

TRANSNET NATIONAL PORTS AUTHORITY  
TARIFF APPLICATION FOR FINANCIAL YEAR 2019/20

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**ABBREVIATIONS AND ACRONYMS**

AFS	Annual Financial Statements
APDP	Automotive Production Development Program
BER	Bureau of Economic Research
BESA	Bond Exchange of South Africa
BRICS	Brazil, Russia, India, China & South Africa
CAGR	Compounded Annual Growth Rate
CAPEX	Capital Expenditure
CAPM	Capital Asset Pricing Model
CMEO	Chief Marine Engineering Officer
CPI	Consumer Price Index
CPT	Cape Town
CSI	Corporate Social Investment
CWIP	Capital Work In Progress
DBN	Durban
DBT	Dry Bulk Terminal
DCT	Durban Container Terminal
DDOP	Durban Dig Out Port
DIA	(Old) Durban International Airport
DMS	Dimson, Marsh and Staunton
DMTN	Domestic Medium Term Note
DORC	Depreciated Optimised Replacement Cost
DoT	Department of Transport
DRS	Dredging Services
EIMS	Enterprise Information Management Services
EL	East London
EPMO	Enterprise Programme Management Office
ETIMC	Excessive Tariff Increase Margin Credit
FEL	Front End Loading
FMCSA	Ford Motor Company of Southern Africa
FY	Financial Year
GDP	Gross Domestic Product
GMTN	Global Medium Term Note
GPPCS	Global Port Pricing Comparator Study
GRT	Gross Registered Tonnage
HC	Historic Cost
HCM	Human Capital Management
HOPS	Haulier-Road Operations Performance Standards
IAS	International Accounting Standards
IDZ	Industrial Development Zone
IMF	International Monetary Fund
IPAP	Industrial Policy and Action Plan
IPMS	Integrated Port Management System
JOC	Joint Operations Centres
JSE	Johannesburg Stock Exchange
KAM	Key Account Manager
KPI	Key Performance Indicators
LE	Latest Estimate
LNG	Liquefied Natural Gas

LTPF	Long-term Transnet Planning Framework
MDS	Market Demand Strategy
MIDP	Motor Industry Development Plan
MOPS	Marine Operations Performance Standards
MPT	Multi-Purpose Terminal
MRP	Market Risk Premium
MSOE	Marine School of Excellence
MTBSA	Man Truck and Bus South Africa
Mtpa	Millions tonnes per annum
NAAMSA	National Association of Automobile Manufacturers of South Africa
NBV	Net Book Value
NERSA	National Energy Regulator of South Africa
NGQ	Ngqura
NIMS	National Infrastructure Maintenance Strategy
NPA	National Ports Authority
NPCC	National Port Consultative Committee
NPP	National Ports Plan
OD	Operating Divisions
OEMs	Original Equipment Manufacturers
OPEC	Organisation of Petroleum Exporting Countries
Opex	Operating Expenses
PCC	Port Consultative Committee
PRSA / The Regulator	Port Regulator of South Africa
PETROSA	Petroleum South Africa
PE	Port Elizabeth
PLP	Project Life Cycle Process
RAB	Regulatory Asset Base
RR	Revenue Requirement
RFR	Risk Free Rate
RBCT	Richards Bay Coal Terminal
RCB	Richards Bay
ROD	Record of Decision
ROPS	Rail Operations Performance Standards
RORO	Roll on Roll off
SA	South Africa
SAMSA	South African Maritime Safety Association
SARB	South African Reserve Bank
SARS	South African Revenue Services
SBIDZ	Saldanha Bay Industrial Development Zone
SLD	Saldanha Bay
SOC	State Owned Company
SOE	State Owned Enterprise
SRAB	Starting Regulatory Asset Base
TCC	Transnet Corporate Centre
TEU	Twenty-foot Equivalent Unit
TOC	Trended Original Cost
TONS	Tonnages
TOPS	Terminal Operator Performance Standards
TP	Transnet Property
TPT	Transnet Port Terminals

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TSHD	Trailing Suction Hopper Dredger
UK	United Kingdom
USA	United States of America
VoA	Methodology for the valuation of the Authority's RAB
VWSA	Volkswagen South Africa
WACC	Weighted Average Cost of Capital
WEGO	Weighted Efficiency Gains from Operations
WTO	World Trade Organisation



## 1. Executive Summary

In terms of Section 72 (1) (a) of the National Ports Act, 2005 (Act No. 12 of 2005) ("the Act"), Transnet National Ports Authority, a division of Transnet SOC Limited ("the Authority") is required, with the approval of the Ports Regulator ("the Regulator"), to determine tariffs for services and facilities offered by the Authority and to annually publish a tariff book containing those tariffs. The Port Directives were approved on 13 July 2009 (gazetted on 06 August 2009) and amended on 29 January 2010. In terms of these Directives, when considering the proposed tariffs for the Authority, the Regulator must ensure that such tariffs allow the Authority to:

- a) recover its investment in owning, managing, controlling and administering ports and its investment in port services and facilities;
- b) recover its costs in maintaining, operating, managing, controlling and administering ports and its costs in providing port services and facilities; and
- c) earn a return commensurate with the risk of owning, managing, controlling and administering ports and of providing port services and facilities.

The Authority shall on an annual basis on or before 1 August submit its application setting out its proposed tariffs for all services and facilities offered by the Authority for the following financial year for approval by the Regulator. The Directives also allows the Authority to submit to the Regulator a proposal for the amendment of any tariff for any services and/or facilities offered by the Authority at any port from time to time. The Directives prescribe a period of 4 months upon which the Regulator shall make a decision.

In determining the tariffs, the Authority applies the prescribed Tariff Methodology issued by the Regulator on 30 March 2017. The approved Tariff Methodology allows the Regulator to administer the Authority's tariff setting process and considers a multi-year approach, applicable from 2018/19 to 2020/21 tariff years. It further allows for an annual review and an annual adjustment of tariffs within the three year period as opposed to fixing the tariffs for the full period.

The approach applicable to the tariff period FY2019/20, per the Tariff Methodology, is based on the Revenue Requirement (RR) formula as follows:

### *Revenue Requirement*

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

The Regulator issued an RoD on the VoA to be implemented with this Tariff Application. The methodology considers a hybrid approach where assets with capitalisation dates before 1990, are valued at HC, whilst assets in existence post 1990 are valued at TOC. Amongst some of the concerns the Authority has with the VoA is the significant financial risks associated with its implementation. Issues raised with the Regulator remain unresolved at the time of this application being made. Therefore, for the purposes of the Tariff Application for FY 2019/20, the Authority has prepared the calculation of the

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RAB informed by the approved Tariff Methodology of March 2017 (original form) which is consistent with past practice. The Authority seeks further engagement with the Regulator to address its issues around the VoA and to align on an appropriate approach and implementation thereof.

The RR determined here below considers the best available information on the latest economic indicators, assumptions and parameters.

**Table 1: Revenue Requirement FY 2019/20 to FY 2021/22**

DETAILS	2018/19	2019/20	2020/21	2021/22
	ROD	Fixed Tariff Year	Indicative Tariff Years	
	R'm	R'm		
RAB	80 474	85 597	92 392	100 423
Vanilla WACC	6.38%	6.80%	6.90%	6.80%
Return on Capital	5 134	5 824	6 378	6 832
Plus: Depreciation	2 099	2 279	2 458	2 675
Plus: Operating Costs	5 938	6 291	6 853	7 446
Plus: Taxation Expense	682	640	699	751
Plus/Less: Clawback	-1 779	-1 353	-136	-
Plus/Less: ETIMC	345	-	-	-
Revenue Allowed	<b>12 419</b>	<b>13 681</b>	<b>16 253</b>	<b>17 704</b>
Less: Real Estate	-3 025	-3 284	-3 580	-3 849
<b>Marine Revenue</b>	<b>9 394</b>	<b>10 398</b>	<b>12 673</b>	<b>13 854</b>

The Authority has determined a required revenue of R13 681m for FY 2019/20 comprising of Marine Business revenue of R10 398m and Real Estate Business revenue of R3 284m.

Table 2 below illustrates the required tariff adjustment taking into account a projected volume growth of 2.80% for each of the years.

**Table 2: Marine Revenue for FY 2019/20 to FY 2021/22**

MARINE REVENUE	2019/20	2020/21	2021/22
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
Prior Year Revenue	9 706	10 398	12 673
Estimated Volume Growth	2.80%	2.80%	2.80%
Revenue after volume growth	9 977	10 689	13 028
Required Revenue	10 398	12 673	13 854
<b>Tariff Increase</b>	<b>4.21%</b>	<b>18.57%</b>	<b>6.34%</b>

FY 2019/20 results in a tariff adjustment of 4.21%. FY 2020/21 and FY 2021/22 indicative tariff adjustments are 18.57% and 6.34% respectively. In applying the approved Tariff Strategy, the Authority proposes the following tariff differentiated adjustments in order to make up the weighted average tariff adjustment of 4.21% for 2019/20:

- A tariff increase of 8.00% on Marine charges (shipping lines);
- An average of 2.74% increase in Cargo Dues differentiated as follows:
  - 5.00% on Liquid Bulk and Break Bulk Cargoes;
  - 1.79% on Containers;
  - 0.00% on Automotives;
  - 5.00% on Dry Bulk Cargoes differentiated further as follows:
    - Coal to increase by 8.00%;
    - Ores and Minerals: Magnetite to increase by 8.00%; and
    - Other Dry bulk to increase by 3.75%.

## 2. Introduction

The Authority is the landlord in the South African national port system. The Authority is responsible for the safe, efficient and effective economic functioning of the national ports system which it manages, controls and administers. The key business activities of the Authority are to provide and manage port infrastructure and maritime services. In a broader context, the Authority also undertakes to facilitate the development of trade and commerce through market collaboration for the economic benefit of the national economy of SA.

## 3. Legal Basis and Regulatory Requirements

The regulatory framework for the Authority's tariffs is informed by the Act, and the Directives promulgated by the Regulator.

### 3.1 Section 72 of the Act

For the purposes of this tariff application, the most relevant part of the Act is Section 72 of the Act which sets out the Authority's obligation in relation to the Authority's tariff book.

In terms of the regulatory framework the Authority is required, with the approval of the Regulator, to determine tariffs for services and facilities offered by the Authority and to annually publish a tariff book containing those tariffs.

### 3.2 The Ports Directives

The Ports Directives were developed by the Regulator, and were gazetted on 6 August 2009 and amended on 29 January 2010. Of these, the most pertinent to the setting and approval of tariffs are Directive 22 (which deals with the Approval and amendment of tariffs) and Directive 23 (which deals with Tariff requirements).

### 3.3 Tariff Methodology

**3.3.1** The current applicable Tariff Methodology was issued on 30 March 2017 and is applicable for a period of 3 years, starting from FY 2018/19 to FY 2020/21.

**3.3.2** The Tariff Methodology prescribes an approach that requires an annual review and an annual adjustment of tariffs within the three year period as opposed to fixing the prices for the full period. This is similar to the previous version of the Tariff Methodology as the Authority will still be required to submit applications presenting three years of information on required revenues, with the first year requesting for a tariff determination and giving an indicative projection of tariff adjustments for the two subsequent years.

**3.3.3** This approach has simplified tariff and revenue determination for the Authority and participation by the Industry stakeholders, as a result it will be retained by the Regulator. The Tariff Methodology narrows the gap between what is requested and subsequently granted as it is based on rules which are uniformly applied by both the Authority and the Regulator.

**3.3.4** The Tariff Methodology is premised on the RR approach with the formula set out below:

*Revenue Requirement*

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

**3.4 Methodology for the valuation of the Authority's RAB**

The VoA issued on 29 March 2018 is the applicable methodology that establishes the starting RAB and treatment thereof going forward. The methodology was to be implemented in the FY 2019/20 application. The methodology is premised on the principles of financial capital maintenance with a hybrid approach whereby assets with capitalisation dates before 1990, are valued at HC, whilst assets in existence post 1990 are valued at TOC. The Authority has raised concerns with the Regulator with regards to the methodology. Owing to the remaining unresolved concerns at the time of application, the VoA has not been implemented with tariff application FY 2019/20. The Authority's reasons for non-implementation of the VoA are further discussed in section 8 of this tariff application.

