3(2), 26 and 27 of the National Ports Act; and
- Compliance Risk Management Plans and its quarterly progress report for all mandatory legislative provisions in the National Ports Act.

Timelines

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 16 March 2016. The Ports Regulator reserves the right to amend these on an ongoing basis.

13. Annexure B: RAB Calculation

The example below illustrating the calculation of depreciations and the TOC value (for new assets and those that postdates 1990 capitalisation dates) of the RAB is based on the following basic assumptions:

- Historical cost of R100 m;
- Inflation 5% per annum;
- Depreciation on a straight line basis over 30 years life of asset;
- Service life of the asset is 30 years; and
- No adjustment in the Remaining Useful Life.

RAB Calculation			Yr 0 R'm	Yr1	Yr2	Yr29	Yr30
Original Cost		1	100.00	100.00	100.00	100.00	100.00
Capex		2	100.00	-	-	-	-
Depreciated original cost brought forward		3	-	100.00	96.67	6.67	3.33
Current period depreciation	2/RUL	4	-	3.33	3.33	3.33	3.33
Depreciated original cost carried forward	3-4	5	100.00	96.67	93.33	3.33	-
		6					
TOC opening balance	13	7	-	100.00	101.50	26.13	13.72
Accumulated trend		8	-	-	4.83	19.47	10.39
Current period trend	7*cpi	9	-	5.00	5.08	1.31	0.69
Trended balance on which Return earned	8+9	10	-	5.00	9.91	20.77	11.07
Trend depreciation allowance	10/RUL	11	-	0.17	0.34	10.39	11.07
Accumulated trend carried forward	10-11	12	-	4.83	9.57	10.39	-
TOC closing balance	5+12	13	100.00	101.50	102.90	13.72	-
		14					
Total depreciation and amortisation	4+11	15	-	3.50	3.68	13.72	14.41
		16					
Regulatory Asset Base	3+10	17	-	105.00	106.58	27.44	14.41

14. Annexure C: Asset Treatment

Asset Description	Remaining Useful Life	RAB Depreciation and Valuation Treatment	Maintenance allowed as part of OPEX	Return allowed (included in RAB calc. for return purposes)	Notes
Short term assets	5 years or less	Straight line Historical Cost	Yes	Yes	
Existing assets in use not fully depreciated	More than 5 years	Trended Original Cost	Yes	Yes	
Existing asset in use-fully depreciated	Any	If leased – lease revenue will be assumed value If not leased (e.g. breakwater – maintenance on the asset may be capitalised)	Yes/optional	Allowed to capitalise maintenance. Value on RAB for return calculation will be 0.	Risk of gold plating requires prudency assessment and NPCC approval for capex inclusion in RAB
Assets no longer in use	Any	Removed from RAB	Yes	No	

Notes:

Capitalisation dates will be 1990 if no capitalisation date post 1990 is available

15. Annexure D: Clawback Calculation

The Claw Back to be applied in the Tariff Application must be calculated in the following way:

Step	Action
Step 1:	Recalculate the Required Revenue for yr1 since we have actual numbers as at 31 March (Let the Recalculated RR be $S1$)
Step 2:	Compare $S1$ to yr1 AFS Revenue ($T1$), subtract Bilateral Agreements ($B1$)
Step 1 & 2:	[Corrected RR yr1 – AFS Revenue yr1 – Bilateral Agreements yr1] or $[S1 - T1 - B1]$
Step 3:	Add or Subtract 50% of the estimated Provisional Claw back Adjustment made in yr1 ($P1$)
Step 1, 2, & 3:	$[S1 - T1 - B1] \pm P1$ = Final Claw back yr1 adjusted in Yr3 ROD ($W1$)
Step 4:	Calculate then add or subtract Claw back Return for yr1 $[(W1 \times WACC \text{ yr1})/2]$ ($V1$)
Step 5:	Calculate then add or subtract Claw back Return for yr2 $[(W1 + V1) \times WACC \text{ yr2})/2]$ ($X1$)
Thus Far:	Full Claw back yr1 $(G1) = W1 + V1 + X1$ Estimated Claw back for yr2 $(YY2) = \text{Revenue Required as per ROD yr2} - \text{Latest Estimate Revenue yr2}$
Step 6:	$YY2 \times 50\% = (VV2)$
Total Clawback for ROD	$G1 + VV2$

The total Claw Back amount calculated will be included in the Revenue Requirement formula as set out in section 5.15.

End

TOPS DEFINITION OF MEASURES AND CALCULATIONS

NB: These may apply differentially as per the nature of the terminal operations

Measure	Definition	Calculation	Applicable	Exclusions
Terminal berthing delays	The average delay per vessel as a direct result of the terminal expressed in hours	Total of all (vessel actual berthing time - vessel planned berthing time) / total number of vessels delayed for a given period. The allowance of 30 minutes is to be considered as a buffer, thus any delay that is less than 30 minutes won't be considered as a delay.	Terminals with dedicated berths only	Force majeure (Weather delays) Surge, under currents External power supply failures
Berth Productivity	Total volume handled during the total time vessel is on berth expressed in tons/hour, KI/hour, Moves/hour, Units/hour	Total volume for a given period (in tons, KI, units or containers) / Total time vessel is on berth. Total time vessel is on berth is the sum for all vessels during the month (last rope untied – first rope tied)	Terminals with dedicated berths only	Force majeure (Weather delays)
Ship Working Hour	Total volume handled during the total productive working hours for the vessel expressed in tons/hour, KI/hour, Moves/hour or units/hour.	Total volume for a given period (in tons, KI, units or containers) / Total vessel productive. Total vessel productive time is the sum for all vessels during the month (last swing or cargo move) – (first swing or cargo move)	All terminals	Surge, under currents External power supply failures
Truck turnaround time	The average service time of road haulers within the terminal expressed in minutes or hours	Total of (gate time out - gate time in) / total number of haulers for the period	Terminals using road trucks	Force majeure (Weather delays) External power supply failures
Truck queuing outside Terminal	The truck congestion on public roads outside the terminal resulting from unmanaged truck arrival patterns. Average waiting time for trucks outside terminal expressed in minutes or hours	Total of all (truck gate in time minus truck arrival in queue) / number of trucks per sample	Terminals using road trucks	Trucks not en-route to terminal or without firm delivery / upliftment order External power supply failures

TOPS DEFINITION OF MEASURES AND CALCULATIONS

Measure	Definition	Calculation		Exclusions
Rail turnaround time	The average service time of trains arriving and departing the terminal expressed in hours	Total of (yard time out - yard time in) / total number of trains for the period	Terminals using Rail	Rolling stock in holding in rail yards Force majeure (Weather delays) External power supply failures
Cargo dwell time in terminal	The average period that cargo stays within the terminal between the times of arrival to loading and vessel discharge until terminal gate exit expressed in hours or days. Imports, exports and transshipments to be indicated separately	Total dwell time per container, ton, KI or units / Total units through the system for the period	All commodities except Liquid Bulk	Commercial arrangements borne in mind
	For liquid bulk terminals the average dwell time is to be the tank turn days.	Tank turn = volume for the period divided by tank capacity. Tank turn days (which should be the average dwell time) = Available days divided by tank turn.	Liquid Bulk Terminals	Planned outage days.
Terminal throughput	Total cargo handled (imported, exported and transhipped) by the terminal over a given period expressed in tons, KI, TEU's or units	Total of imports + exports + transshipments handled by the terminal over a given period.	All Terminals	Volume of refinery product stored in port is not regarded as import or export cargo but included in capacity