**4. Proposal on Tariff Structure amendments**

A port represents a convergence of physical facilities and services designed to serve as an interchange point between land and sea transport. There are various factors considered in determining port tariffs. Amongst these factors, the most important are pricing objectives and constraints, supply and demand of port facilities, flow of benefit costs and revenues. The tariff structure is composed of many individual tariffs. The Authority has made strides in shifting to a cost reflective tariff structure in many of these individual tariffs. However, some tariffs still need to gradually move to reflect the user pay principle. These individual tariffs are discussed below.

**4.1 Implementation of the Tariff Strategy**

The tariff strategy sets out the strategic direction for the South African port system where it proposes tariffs for the use of port facilities and services by port users namely cargo owners, terminal operators and vessel owners. It considers flow of costs, flow of benefits and the resulting revenues which accrue when services are provided to port users. The Authority has a responsibility of financing infrastructure and recovering the revenues by charging tariffs. The tariff strategy sets out the tariff structures as well as the tariff levels which reflects cost recovery on a user pay principle basis. The tariff strategy recognises that the current tariff imbalances will need to be phased out on a gradual basis. It is therefore proposing a gradual shift over an estimated period of 10 years.

This application illustrates the difference between what cost recovery principle recommends across various revenue streams as compared to the current tariff book. These include asset allocations and movements across various cost/revenue categories. This results in some categories benefiting from steep tariff decreases whilst some categories experience the opposite as the charges shift towards cost based tariffs. The recent base rates determined on cost recovery indicates the need for a general decrease in cargo dues tariffs with some exceptions on some tariff lines. This must be followed by steep

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increases on some marine service charges, and in particular port dues tariffs. Detailed discussion is covered in section 8.3 of this tariff application.

### 4.2 An update on clauses in the Tariff Book

The tariff book is a document that contains all the tariffs that are payable by port users on the use of all the facilities offered by the Authority. The tariff book consists of all the terms and conditions that guide the different customer categories on the cargo dues and marine service charges applicable on each service or port infrastructure utilised in the port. Therefore the tariff book is subject to change with each tariff application and resultant ROD. With the developments on the port tariff strategy and trajectory, the corresponding tariff terms and conditions need to be reviewed on an ongoing basis to strengthen the principle of cost recovery on a user pay basis. It has become clear that some terms and conditions urgently require enhancements. These enhancements include definitions, exemptions and most importantly business processes and documentation (i.e. Section 8 of the tariff book). These changes are all attached in Annexure E (Tariff Book Changes).

## 5. The Business of the Authority

### 5.1 Introduction

The Authority operates within the port industry, providing services to its target market comprising of port users, which include terminal operators, shipping lines, ship agents, cargo owners and the clearing and forwarding industry. The Authority owns and manages nine commercial ports within South Africa namely, Port Nolloth, Saldanha Bay, Cape Town, Mossel Bay, Port Elizabeth, Ngqura, East London, Durban and Richards Bay.

Port Nolloth is currently not a commercial port and renders maritime services of a basic nature supporting fishing and supply vessels.

Port infrastructure and maritime services are provided in five market segments namely, containers, dry bulk, liquid bulk, break-bulk and automotive. The major commodities handled at the ports are coal, iron ore, manganese, containers, automotive, steel, fruit, ferrochrome and petroleum products. Growth of these commodities is a function of global demand, logistics infrastructure capacity and supply chain efficiencies which include port efficiencies.

Port users fall into three main categories, namely, terminal operators, shipping lines and cargo owners. While numerous other parties utilise the port, they do so to a lesser extent than these principal port users.

The Authority's operating strategy is premised on the Transnet Market Demand Strategy "MDS". Whilst embracing the 4<sup>th</sup> industrial revolution, which is underpinned by these four key pillars of focus:

- Provision of port capacity
- Efficient integrated port system
- Regulatory compliance
- Innovation and capability

**5.2 Functions of the Authority**

The National Commercial Ports Policy requires that the Authority be responsible for the management of the national commercial port system as a landlord port authority. Being a landlord port authority means that the Authority:

- Owns, develops and maintains port infrastructure;
- Does not engage in landside port operations (except as operator of last resort);
- Does not employ cargo handling labour;
- Fulfils a port regulatory function including oversight and port landowner function; and
- Owns all port land.

The Authority’s core functions (as set out in Section 11 of the Act) can be summarised in the table as follows:

**Table 3: The Authority’s Core Functions**

Function	Detail
Landlord	Promote the use, improvement and development of ports, and control land use within the ports, having the power to lease port land under conditions it determines.
Master planner	Plan, improve, develop and maintain port infrastructure.
Controller of ports navigation	Make and apply rules to control navigation within port limits and approaches, ensure protection of the environment and ensure safety and security within port limits.
Controller of ports services and facilities	Ensure that port services and facilities are provided, and may enter into agreements or license other parties to provide these.
Marketer and administrator	Ensure that adequate, affordable, equitable and efficient port services and facilities are provided for port users.
Change agent	Ensure non-discriminatory, fair, transparent access to port services and facilities; advancement of previously disadvantaged people; promotion of representation and participation in terminal operations; enhanced transparency in port management.
Coordinator with other State Agencies	Advise on all matters relating to the port sector, and liaise with all stakeholders.

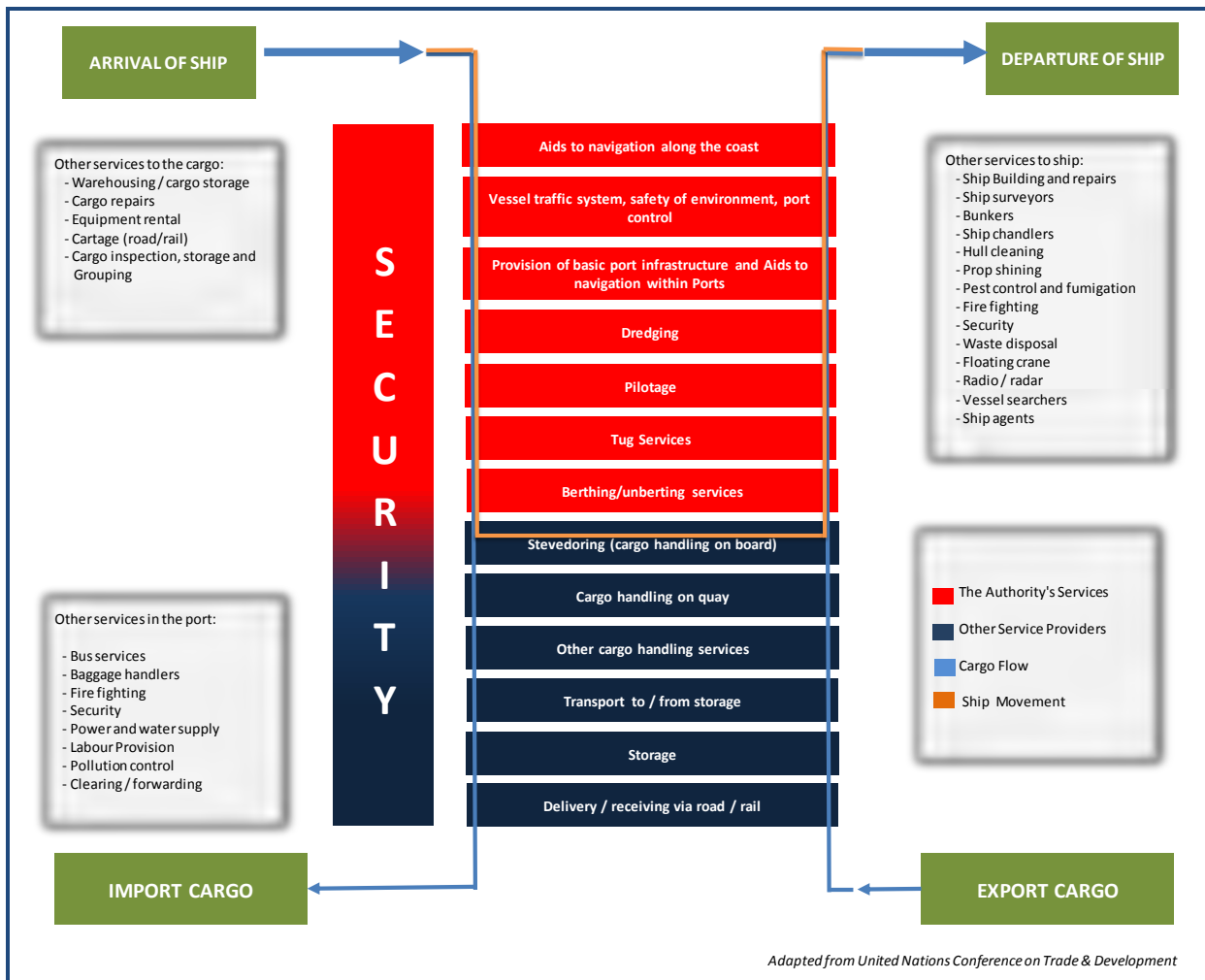
### 5.3 Tariffs in Perspective

Like any other entity providing commercial port operations, the Authority needs to generate revenue by charging tariffs for the services provided. The Authority generates revenue by charging fees, in accordance with tariffs approved by the Regulator in order to fulfil the functions it must perform in terms of the Act.

As a landlord port authority, the Authority’s core services, as specified in the Act, result in a number of revenue streams, which are utilised by the Authority to fulfil its responsibility for the safe, efficient and effective economic functioning of the national ports system.

**Figure 1** presents various services provided within a port (adapted from the United Nations Conference on Trade and Development) and it illustrates the flow of cargo and ships through the port system:

Figure 1: Port Services



The Authority’s services at the ports can be divided into two basic groups:

- Basic port infrastructure; and
- Operational services to port users.

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The Authority's services and their respective revenue streams are set out in table 4 below.

**Table 4: The Authority's Services and Corresponding Revenue Streams**

Port Infrastructure		Revenue Stream
Port land and terminals	Lease port land to terminal operators and other port service and port facility providers in the port(s).	Lease income (rentals)
Wet infrastructure	Lighthouse services infrastructure (lighthouses, buoys, beacons and electronic / radio navigation equipment) , port control and safety, entrance channels, breakwaters, turning basins, aids to navigation within port limits, vessel traffic services, maintenance dredging within ports.	Light dues, port dues, vessel traffic services fees
Dry infrastructure	Quay walls, roads, rail lines, buildings, fencing, port security, lighting (outside terminals), bulk services and in certain cases terminal infrastructure,	Cargo dues, berth dues
Ship repair services	Provide and maintain ship repair facilities	Preparation fee, docking and undocking fees (vessels at repair facilities), berth dues (vessels at repair quays)
Marine services	Pilotage, tug assistance, berthing, running of lines, floating cranes	Pilotage dues, tug assistance fees, berthing fees, running of line fees, floating crane hire fees

In the context of the South African ports system and the Act, the revenue generated from the Authority's services is utilised inter alia to:

- Maintain basic port infrastructure;
- Provide future port infrastructure;
- Maintain and provide the current and future marine fleet; and
- Maintain and provide current and future ship repair facilities

***This makes the South African port system distinct from most ports internationally, where typically, some port capital costs are funded through State or Municipal budgets.*** The Authority's Tariff Book sets out the various tariffs that are charged by the Authority to maintain and develop the South African port system (Refer to **Annexure A**).



## 6. Port Infrastructure Development Plan and Capital Expenditure

Section 11(1) of the Act lists the main functions of the Authority, amongst others, the responsibilities with respect to the provision of port infrastructure.

### 6.1 Port Investment planning

#### “Functions of the Authority”

*Section 11(1) the main function of the Authority is to own, manage, control and administer ports to ensure their efficient and economic functioning, and in doing so the Authority must:*

- (a) plan, provide, maintain and improve port infrastructure;*
- (b) prepare and periodically update a port development framework plan for each port, which must reflect the Authority’s policy for port development and land use within such port;*
- (c) control land use within ports, and has the power to lease land under such conditions as the Authority may determine;*
- (d) provide or arrange for road and rail access within ports;*
- (e) arrange for such services such as water, light, power and sewerage and telecommunications within ports;*
- (f) Maintain the sustainability of the ports and their surroundings;*

### 6.2 The Authority’s Capital Investment Programme

The Authority’s investment spending is primarily influenced by its detailed strategic initiatives which aim at providing adequate port infrastructure ahead of demand, improve vessel and cargo turnaround; and improve the productive use of assets to sustain the existing business.

In developing the capex plans, the following activities are considered by the Authority:

- **Long-term Framework Plans:** The Authority in accordance with the National Ports Act has to develop and periodically update port framework plans. The Authority publishes its National Ports Plan (“NPP”) which contains individual port development plans for each of the Authority’s 9 ports. The NPP is revised every 5 years. The last revision was completed in FY 2014/15. The next revision will be published as the NPP 2020. The NPP and the port framework plans are updated on a bi-annual basis (every 2 years), based on Transnet’s commodity demand forecast. The latest versions are currently available on the Authority’s website for stakeholders review and comment.
- **Capacity studies:** The Authority uses a robust simulation tool to assess the capacity of current infrastructure and to simulate future infrastructure capacity. The capacity studies are updated annually.

- **Volume Studies:** The forecasted volumes used in the Authority's development plans are based on the latest available information for the short-term investment guidelines. The long-term investment guidelines use the forecasted volumes from Transnet's Freight Demand Model, which provides the volume studies for all Transnet ODs. The Transnet Freight Demand Model is a demand forecasting tool developed and utilised in association with the University of Stellenbosch.
- **Prioritization:** Projects are prioritized by safety; and secondly to meet demand forecasted.
- **Interaction with Transnet:** The Authority maintains close interaction with Transnet Planning and Transnet Commercial during the planning cycle and the development research process. The plan developed by the Authority is incorporated into the Transnet Group Plans.
- **Port Consultative Committees:** The Authority adopts a consultative approach to the drafting of the Port Development Framework Plans and the execution of the resultant Capital Investment Plan. Port Development Framework Plans projected for the short, medium and long term as well as 6-year Capital Investment Plans have been consulted with port users. This consultation was conducted on a port-by-port basis during a process facilitated by the DoT in June and July 2018 with the SAMSA as secretariat. These plans are informed, inter alia, by the aforementioned Transnet Freight Demand Model (developed by the University of Stellenbosch).

### 6.3 Key Focus Areas of Capital Investment Program in FY 2019/20 to FY 2021/22

The Capital Investment Program for FY 2019/20 to FY 2021/22 amounts to R 4 513m, R 5 026m and R 6 849m respectively. These amounts are included in the Authority's RAB as capital expenditure in the years in which they are incurred. The key projects listed below are continuing into this tariff control period. On aggregate these projects contribute 75% of the planned capital expenditure over the next 3 years:

- Port of Richards Bay Provide additional rail facility for Duine area;
- Port of Richards Bay Bayvue rail yard expansion - Outcome from ECICS feasibility;
- Port of Richards Bay Deepening berth at Small Craft to -14 m CD with associated works (Refurbish repair quay and install floating dock);
- Port of Durban Execution: DCT berth deepening 203 to 205;
- Port of Durban Port Perway Upgrade;
- Port of Durban Replace Water Pipelines & Billing System;
- Port of Durban Execution: Pier 1 Phase 2 Infill (Salisbury Island);
- Port of Durban Execution: Firefighting infrastructure at berth 9 Island View;
- Port of East London Extend main breakwater and deepen entrance;
- Port of East London Repairs to No 3 Quay;
- Port of Ngqura New entrance, roads and services;
- Port of Ngqura Manganese project;
- Port of Cape Town Two Replacement Tugs;
- Port of Saldanha Bay Bulk electrical power supply related to Third tippler;
- Dredging Services 2nd Grab hopper dredger;

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- Port of Cape Town Upgrade of Electrical Infrastructure;
- Port of Cape Town Expansion of Container Terminal : CPT Phase 2B - FEL3; and
- Phakisa projects.

The Authority's capital investment goals are to increase productivity and efficiency, ensuring a safe, secure and compliant port system whilst optimising human resources.

**Table 5: Strategic Capital Investment Objectives**

Strategic objective	Details	Budget	Projections					
		2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total 6yr
		R'm						
<b>Re-engineering, Integration, Productivity and Efficiency</b>	To maximise return on investments by obtaining additional volumes	1 067	1 770	2 144	2 855	3 494	3 906	15 237
	To maximise return on investments by improving operating efficiencies	176	228	164	64	82	244	957
	To preserve current revenue streams without obtaining additional volumes (ie. revenue protection)	958	2 024	2 049	2 953	2 488	1 604	12 076
<b>Safety, Risk and Effective Governance</b>	Ensure Safety Optimisation	155	294	353	467	728	254	2 252
	Optimise Business Enterprise Offerings	150	70	30	51	17	15	333
	Optimally Satisfy Social Investments (non economic value creating projects)	12	0	1	91	201	119	425
	Environmental	18	55	68	53	111	100	404
<b>Human Capital</b>	Optimise Human Resources	101	72	216	315	173	119	995
<b>Total (excl. borrowing cost)</b>		<b>2 636</b>	<b>4 513</b>	<b>5 026</b>	<b>6 849</b>	<b>7 295</b>	<b>6 360</b>	<b>32 678</b>

The detailed capital expenditure schedule is highlighted in **Annexure B**.

## 7. The Authority's Total Revenue

### 7.1 Real Estate Revenue

The vision of the Authority's Real Estate business is to ensure that the property portfolio is managed adequately, efficiently, effectively and in accordance with organization policies and a mandate as outlined by the National Ports Act. It also aims to maximize value and support for the Authority's core business.

The Real Estate Strategy drives the management of the property portfolio. There are five key pillars of the Real Estate Strategy:

- Revenue Growth
- Portfolio Optimisation
- Land use and strategic developments
- Total Facilities Management
- Human Resources Capacity Building

The Authority currently manages port land in excess of 46.0 million square meters of which 23.5 million square meter is the Gross Lettable Area (GLA). The remainder of 22.4 million square meters is comprised of Roads, Rails, Common areas, environmental sensitive areas etc., the remainder of approximately 1.9 million square meters refers to lettable vacancy area.

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The Authority manages four categories of leases:

- (a) Complimentary leases
- (b) Supplementary leases
- (c) Commercial leases
- (d) Leases with other Government entities

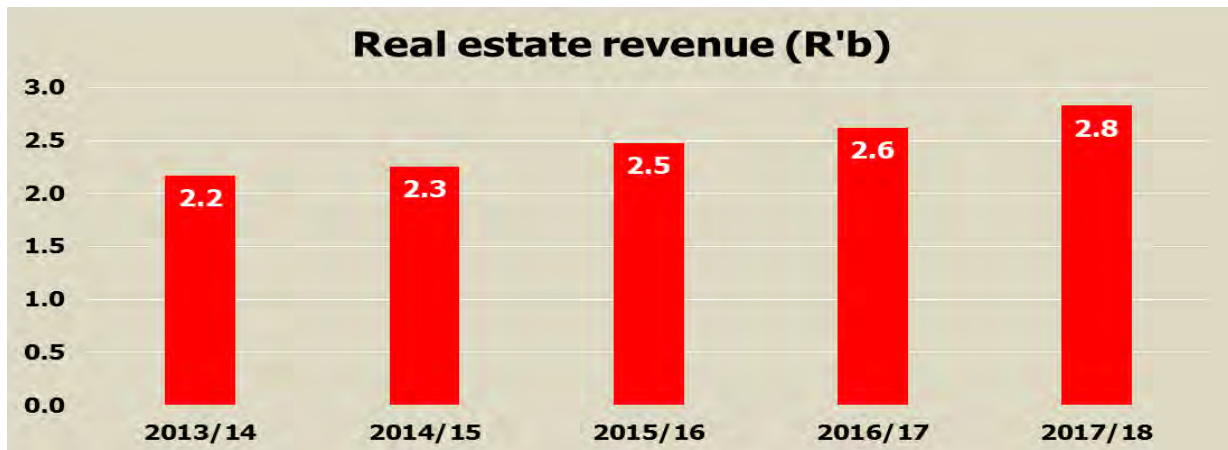
These leases ranges from short to long term leases which are inclusive of terminal operators, licensed service providers and Government entities executing legislative functions. The management of leases is carried out through the Lease Management Manual (“LMM”). The process of leasing follows an open, transparent, competitive and fair process. All vacant sites are advertised to the public for broader participation.

The Authority is currently managing approximately 675 leases across the eight ports. The Port of Durban which is the Authority’s biggest port has 346 leases. The average lease tenure ranges between 5 -25 years. The expired leases normally continue to run on a month to month basis pending the lease renewal process completion.

The Authority achieved a lettable land vacancy rate of 4.6% in FY 2017/18, an improvement on the industry average of 7%, which generally is attributable to lower economic activity.

The land rental revenue budget set for FY 2018/19 is R2 985m which is approximately a 5.5% growth from the actual revenue achieved in FY 2017/18. The revenue in ports real estate business is rather stable and gradual as the lease agreements are already in place. The land rental revenue forecast for FY 2019/20 is R3 284m.

Figure 2: Historical Real Estate Performance



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**Table 6: Real Estate Salient Features**

Salient Features of Real Estate Business	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
	Current Tariff Year	Fixed Tariff Year	Projected Tariff Years	
Number of Ports	8	8	8	8
Gross Lettable Area	Approx 24 million sqm	Approx 24 million sqm	Approx 24 million sqm	Approx 24 million sqm
Number of Tenants	675	675	675	675
Total No. of Terminal Operators	90	90	90	90
Vacancy factor including Un-service/Virgin land	20%	20%	20%	20%
Vacancy factor excluding Un-service/Virgin land	5.0%	5.0%	5.0%	5.0%
Average term of Leases	5 - 25 Years	5 - 25 Years	5 - 25 Years	5 - 25 Years
Estimated Revenue (Current Financial Year)	R2 985 m	R3 284 m	R3 580 m	R3 849 m
Estimated Revenue (Subsequent Financial Year)	R3 284 m	R3 580 m	R3 849 m	R4 143 m
Forecast Revenue Growth	R299 m	R296 m	R270 m	R294 m

Further to the above, in terms of Section 11(1)(r) of the Act, the Authority must promote greater representation, in particular to increase participation in terminal operations of historically disadvantaged persons. In order to achieve compliance with the Act, the Authority as part of its ports' transformation program has considered measures to achieve 75% of Level 4 B-BBEE status in lease contracts and strives for a greater occupation of its lettable properties.

In setting the ports' transformation program, the Authority considers its financial objectives as well as the tenants' financial rewards and incentives. The tenants (i.e. Terminal Operators) derive income from terminal handling charges. This enables the lessee's ability to meet rental payments to the Authority. Should the sub-optimal usage of the leased facilities continue to exist across the port system, which may be attributable to hardships, there would be contractual disequilibrium (i.e. the inability to afford rent). The Authority has observed its tenants struggling to meet rental obligations. In fact tenants are beginning to engage the Authority and have indicated that should the sluggish economic trade conditions (i.e. lower volumes handled at the terminals) continue to persist, this will necessitate re-negotiation of leases with possible handback of some leased facilities.

### 7.2 Private Sector Participation in the Port Sector (Concession Programme)

In line with Government transformation Strategy and commitments to transformation, the Authority encourages participation in Port Activities to businesses owned by Historically Disadvantaged Individuals through section 56 of the National Ports Act.

To entrench broad participation and liberalisation of Port Capacity, the Authority requires bidders to comply with new port entrant and cargo ownership at 51% and 49% respectively.

To date six Terminal Operator agreements have been concluded where a percentage of black ownership was a mandatory requirement.

The Six concluded terminals are as follows:

- Sunrise Energy LPG – Port of Saldanha Bay, signed on 03 June 2013
- Burgan Cape Liquid Bulk – Port of Cape Town, signed on 03 July 2013
- Cape Town Cruise – Port of Cape Town, signed on 14 December 2015
- Oil Tanking Grinrod Calulo (OTGC) – Port of Ngqura, signed on 16 December 2016
- Durban Cruise Terminal – Port of Durban, signed on 10 April 2018
- OffShore Supply Base – Port of Saldanha Bay, signed on 23 April 2018.

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Details of the Authority's efforts around concessioning are presented in the table below:

**Table 7: 2020 Concession Programme**

A. WESTERN CAPE REGION		
CAPE TOWN	SALDANHA	MOSSEL BAY
1.Liquid Bulk Terminal •Brownfield Project	1.Ship Repair Facility / Floating Dock •Greenfield Project •Operation Phakisa Project	1.Waterfront Development •Greenfield Project
2.Green Ship Recycling •Greenfield Project	2. Rig Repair facility •Greenfield Project	
3.Liquid Bulk Terminal •Brownfield Project		
B. EASTERN CAPE REGION		
EAST LONDON	NGQURA	PORT ELIZABETH
1.Liquid Bulk Facility for Heavy Fuel Oils (HFO) •Greenfield / Brownfield Project	1.Multi-Purpose Terminal •Greenfield / Brownfield Project •This Project has been temporarily placed on hold.	1.Port Elizabeth Waterfront •Greenfield Project
2.Shipyard Facility •Brownfield project. •Operation Phakisa Project. •Slipway to be utilized for movement of craft during boat building and ship repair.		
3.East London Waterfront (Latimers Landing) •Greenfield / Brownfield Project.		
C. KWAZULU NATAL REGION		
DURBAN	RICHARDS BAY	
1.Maydon Wharf Agri-Bulk Terminal  •Greenfield Project •RFP to be issued = 2018	1.Liquid Bulk Terminal at South Dunes (Including Bunkering, if viable) •Greenfield Project	
2. Floating Dock Facility •Greenfield Project	2. Ship Repair Facility / Floating Dock •Greenfield Project •Operation Phakisa Project	
3. Liquid Bulk (Petroleum & Chemicals) Terminal •Brownfield Project. •Island View Precinct.		

### 7.3 Marine Business Revenue

The Authority generates revenue by providing services to port users, which include terminal operators, shipping lines, ship agents, cargo owners and the clearing and forwarding industry. Port Infrastructure and maritime services are made available for use in the five commodity market sectors namely; containers, dry bulk, liquid bulk, break-bulk and automotives. The main source of revenue is tariffs charged by the Authority for providing the aforementioned services as determined and administered by the Regulator. In determining the tariffs, the economic factors are considered. The volume growth anticipated serves as an indicator of economic activity and trade.

#### 7.3.1 The Authority's Volumes

The volumes as presented in this part of the application, showcases the commodity cargoes that go through the ports as well as the movements of the marine vessel traffic entering the ports.

Annually, projections for the Authority's volume budget process usually commence in October and continues to be refined until the Transnet Board approves the budgets in February of the following year. These forecasts present the annual demand probable, on commodities which are handled through the Authority's infrastructure within the port system. This process normally depicts the current year's latest estimates, taking into account the previous year's performance. Forecasts extend to the following year's volumes (budget period) and forecasts volumes for the next four years. This volume demand is a critical element as it guides the organisational planning to ensure the availing of capacity ahead of demand whilst at the same time warranting efficient and optimal utilisation of current capacity.

The cargo volumes budget compilation follows a bottom-up approach from the port level to the Authority's validated budget. The process starts with KAM's communicating and liaising with customers on their operational and strategic plans (i.e. how this translates into volume forecasts for the six year period at the port level). The KAM's also liaise across the port system with Port Terminals and all other operators to achieve alignment on all cargo categories. This process ends at a central consolidation at the Authority's level. This includes budget evaluation process such as historic, prevailing and anticipated market conditions, operational efficiencies, and infrastructure capacity levels and anticipated improvements.

Transnet also enforces a formal interaction platform with key customers to validate customer volume forecasts. All divisions of Transnet participate to synchronise across the entire commodity value chain.

### 7.4 Cargo

While global economic growth accelerates, the SA economy has been gathering steam slowly. The South African economy performed above expectations during 2017 growing at 1.3% compared with 0.6% recorded in 2016. Despite showing improvements, domestic real economic growth remains far below the desired growth rate in order to have a meaningful impact to the country's required export growth.

The economic growth during 2017 was mainly driven by the primary sector, particularly agricultural and mining sectors. This is evident that SA is diverging from global economic growth as the country continues to mainly export commodities. With the exception of the services sector, the SA economy remains weakly integrated into global and regional value chains which is limiting the country's markets from benefiting on economic opportunities provided by the current global growth and developments.

Despite, the SA economy starting on a poor note by shrinking at 2.2% during the first quarter of 2018 (Q1 2018), SA's country's economic forecast remains positive at 1.5% for 2018 and it is expected to marginally improve to 1.7% during 2019. However, the current economic projection of 1.5% is still relatively muted and not enough to address the country's main challenges such as low growth in domestic consumption expenditure and continued disconnection to the global market.

Adding to low domestic market demand, the adoption of protectionist policies by countries such as the United States and potential global trade wars are likely to negatively affect exporting sectors which could result to more economic growth difficulties in the short-term.

Assuming the current domestic GDP growth forecasts, SA exports in Rand terms are expected to grow by 3.3% in both 2019 and 2020 according to the latest IMF publication. The imports are expected to grow by 3.6% and 3.2% in 2019 and 2020 respectively.

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Despite these market challenges, moderate performance for commodity volumes moving through the ports system over the next few years is expected. The gradual recovery in business and consumer sentiment should positively impact the Authority's container volumes, while favourable global conditions and firmer international commodity prices are expected to continue supporting exporting sectors such as dry bulk (coal, iron ore and manganese). The high fuel prices (as driven by high crude oil prices and weak local currency exchange rate) may also imply low recovery in liquid-bulk volumes as dictated by low domestic economic activities.

All of these factors described above have an impact on various categories of cargo that traverse port infrastructure. The Authority's volumes are estimated as follows:

**Table 8: Authority's Volume Projection**

Details	Actual	LE	%	Forecast	%	Forecast	%	Forecast	%
	2017/18	2018/19	Deviation	2019/20	Deviation	2020/21	Deviation	2021/22	Deviation
<b>Container (TEUs)</b>									
Deepsea Full: Imports	1 547 480	1 556 567	1%	1 622 695	4%	1 640 863	1%	1 662 627	1%
Deepsea Full: Exports	1 167 024	1 240 278	6%	1 296 717	5%	1 316 477	2%	1 340 306	2%
Transshipments	1 097 615	986 596	-10%	1 036 544	5%	1 047 884	1%	1 058 703	1%
Other	965 392	1 061 127	10%	1 103 837	4%	1 112 293	1%	1 123 467	1%
<b>Total</b>	<b>4 777 511</b>	<b>4 844 567</b>	<b>1%</b>	<b>5 059 792</b>	<b>4%</b>	<b>5 117 517</b>	<b>1%</b>	<b>5 185 103</b>	<b>1%</b>
<b>Vehicles (Units)</b>									
Vehicles: Imports	306 636	309 263	1%	324 271	5%	338 463	4%	352 653	4%
Vehicles: Exports	308 741	330 193	7%	349 046	6%	358 501	3%	322 748	-10%
Other	61 131	51 630	-16%	43 071	-17%	42 413	-2%	41 539	-2%
<b>Total</b>	<b>676 508</b>	<b>691 087</b>	<b>2%</b>	<b>716 388</b>	<b>4%</b>	<b>739 377</b>	<b>3%</b>	<b>716 940</b>	<b>-3%</b>
<b>Break Bulk (Metric Tons)</b>									
Break Bulk: Imports	2 307 389	2 270 581	-2%	2 228 067	-2%	2 184 317	-2%	2 195 856	1%
Break Bulk: Exports	4 665 092	4 790 700	3%	4 979 270	4%	4 949 718	-1%	5 033 492	2%
Other	174 269	206 661	19%	181 266	-12%	239 975	32%	239 565	0%
<b>Total</b>	<b>7 146 750</b>	<b>7 267 942</b>	<b>2%</b>	<b>7 388 602</b>	<b>2%</b>	<b>7 374 009</b>	<b>0%</b>	<b>7 468 913</b>	<b>1%</b>
<b>Dry Bulk (Metric Tons)</b>									
Coal Exports	80 366 439	80 531 000	0%	82 006 415	2%	87 366 643	7%	87 815 940	1%
Iron Ore Exports	54 101 902	58 500 000	8%	58 500 000	0%	58 500 000	0%	58 500 000	0%
Manganese Ore Exports	15 837 717	13 088 000	-17%	14 220 000	9%	14 620 000	3%	15 120 000	3%
Other Dry Bulk	30 329 644	29 187 679	-4%	31 143 238	7%	32 256 534	4%	33 574 234	4%
<b>Total</b>	<b>180 635 702</b>	<b>181 306 679</b>	<b>0%</b>	<b>185 869 653</b>	<b>3%</b>	<b>192 743 177</b>	<b>4%</b>	<b>195 010 174</b>	<b>1%</b>
<b>Liquid Bulk (kl)</b>									
Petroleum	35 606 797	34 548 682	-3%	35 450 521	3%	35 582 234	0%	35 644 285	0%
Chemicals	2 428 095	2 407 582	-1%	2 523 496	5%	2 631 460	4%	2 740 283	4%
Other Liquid bulk	6 514 809	6 027 708	-7%	6 102 434	1%	6 181 559	1%	6 303 872	2%
<b>Total</b>	<b>44 549 701</b>	<b>42 983 973</b>	<b>-4%</b>	<b>44 076 451</b>	<b>3%</b>	<b>44 395 252</b>	<b>1%</b>	<b>44 688 440</b>	<b>1%</b>

### 7.4.1 Containers

World merchandise trade growth is expected to remain strong in 2018 and 2019 after posting its largest increase in six years in 2017. No single factor can explain the revival of world trade in 2017 but several cyclical factors contributed to it, including increased investment spending, higher commodity prices, and increased consumption expenditure.

The WTO anticipates merchandise trade volume growth of 4.4% in 2018, roughly matching the 4.7% increase recorded for 2017. Merchandise trade volume growth is expected to moderate to 4.0% in 2019, below the average rate of 4.8% since 1990 but still firmly above the post-crisis average of 3.0%. However the continued expansion depends on robust global economic growth and governments pursuing appropriate monetary, fiscal and especially trade policies.

Until recently, risks to the forecast appeared to be more balanced than at any time since the financial crisis. However, there are signs that possible trade tensions may affect business confidence and investment decisions, which could compromise the current positive outlook.

Assuming the current positive global outlook, WTO expects world merchandise trade volumes to increase in 2018 supported by stronger growth in developing economies in both exports (5.4%) and imports (4.8%). According to the WTO projections, developed countries are also expected to see fairly



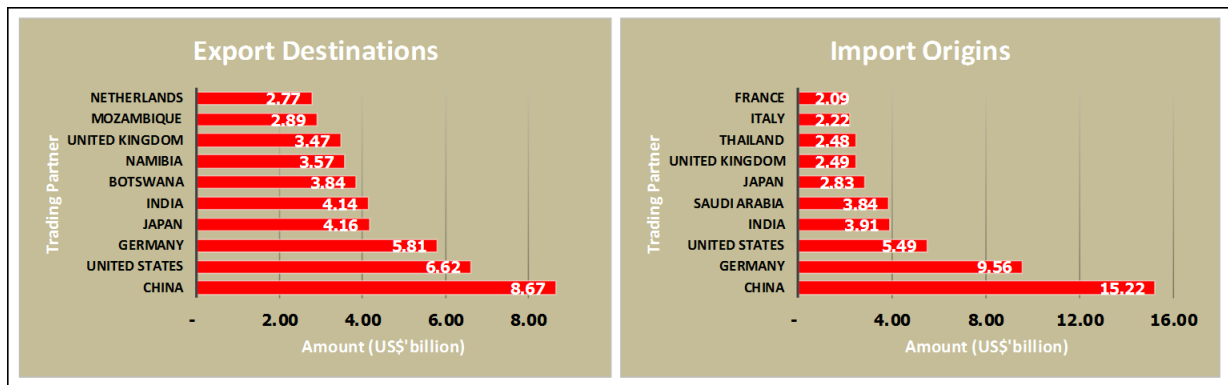
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strong growth in 2018 on both the export side (3.8%) and the import side (4.1%). In 2019 the WTO projects global trade growth to moderate to 4.0%, with developing economies still outpacing developed countries in both exports (5.1% compared to 3.1%) and imports (4.4% compared to 3.3%). Since the Authority's container volumes are affected by global economic outlook, the global merchandise trade projections discussed above may be expected to have an impact on the Authority's volumes.

The full picture on the Authority's container business is informed and impacted on by growth prospects of the trading partners and countries that does business with SA. The continued trade improvements also depends on the trading partners governments pursuing appropriate monetary, fiscal and especially trade policies. Figure 3 shows SA's main trading partners, developments in these countries will have a huge impact on container prospects in SA.

The current Authority's economic outlook improves prospects for container exports for the FY2019/20 at 5%. While the slight domestic positive outlook improves prospects for container imports for the FY2019/20 at 4%.

Figure 3: South Africa's main trading partners in 2017 (Source: Trade economics)



With the global economy expected to recover, although not at levels seen pre-global financial crisis and recession, this improves prospects for container exports. Growth comes with the utilisation of production and manufacturing capacity which comes with other benefits such as employment, rises in incomes, retail activity etc.

### 7.4.2 Automotives

Currently, SA accounts for approximately 0.6% (around 600 000 units) of the world's total vehicle production. The SA vehicle manufacturing industry aims to increase its contribution to 1% by the year 2035. However, this sounds optimistic considering the country's all time highest production of around 700 000 units in 2006 at the back of more than 5% economic growth at the time. The IMF projects South African economy will grow at an annual average of 1.7% over the next five years. This is far below the desired growth rate to have significant impact to the automotive sector's production of over 1 million units per annum. For SA to achieve a 1% share of world vehicle production, it would need to produce between 1.4 and 1.5 million units per annum. However, at the current rate of economic growth which is a major driver of the industry's growth and development, it's more unlikely to achieve this target in the short to medium term.

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According to the Automotive Export Manual (AEM) report; seven major light vehicle manufacturers have invested a record of R8.2 billion in 2017, approximately 28.1% higher than the investment made in the previous year. Recently (May 2018), Mercedes Benz South Africa (MBSA) announced an investment value of approximately R10 billion for the expansion of its East London plant. Despite economic challenges over the recent years, this industry has remained resilient with the support from government incentives in order to further develop the industry and attract investors. Such industry incentives should impact the dynamics and performance of the domestic automotive industry thereby also impacting the auto volumes passing through the port system.

Despite the support through favourable global conditions particularly for exporting sectors, the SA vehicle market export is among sectors that are still struggling to exploit such market opportunities. This was evident as RoRo exports passing through port system contracted by 1.7% during the previous financial year (FY2017/18). With the USA's recent proposal to increase tariffs on imported cars, this could cause more harm on the current struggling automotive exports. However, in the short-term, the SA automotive market is expected to remain resilient despite the challenges. For 2018, the SA local vehicle market is projected to grow around 3% and expected to further improve with the support from Automotive Master Plan to be effective in 2020. Given this background, the Authority expects vehicles volumes to increase by 4% in the FY 2019/20 (with vehicle imports expected to increase by 5% while vehicle exports are expected to increase by 6%).

### 7.4.3 Break Bulk

Projected cargo volumes of key cargo commodities for the break-bulk sector from clients in the oil, gas, and mining sectors is dependent on global economic performance. Machinery and equipment shipments for the mining industry are bound to recover on the back of mine expansions and new projects from countries in the west coast of South America. However, the uncertainty in the market due to trade disputes between the USA and the rest of the world (particularly for steel products which are facing a 25% import tariff in the USA) remains a risk. Given this background, the Authority expects break bulk to grow by 2% in the FY2019/20 driven by 3% higher exports.

### 7.4.4 Coal

Coal consumption faces long-term structural declines in several consuming regions for both economic and policy reasons. China, the worlds' largest coal consumer, is investing in cleaner energy sources, reforming its electricity sector to reduce inefficient production, and reducing the energy intensity of its economy—all at the expense of coal. Much of the slowdown in global coal consumption is driven by China, where coal consumption is projected to be broadly flat over the next 10 years or so, before declining thereafter. In contrast, coal demand within India and other emerging Asian economies increases, as these economies continue to industrialize and electrify their economies. India is the largest growth market for coal, with its share of global coal demand more than doubling from a little over 10.0% in 2016 to around 25.0% by 2040. Coal prices are expected to average \$85/mt in 2018, down slightly from 2017, as inventories are replenished and consumption is curtailed. China, which accounts for more than half of global coal consumption, is expected to continue to be a key driver of coal prices in the seaborne market, as it reforms its energy sector away from coal toward cleaner burning fuels. Given this background, coal exports through the ports are expected to grow by 2% in the FY2019/20.

#### 7.4.5 Iron Ore

Iron ore and manganese trends closely follow the steel trends. In the short- to medium-term, both the steel and iron ore markets face significant challenges due to subdued global demand, particularly from China. Iron ore prices increased by 13.0% during Q1 2018 on increased steel output in China, which mainly reflects a government imposed closure of illegal scrap-based steel capacity. China's Metals prices are projected to increase by 9.0% in 2018. Over the same period, iron ore prices are projected to decline by 11.0% due to oversupply, which are more than offset by increases in all base metals prices, led by nickel (up 30%), due to growing demand and supply tightness. The Upside risks to the price forecast includes more robust global demand, as well as production shortages. Supply could be curtailed by slower ramp-up of new capacity, tighter environmental constraints, sanctions against commodity producers, rising costs, and policy action that limits output and exports, notably in China. Downside risks include slower growth in China, risks of higher-than-expected production—including the restart of idled capacity as well as easing production restriction policies in China, and an escalation of trade tensions. Hence the static outlook for the FY2019/20.

#### 7.4.6 Manganese Ore

Manganese export performance reflects developments in the steel and iron ore sectors. Steel demand in 2018 is expected to stay flat and this should limit industrial metals imports. In 2019, it is expected to contract by 2.0% with a further slowdown in construction activity. In manufacturing, the machinery sector is expected to maintain positive growth on the back of a strong global economy while automotive and home appliances are expected to decelerate. In 2018 and 2019 China GDP growth is expected to decelerate mildly, but as the government continues to focus on shifting the growth driver toward consumption, investment is likely to further decelerate. Consequently, steel demand should remain relatively depressed in the next two years and possibly beyond. However, better than expected global economic activity coupled with supply constraints should boost manganese exports. Moreover, SA remains a key supplier of manganese as it accounts for 75% of global reserves. Based on the information above, Manganese exports are expected to grow by 9% in FY 2019/20.

#### 7.4.7 Liquid Bulk

The international crude oil prices have since shown strong recovery after experiencing significant drop between mid-2014 and early 2016. By April 2018, the crude oil price was at US\$68.79 per barrel and it is expected to average US\$65 per barrel for both 2018 and 2019. In the medium-term, oil demand outlook is positive with demand in developing countries expected to be strong, reaching 49.6 mb/d by 2022. Although the world oil market demand is projected to improve in the short-term to medium-term particularly for the emerging markets, however, the lack of fixed investment in the SA refinery sector, firmer oil prices and possible slow economic recovery are likely to further delay growth recovery in domestic fuel demand. In the short-term, the country's persistent low fuel demand is likely to have negative impact on liquid bulk imports passing through the port system, hence the moderate expectation for the FY2019/20.

According to the Chemical Industries Education & Training Authority (CHIETA), growth expectations in the SA chemical market were low and uncertain in 2017. The situation may change if the Industrial Policy and Action Plan (IPAP) materialises, with one of its focus areas being to develop the chemical and related sectors. The chemicals industry is also dependent on imports which makes it vulnerable to global economic changes such as competition from rapidly growing chemical producers like China and India

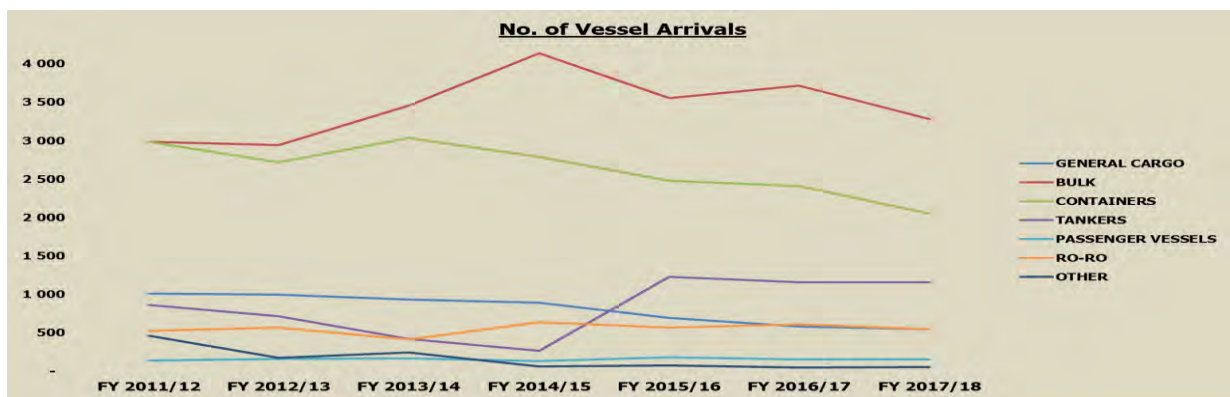
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and exchange rate fluctuations. Given this background, the Authority expects chemicals volumes to increase by 5% in FY2019/20.

**7.5 Marine Services**

Marine volumes comprise of the number of vessels arriving at SA ports and their associated Gross Registered Tonnage (GRT). The revenue in this category is influenced by the average vessel size and ship turnaround time. When the average number of calls decrease as larger vessels call into the Authority’s ports, which is a trend recently seen, the revenue remains relatively static. Lesser vessel calls with longer stays attract additional charges, however, this is not a substitute for revenue earned from more frequent vessel calls with shorter stays. Figure 4 presents historic performance.

**Figure 4: Port vessel calls**



A closer look at the vessel movements over the past three years indicates the following:

- The Authority has been experiencing a downward trend in the number of vessel calls. This is due to larger vessels consolidating cargoes across many ports and major hubs. Specifically, liner shipping carriers take advantage of mergers and acquisitions, alliances and the use of larger ships to achieve both scale of economies and greater market power so as to increase income and profits.
- The larger the carrier or alliance, the larger the influence it can have on a port. The threat that a carrier could divert its vessel means a shipping line can effectively eliminate a port’s position in global trade. As a result, to benefit from the process of concentration in liner shipping, SA ports must ensure that port infrastructure and water depth is adequate for bigger vessels. This will result in ports becoming major hubs, creating transshipment opportunities and remaining competitive within the global supply chain network.
- The recovery in both global and domestic economic activity should translate into higher vessel calls and improve marine revenue.

The vessel traffic is demand-driven as it depends on growth in volumes per cargo commodity. The current outlook for economic activity is moderate. However with the expected volume increase in containers, RoRo’s, dry bulk and liquid bulk cargo categories for FY 2019/20, marine services activity is expected to grow by 0.4%.

## 8. Tariff Application Approach

### 8.1 Revenue Requirement Formula

The RR approach is as per the “Port Tariff Methodology for Tariff Years 2018/19 - 2020/21”, dated March 2017, which forms the basis upon which the Regulator will determine the appropriate revenues for the Authority. For the purpose of this application, the indicative year FY 2021/22 has been modelled on the assumption that the tariff methodology will not change. The formula as prescribed is as follows:

#### *Revenue Requirement*

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

The application of this formula is demonstrated in the sections that follow.

#### 8.1.1 Regulatory Asset Base

##### **Methodology for the valuation of the Authority’s RAB**

On 29 March 2018, the Regulator issued an RoD on the “Methodology for the valuation of the Authority’s RAB” (“VoA”) to be implemented with this Tariff Application. The Authority evaluated the new methodology, modelled the outcome of the valuation of assets for FY 2019/20 and compared the outcome with that of the current methodology.

At the time it was estimated that the VoA reduces the Authority’s calculated opening RAB value at 1 April 2019 by approximately R45 billion from R83.5 billion to R38.1 billion. This in turn reduced the calculated Allowable Revenue attributable to RAB by R3.8 billion/ 46% from R8.2 billion to R4.4 billion for FY 2019/20 and every year thereafter perpetually. Given this significant revenue reduction, together with the commitments of the Authority, the financial sustainability of the Authority would be at risk.

The reduction in the Authority’s revenue base significantly impacts the organisation’s key financial ratios and credit metrics, breaching most of the parameters in the first year of implementation. Key financial ratios and credit metrics would continue to deteriorate significantly over the three-year period resulting in the Authority requiring recapitalization every two to three years. Access to funding will be limited to the nature and extent of government guarantees to be provided, which cannot be expected given the current status of the fiscus. Funders are also likely to place doubt on the stability of revenue and predictability of the tariff methodology, that the Act and Regulator is expected to offer.

Various correspondences have been exchanged and meetings have been held between the Authority and the Regulator to align on the revenue impact associated with implementation of the VoA which threatens the financial sustainability of the organisation. Gaps in the methodology, which were raised during the limited consultation process, remain unresolved, such as the issue around valuing the existing Authority’s Real Estate assets. The methodology introduces an unexplained difference in treatment

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between new lease arrangements and existing lease contracts. The Authority's initial estimates indicates that implementation of the VoA would further render the Regulator-approved Tariff Strategy obsolete. This recently implemented Tariff Strategy is largely informed by the value of the underlying assets making up the existing RAB. The implementation of the VoA will require outcomes of the Tariff Strategy to be reassessed necessitating a complete review of the format and 10 year rollout plan.

The Authority remains committed to reducing the costs of doing business in SA for the benefit of the SA consumers. However, in the absence of alignment around the VoA, the Authority has delayed the implementation of the new methodology until its concerns have been addressed and consensus reached with the Regulator that will ensure the sustainability of the ports and ports users alike.

The calculation of the RAB and determination of depreciation in the tariff application for FY 2019/20 has thus been prepared in accordance with the approved Tariff Methodology of March 2017 (original form) which is consistent with past practice.

### 8.1.1.1 Asset Base

The RAB represents the value of assets that the Authority is allowed to earn a return on and is based on the approved Tariff Methodology.

The formula for the determination of the value to be allowed in the RAB for the tariff period is highlighted on page 8 of the approved tariff methodology as follows:

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

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

Where:

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

### 8.1.1.2 Depreciation

In accordance with the Tariff Methodology, the resultant depreciation has been determined to be R2 279m for FY 2019/20, R2 458m for FY 2020/21 and R2 675m for FY 2021/22.

The formula for the determination of depreciation for the tariff period is as highlighted:

$$Depreciation = (RAB_{(o,y)} + (RAB_{(o,y)} \cdot CPI(y)) + (Capex(y) / 2 \cdot CPI(y))) / 40$$

### 8.1.1.3 Inflation Trending

The Tariff Methodology prescribes the use of the CPI for the tariff period based on the latest forecast published by the National Treasury or alternatively the BER inflation forecast for the purposes of trending the RAB. The Authority has utilised the latest forecasts published annually by the BER (Source: BER July 2018).

### 8.1.1.4 Capital Works in Progress/ Capital Expenditure

The formula for determination of the RAB includes CWIP/Capex. Capex refers to capital works in progress for assets that are under construction. Capex is informed by the Capex program which is projected at R4 513m for FY 2019/20, forecasted at R5 026m for FY 2020/21 and R6 849m for FY 2021/22. Detailed information relating to capital expenditure is demonstrated in **Annexure B: Capital Expenditure**.

### 8.1.1.5 Working Capital

In line with the Tariff Methodology, net working capital is to be included in the RAB.

In accordance with the Tariff Methodology, the working capital is determined as follows:

Table 9: Working Capital

Working Capital	2017/18	2018/19	2019/20	2020/21	2021/22
<b>Indexation</b>					
Volume Growth		3.05%	2.80%	2.80%	2.80%
Inflation		5.40%	5.10%	5.00%	5.10%
<b>AFS 2017/18 - rolled forward to FY 2018/19</b>		<b>R'm</b>			
<b>Current Assets</b>					
Trade receivables	1 044	1 076			
Inventories	46	48			
<b>Current Liabilities</b>					
Trade Payables (including VAT liability)	2 695	2 841			
<b>Working Capital Calculation for FY 2019/20 - FY 2021/22</b>			<b>R'm</b>		
<b>Current Assets</b>			<b>1 157</b>	<b>1 190</b>	<b>1 225</b>
Trade receivables			1 106	1 137	1 169
Inventories			51	54	56
<b>Current Liabilities</b>			<b>3 361</b>	<b>3 553</b>	<b>3 865</b>
Trade Payables (including VAT liability)			2 985	3 135	3 295
CWIP Payables (1/12)			376	419	571
<b>Working Capital</b>			<b>-2 205</b>	<b>-2 363</b>	<b>-2 640</b>

### 8.1.2 Weighted Average Cost of Capital

The weighted average cost of capital represents an estimate of a return commensurate with the risk of owning, managing, controlling and administering ports and of providing port services and facilities which the Authority is allowed by the Port Directives to earn. The rate of return is determined on a real basis with a weighted average cost of debt and cost of equity.

The key components used to determine the Vanilla WACC are highlighted in the table on the next page.

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**Table 10: Weighted Average Cost of Capital (WACC)**

REAL RATE OF RETURN	2019/20	2020/21	2021/22
Inflation forecast	5.10%	5.00%	5.10%
Nominal Risk-free rate	8.58%	8.58%	8.58%
Real risk free rate	3.31%	3.41%	3.31%
MRP	5.30%	5.30%	5.30%
Asset beta	0.50	0.50	0.50
Equity beta (using Hamada)	0.92	0.92	0.92
Gearing	50.00%	50.00%	50.00%
Debt/equity ratio	100.00%	100.00%	100.00%
Nominal Weighted Average Cost of Debt (WACD)	10.78%	10.78%	10.78%
Equitable Tax rate	15.42%	15.42%	15.42%
Real Cost of equity (post-tax)	8.20%	8.30%	8.20%
Real WACD (pre-tax)	5.40%	5.50%	5.40%
<b>Real Vanilla WACC</b>	<b>6.80%</b>	<b>6.90%</b>	<b>6.80%</b>
<b>Explanatory notes:</b>			
<i>Risk Free Rate: KBP2003M, calculated over a five yearly average from June 2013 to May 2018 for FY 2019/20</i>			
<i>MRP: Geometric mean with the use of the DMS studies over the full period available dataset (117 years)</i>			
<i>Inflation: BER Forecasts</i>			
<i>Cost of Debt: NPA's actual, embedded (adjusted for an effective weighting) debt costs</i>			
<i>FY 2019/20 MRP figure is used as a proxy for MRP for indicative years FY 2020/21 &amp; FY 2021/22</i>			

The RFR is calculated over a five yearly average from June 2013 to May 2018 for FY 2019/20 from Government bonds (KBP2003M). The RFR is not available for FY2020/21 and FY2021/22. For projection purposes the 8.58% of FY2019/20 has been utilized.

### 8.1.3 Valuation of the RAB

The opening RAB for FY 2019/20 is highlighted in Table 11 as follows:

**Table 11: Opening Regulatory Asset Base**

Opening Regulated Asset Base	2018/19	2019/20	2020/21
	R'm		
Opening NBV 01 April	79 600	84 473	91 131
Indexation	4 370	4 423	4 682
Depreciation	-2 132	-2 279	-2 458
Capex	2 636	4 513	5 026
<b>Closing NBV 31 March</b>	<b>84 473</b>	<b>91 131</b>	<b>98 380</b>



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The valuation of the RAB is highlighted in Table 12 as follows:

**Table 12: Regulatory Asset Base**

REGULATORY ASSET BASE	2019/20	2020/21	2021/22
	R'm		
Opening book value	84 473	91 131	98 380
Inflation Index	4 308	4 557	5 017
Indexed Opening Asset Base	88 782	95 687	103 398
Indexation of Capex	115	126	175
Indexed Asset Base	88 897	95 813	103 572
Add :Capex (Corporate Plan)	4 513	5 026	6 849
Depreciation	-2 279	-2 458	-2 675
Closing Book Value	91 131	98 380	107 746
Average Asset Base	87 802	94 755	103 063
Less :Working Capital	-2 205	-2 363	-2 640
<b>Regulated Asset Base</b>	<b>85 597</b>	<b>92 392</b>	<b>100 423</b>

### 8.1.4 Taxation

The RR formula considers the tax expense on an equitable basis assumption based on the Transnet OD's profits before tax contribution. The effective rate is calculated as a ratio of the Transnet taxation liability due under the current corporate structure. The calculation of the equitable tax is as follows:

**Table 13: Equitable Tax calculation**

Details	5 Years Total
Total Profit Before Tax	28 087
Total Profit Making Divisions	50 988
<b>Equitable Tax = (Total Profit before tax / Total profit making divisions) * 28%</b>	<b>15.42%</b>

For tax purposes, the Vanilla WACC is applied to the average RAB for the period under review, and does not include the cost of debt as it is a pre-tax determination. Any under or over recoveries between the 5 year average estimated equitable tax rate and the actual equitable tax rate determined from the recent AFS will be clawed back.

The calculation for tax is illustrated as follows:

**Table 14: Tax Calculation**

Taxation	2019/20	2020/21	2021/22
Equity Return	3 511	3 835	4 119
Depreciation	2 279	2 458	2 675
Opex	6 291	6 853	7 446
<b>Gross income</b>	<b>12 081</b>	<b>13 146</b>	<b>14 239</b>
Depreciation	2 279	2 458	2 675
Opex	6 291	6 853	7 446
<b>Total Deductions</b>	<b>8 570</b>	<b>9 311</b>	<b>10 121</b>
Taxable Income	3 511	3 835	4 119
Grossup factor	0.85	0.85	0.85
Grossed up taxable income	4 151	4 534	4 870
<b>Tax @ 15.42%</b>	<b>640</b>	<b>699</b>	<b>751</b>

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### 8.1.5 Operating Costs

The Authority's opex is a reflection of the organisation's expenditure in line with the nature of its business to sustain day to day operations as well as support strategic initiatives which aim to improve productivity, efficiency and enhance port safety. Consequently, most of the Authority's operating costs are largely of a fixed nature.

The cost elements contributing significantly to the total operating expenditure includes Labour Costs, Energy, Maintenance, Rates & Taxes, Sundry Operating costs, Professional services, Computer & Information systems, Rental and Pre-Feasibility Studies.

The table below highlights the Authority's material opex items. The Authority's total opex for FY 2019/20 is made up of R 5 826 and an allocation of R 466m from Group overhead costs.

**Table 15: Operating Costs Including Group Costs**

Cost Category	Actual	Budget	Forecast	Dev '18/19	Dev '18/19	% of Opex	Forecast	Forecast	CAGR
	2017/18 R Million	2018/19 R Million	2019/20 R Million	vs 19/20 R Million	vs 19/20 Percentage	19/20	2020/21 R Million	2021/22 R Million	2019/20 - 2021/22
Labour Costs	2 551	2 777	3 142	365	13%	54%	3 440	3 697	8%
Rates & taxes	341	375	395	20	5%	7%	417	440	6%
Maintenance	410	459	504	45	10%	9%	625	801	26%
Contract Payments	42	80	85	4	5%	1%	89	94	5%
Energy	509	575	623	48	8%	11%	684	731	8%
Professional services	19	105	120	15	14%	2%	128	137	7%
Material	83	92	102	10	11%	2%	112	119	8%
Computer & Info systems	161	226	249	23	10%	4%	263	278	6%
Rental	209	186	203	16	9%	3%	213	225	5%
Security costs	97	100	107	7	7%	2%	114	122	7%
Pre-Feasibility Studies	43	96	116	19	20%	2%	105	109	-3%
Sundry operating costs	36	177	181	4	2%	3%	185	193	3%
<b>Total operating cost (excluding depreciation)</b>	<b>4 499</b>	<b>5 250</b>	<b>5 826</b>	<b>575</b>	<b>11%</b>	<b>100%</b>	<b>6 375</b>	<b>6 946</b>	<b>9%</b>
Group Costs	526	458	466	8	2%		478	500	4%
<b>Total operating cost (Including Group Costs)</b>	<b>5 025</b>	<b>5 708</b>	<b>6 291</b>	<b>584</b>	<b>10%</b>		<b>6 853</b>	<b>7 446</b>	<b>9%</b>

More details relating to Opex is provided in **Annexure D**.

### 8.1.6 Revenue Claw-back

In line with the approved Tariff Methodology, the key purpose of applying a claw back is to ensure that neither the Authority nor port user gain or lose out from differences arising between forecasts made at the time of the tariff application and actual figures on the realisation of capital expenditure, operating expenditure, depreciation, taxation, volume and inflation.

#### 8.1.6.1 Re-computed Claw-back FY 2017/18

The actual revenue for FY 2017/18 is R12 203m as per the AFS. The calculation of the claw-back is as per the on the next page.

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Table 16: Re-computation of RR for FY 2016/17

CLAWBACK	FY 2017/18	FY 2017/18
	ROD	Actuals
	R' m	
Return on asset	4 417	4 897
Depreciation	2 031	2 026
Opex + Group Costs	5 961	5 025
Tax	1 050	500
Clawback	-681	-681
ETIMC	-593	-593
<b>Revenue Allowed/Actual Revenue</b>	<b>12 185</b>	<b>11 174</b>
AFS Revenue		12 203
Clawback		-1 029
Clawback as per above		-1 029
Contract Revenue		-109
Reverse FY 2017/18 Clawback taken in FY 2018/19		-6
Estimated Clawback for FY 2018/19 (50%)		-136
Plus return on clawback account for FY 2018/19 @ 6.38% RoR		-73
<b>Net Clawback</b>		<b>-1 353</b>

The recomputed revenue of R11 174m is compared with the actual revenue of R12 203m as recorded in the AFS resulting in a clawback in favour of port users to the value of R1 029m. Added to this is a revenue amount of R109m which represents bilateral contracts revenues not allowed by the Regulator. A further addition to the clawback calculation is the reversal of unfavourable interim clawback amount of R 6m (50% of R12m) provided for in FY 2017/18. The estimated clawback for FY 2018/19 in favour of customers is reduced by 50% of the estimated under-recovery of revenue translating to R 136m. The addition of R73m interest on clawback account (calculation based on last approved WACC of 6.38%) results in net clawback R1 353m.

### 8.2 Revenue Requirement

The Revenue Requirement considers the best available information on the latest economic indicators, assumptions and parameters.

Table 17: Revenue Requirement from FY 2019/20 to FY 2021/22

DETAILS	2018/19	2019/20	2020/21	2021/22
	ROD	Fixed Tariff Year	Indicative Tariff Years	
	R' m	R' m		
RAB	80 474	85 597	92 392	100 423
Vanilla WACC	6.38%	6.80%	6.90%	6.80%
Return on Capital	5 134	5 824	6 378	6 832
Plus: Depreciation	2 099	2 279	2 458	2 675
Plus: Operating Costs	5 938	6 291	6 853	7 446
Plus: Taxation Expense	682	640	699	751
Plus/Less: Clawback	-1 779	-1 353	-136	-
Plus/Less: ETIMC	345	-	-	-
Revenue Allowed	<b>12 419</b>	<b>13 681</b>	<b>16 253</b>	<b>17 704</b>
Less: Real Estate	-3 025	-3 284	-3 580	-3 849
<b>Marine Revenue</b>	<b>9 394</b>	<b>10 398</b>	<b>12 673</b>	<b>13 854</b>

The Authority determined a required revenue of R13 681m comprising of Marine Business revenue of R10 398m and Real Estate Business revenue of R3 284m for FY 2019/20. Indicative required revenues for FY 2020/2021 and FY 2021/22 are R16 253m and R17 704m respectively.

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Volume growth for FY 2019/20 of 2.80% is determined per Table 18 below.

**Table 18: Revenues related to volume growth (FY 2019/20)**

REVENUE	FY 2018/19		FY 2019/20		
	Revenue LE	Weighted Average Revenue Volume Increase	Revenue: Volume Increase	Revenue: Before Tariff Increase	
	R'm	%	R'm	R'm	
Containers	4 254	4.3%	184	4 438	
Break Bulk	238	1.9%	5	243	
Dry Bulk	1 208	2.7%	33	1 241	
Liquid Bulk	852	2.5%	22	873	
Automotive	378	4.9%	18	396	
<b>TOTAL CARGO DUES</b>	<b>6 930</b>	<b>3.8%</b>	<b>261</b>	<b>7 191</b>	
Marine & other revenue	2 776	0.4%	10	2 786	
<b>TOTAL TARIFF BOOK REVENUE</b>	<b>9 706</b>	<b>2.80%</b>	<b>271</b>	<b>9 977</b>	
Real Estate revenue	2 985	10.0%	299	3 284	
<b>TOTAL REVENUE</b>	<b>12 691</b>	<b>4.5%</b>	<b>570</b>	<b>13 261</b>	

Table 19 below illustrates the required tariff adjustment taking into account the projected volume growth of 2.80% for FY 2019/20:

**Table 19: Marine Revenue for FY 2019/20 to FY 2021/22**

MARINE REVENUE	2019/20	2020/21	2021/22
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
Prior Year Revenue	9 706	10 398	12 673
Estimated Volume Growth	2.80%	2.80%	2.80%
Revenue after volume growth	9 977	10 689	13 028
Required Revenue	10 398	12 673	13 854
<b>Tariff Increase</b>	<b>4.21%</b>	<b>18.57%</b>	<b>6.34%</b>

In summary, the Authority has determined a required revenue of R13 681m comprising of marine revenue of R10 398m and real estate of R3 284m for FY 2019/20. This translates to a weighted average tariff adjustment of 4.21% for FY 2019/20.

FY 2020/21 and FY 2021/22 indicative tariff adjustments at similar volume growth rate of 2.8% are 18.57% and 6.34% respectively

### 8.3 The Tariff Strategy

The tariff strategy sets out the strategic direction for the SA port system, in order to provide port users and stakeholders with a clear view of the port tariffs over the next couple of years. Included in the tariff strategy are guiding principles for setting base tariffs which apply to different cargo categories and port users. Most importantly the port industry has opted for a progressive tariff strategy that establishes an appropriate level of tariffs that better reflect the underlying costs, based on use and benefit. However, with some degree of flexibility as tariffs change significantly for all the cargo categories whilst it reduces significantly over time (i.e. Containers and Automotives).

The underlying principle of the tariff strategy is the user pay principle where cost based tariffs are formulated as guided by the asset cost allocations on the next page.

### 8.3.1 Asset Cost Allocations

In the Tariff Strategy, the Regulator follows a coherent costed infrastructure according to an asset allocation in the similar manner prescribed by the Authority. The Regulator’s Tariff Strategy for the SA ports is premised on the following principles:

- **Cost causation:** To provide port users with the correct pricing signals when utilising port facilities;
- **Cost minimisation:** An approach seen to minimise costs;
- **Distribution of benefits:** To achieve equity and reasonability between causers and beneficiaries of costs; and
- **Practicality:** For practicality and ease of implementation of Tariff Strategy.

Furthermore in the allocation or attribution of the cost of port assets, the Regulator takes into consideration which user classes depend more on a particular asset type and the extent to which they would be affected if the infrastructure did not exist. Therefore, in considering where the burden of this asset class allocation should be, the Regulator also looked at the activities of the different users and the benefit they derive there from. The Regulator has categorised port users as follows:

- Shipping Lines
- Cargo Owners
- Terminal operators (and all cargo working lessees)
- All other lessees in the port system

The general underlying logic is that the seaward side benefits mostly shipping lines and cargo owners, while the interface benefits mostly shipping lines and tenants, and the landward side benefits mostly tenants.

Figure 5 that follows identifies the key port assets and allocates these assets to user groups in order to determine a more equitable share of infrastructure and cost sharing between the broad groups.

Figure 5: Ports Regulator’s Asset Allocations

Port User Asset Class	Lessees	Terminal Operator	Cargo Owners	Shipping Lines
Breakwaters	33% shared on a NBV basis		33%	33%
Channels, Fairways, basins			50%	50%
Quay walls, berths and jetties		50%		50%
All ship working vessels and aids to navigation				100%
Vessel repair infrastructure	40%	15%	15%	30%
All movable NPA assets, buildings and structures (not part of lease agreements) and unused land	50% shared on a NBV basis		25%	25%
Terminal land and staging areas		100%		
Non-Terminal Land including recreational and yachting	100%			
All common access infrastructure	66% Shared on a NBV basis		33%	
Overheads	50% shared on a NBV basis		25%	25%

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This pricing structure which is cost reflective is envisaged to be phased-in over a period of at least 10 years and the Regulator has highlighted the following factors for a prolonged implementation period to be accommodated:

- Contractual agreements and binding leases prevents the Regulator from changing tariffs too quickly;
- Large shifts in tariffs may lead to unintended consequences and as such, a more gradual approach is favoured; and
- The cost structure of the port system by its very nature changes and evolves over time.

The phased approach as envisaged by the Regulator will lead to the following tariff increase over the envisaged 10 year period:

- **Cargo Owners:** - 5.2% real price decrease on an annual basis;
- **Shipping Lines:** 7.2% real price increase on an annual basis; and
- **Tenants:** 2.8% real increase on lease revenue on an annual basis.

The tariff strategy in its current form has been embarked on by the industry since it was published in 2015 with the first year of implementation being FY 2016/17. The reductions in Container and Automotive cargo together with bulk categories are expected to continue into the foreseeable period of time. However, the tariff strategy introduces a completely new tariff structure for port dues. This is all guided by cost allocations of which the water based infrastructure is assumed to be represented by shipping lines which includes a portion of assets such as breakwater, channels, fairways, quay walls and ship repair facilities. This is a shift in the overall port infrastructure allocations as these cost bases were generally carried by cargo owners in the past.

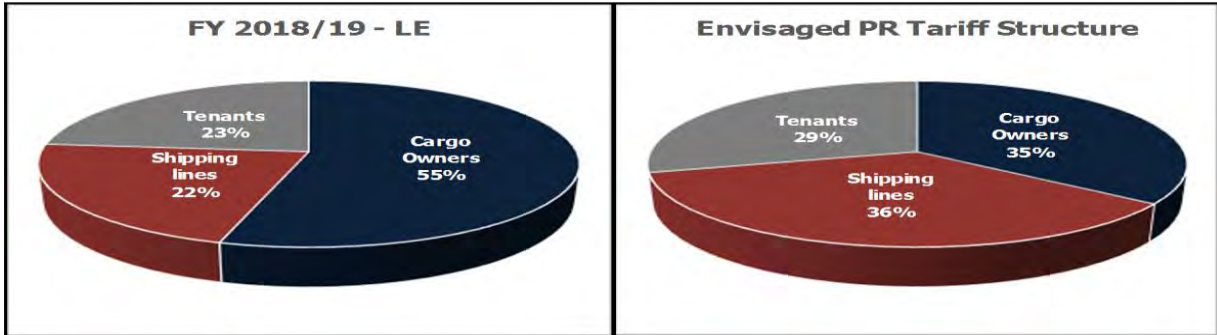
In the continuation of the tariff strategy implementation, the proposal requires a consistently higher tariff increase for port dues in the foreseeable future with a declining pattern of tariffs in cargo dues applicable on cargo that goes over the quay.

### 8.3.2 Tariff Book Proposal for FY 2019/20

The tariff strategy is intended to guide the annual setting (or revision) of port tariffs and charges. Once the required revenue for FY 2019/20 has been calculated, the next step would be to formulate cargo dues (i.e. tariff differentials) in line with the tariff strategy. In aligning tariffs to the tariff strategy (which is an exercise expected to be finalised in the medium to long term), the impact (i.e. feasibility and affordability) of these adjustments are considered on each user group. Furthermore, the Authority should still recover its full required revenue from port users.

The transition to the Regulator’s tariff strategy is depicted in figure 6 below.

Figure 6: Transition to the Regulator’s Tariff Strategy



### 8.3.2.1 Cargo Dues

The Tariff strategy prescribes that cargo owners should contribute 35% of the revenue stream which needs to be rebalanced against shipping lines (36%) and real estate (29%) revenue streams.

### 8.3.2.2 Shipping Lines

In the review of tariff lines for Marine Services, the vessel owners are required to contribute partially for breakwaters, channels, fairways, basins, quay walls, berths, jetties, all ship working vessels, aids to navigation, vessel repair infrastructure as well as assets not earning lease revenue and overheads. These allocations increase the revenue contribution required from Marine Services to approximately 36%.

### 8.3.2.3 Real Estate

The real estate revenue category is contributing appropriately to the envisaged revenue contribution in accordance with the tariff strategy.

### 8.3.2.4 Differentiated Tariff Proposal

In order for this transition to occur it needs to build-up from the shift in asset allocation which is constructed within the required revenue approved for the Authority. The table below demonstrates the proposed differentiation.

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**Table 20: Differentiated Tariff Approach results**

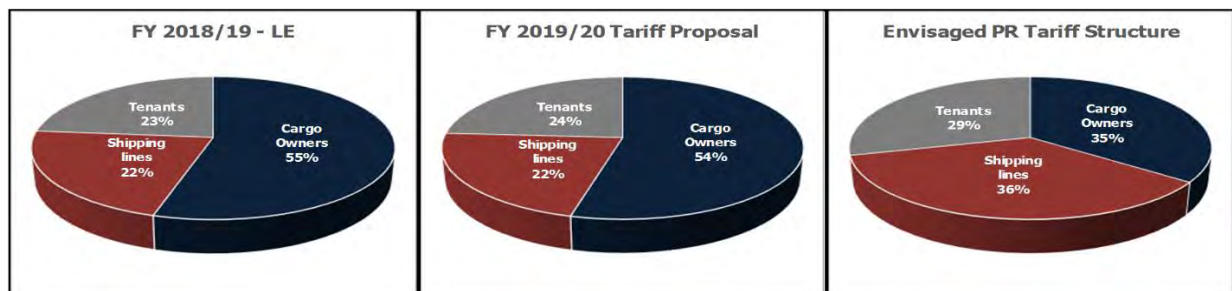
REVENUE	FY 2018/19		FY 2019/20			
	Revenue LE	Weighted Average Revenue Volume Increase	Revenue: Volume Increase	Revenue: Tariff Increase	Weighted Average Revenue Tariff Increase	Projection
	R'm	%	R'm	R'm	%	R'm
Containers	4 254	4.3%	184	79	1.79%	4 517
Break Bulk	238	1.9%	5	12	5.00%	255
Dry Bulk	1 208	2.7%	33	62	5.00%	1 303
Liquid Bulk	852	2.5%	22	44	5.00%	917
Automotive	378	4.9%	18	-	0.00%	396
<b>TOTAL CARGO DUES</b>	<b>6 930</b>	<b>3.77%</b>	<b>261</b>	<b>197</b>	<b>2.74%</b>	<b>7 389</b>
Marine & other revenue	2 776	0.4%	10	223	8.00%	3 009
<b>TOTAL TARIFF BOOK REVENUE</b>	<b>9 706</b>	<b>2.80%</b>	<b>271</b>	<b>420</b>	<b>4.21%</b>	<b>10 398</b>
Real Estate revenue	2 985	10.01%	299	-	10.01%	3 284
<b>TOTAL REVENUE</b>	<b>12 691</b>	<b>4.5%</b>	<b>570</b>	<b>420</b>		<b>13 681</b>

Guided by the Tariff Strategy, the Authority is proposing the following tariff differentiation:

- A tariff increase of 8.00% on Marine charges (shipping lines);
- An average of 2.74% increase in Cargo Dues differentiated as follows:
  - 5.00% on Liquid Bulk and Break Bulk Cargoes;
  - 1.79% on Containers;
  - 0.00% on Automotives;
  - 5.00% on Dry Bulk Cargoes differentiated further as follows:
    - Coal to increase by 8.00%;
    - Ores and Minerals: Magnetite to increase by 8.00%; and
    - Other Dry bulk to increase by 3.75%.

The result of the proposed tariff differentiated adjustments is depicted in the following diagram:

**Figure 7: Transition to the Regulator's Tariff Strategy**



Whilst the shipping lines contribution does not shift, containers and tenants see a 1% shift toward the envisaged tariff structure.

### 8.3.2.5 Port Tariff Incentive Programme (PTIP)

PTIP is a scheme put forward by the Port Industry to support the government policy environment that seeks to bolster the country's economic output by incentivising beneficiation, industrialisation and localisation of manufactured goods through discounts on port tariffs. The Authority is regulated on a tariff methodology and its tariffs are determined in accordance with the tariff strategy that is premised on a cost reflective, user pay principles. These methodologies are keen on limiting cross subsidisation



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across the tariff categories. However, the industry still wishes to support government imperatives of incentivising beneficiation and aiding economic growth through limited subsidisation inter-tariff categories.

The PTIP is a mechanism that is based on the amount and size of funds made available to the public before the scheme can be explored for discounts. It is envisaged that the scheme will be based on a percentage of the revenues granted to the Authority, which will then be used to provide discounts and subsidies to the tariffs successfully enlisted for incentives. For these reasons, the PTIP process flow is summarised as follows:

- Applications are to be submitted to the Regulator on or before the 28<sup>th</sup> day of January of each year for consideration in the next financial year;
- The application as received by the Regulator will be submitted to either the DTI or DoT (depending on the nature of the application) for review and endorsement;
- Once the DTI/DoT has verified all the required information, accreditation can either be approved or not approved. The application together with the endorsement or comments from the DTI/DoT will be submitted to the Authority for analysis and recommendation in the tariff application;
- The Authority will then inform the Regulator of the application received as well as appraise the application for an assessment of an economic and financial viability and in its application to the Regulator, make a recommendation; and
- The Regulator will consult on the proposal and make a decision at the time of making a tariff determination on the Authority's application.

The Authority received a PTIP application from the Regulator in February 2018. The application was forwarded to DTI by the Regulator for review and endorsement. Applications concerning industrial trade would require the DTI's accreditation. The application received does fall within the scope of the industrial trade ambit but did not meet the minimum requirements for accreditation as set by the DTI. As a result the application did not receive endorsement from the DTI and cannot be appraised any further by the Authority within the PTIP framework as part of its FY 2019/10 Tariff Application process.

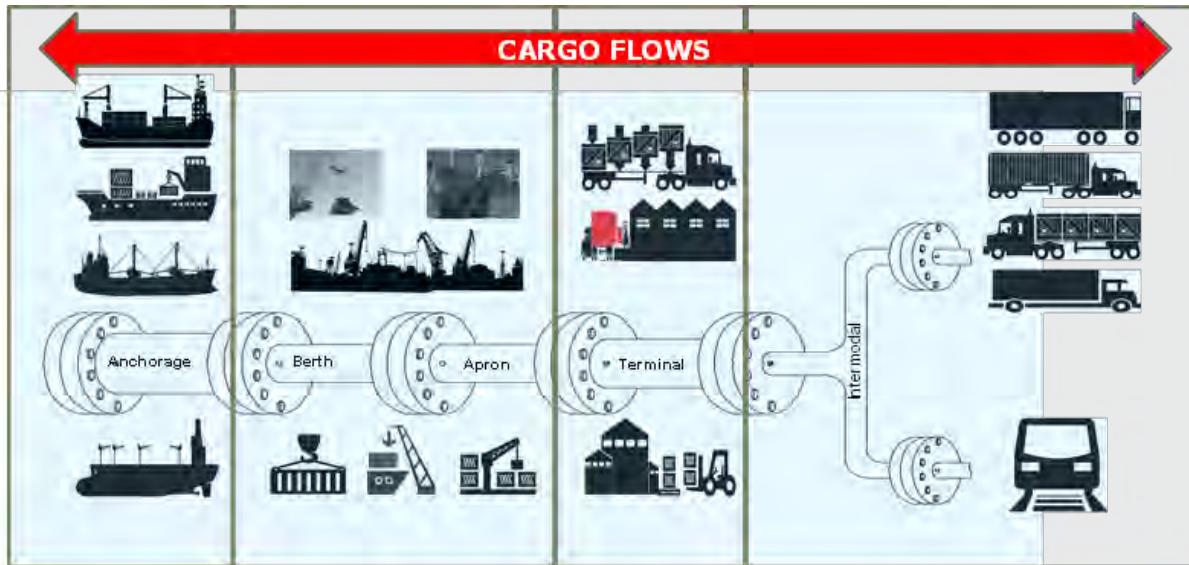
### 9. Port Efficiency

The ports system is central to SA's ability to engage in international trade and promote economic growth. Ports exist at the coastal end of supply chains and play a critical role in the effectiveness of respective hinterlands served by these supply chains. The overall performance of ports is therefore a matter of strategic importance.

The primary role of the Authority is to provide port capacity and further to ensure that the full set of productive services exists at a port in order to serve demand. The provision of capacity is necessary but in itself not sufficient to ensure that the objectives of the Authority are achieved. The levels of efficiency realized in the operation of such capacity have shown to be a key determinant of success, service levels and attractiveness of a port.

The main initiatives of the Authority’s operating model are shown in the figure 8 below:

Figure 8: Port Performance Model



It is important that the Authority’s operating model maintains a set of performance indicators. The Authority maintains a set of performance indicators through the establishment of TOPS, ROPS, HOPS and MOPS performance standards.

## 10. Weighted Efficiency Gains Operations

The Regulator introduced an efficiency incentive in the form of the WEGO aimed at regulating port performance and tariff determination, allowing up to 5% additional return on equity to the Authority for an increase of 10% year-on-year performance improvements. Similarly, a 10% reduction in performance can result in a 5% reduction of return on equity. The previous best performance will be the baseline for the next year’s measurement. Performance of the port system during 2017/18 is regarded as the initial base for measurement.

In terms of the Regulator ROD on WEGO published in March 2018, a basket of five KPI’s of equal weighting were selected. These include the following:

- Ship Turnaround Time (20%)
- Ship Productivity (20%)
- Vessel Delays at Anchorage (20%)
- Berth Productivity (20%)
- Ship Working Hours (20%)

A Technical Working Committee (TWC) is to be established by the Ports Regulator consisting of the Authority, PCC, and the Ports Regulator. The TWC will have the responsibility of monitoring and verifying the performance of the set five KPI’s.

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The Authority is to report on actual performance in FY 2018/19 against the base of FY 2017/18. WEGO will be implemented in line with audited KPI performance through the Claw-Back Mechanism in the FY 2020/21 Tariff Application.

### 11. Conclusion

The tariff application for FY 2019/20 has been prepared in terms of the approved Tariff Methodology issued by the Regulator in March 2017 (original form).

The Authority has determined a required revenue of R13 681m for FY 2019/20 comprising of Marine Business revenue of R10 398m and Real Estate Business revenue of R3 284m. This translates into tariff adjustment of 4.21% for FY 2019/20.

The weighted average tariff increase proposed by the Authority for FY 2019/20 is 4.21%. This is further proposed to be differentiated as follows:

- A tariff increase of 8.00% on Marine charges (shipping lines);
- An average of 2.74% increase in Cargo Dues differentiated as follows:
  - 5.00% on Liquid Bulk and Break Bulk Cargoes;
  - 1.79% on Containers;
  - 0.00% on Automotives;
  - 5.00% on Dry Bulk Cargoes differentiated further as follows:
    - Coal to increase by 8.00%;
    - Ores and Minerals: Magnetite to increase by 8.00%; and
    - Other Dry bulk to increase by 3.75%.

The indicative required revenues and resultant tariff adjustments for FY 2020/21 and FY 2021/22 are R16 253m (18.57%) and R17 704m (6.34%) respectively.

**ANNEXURE A: The Authority's Tariff Book**

Table 21: The Authority's Tariff Definitions

Tariffs	Services Rendered	Application
Light Dues	The provision of navigation aids to vessels along the SA coast	Raised per vessel (per gross ton) at the first port of call (Tariff Book Section 1)
Vessel Traffic Services	The provision of vessel traffic services, safety of the port environment and port control	Raised per vessel (per gross ton) at all ports (Tariff Book Section 2)
Port Dues	The provision and maintenance of entrance channels, breakwaters, turning basins, navigational aids (beacons and buoys inside port limits) and maintenance dredging inside the port	Raised per vessel (per gross ton), linked to the time that the vessel remains in port (Tariff Book Section 4)
Berth Dues	The provision and maintenance of repair quays and other non-cargo quay (berth) infrastructure	Raised per vessel (per gross ton), per 24-hour period (Tariff Book Section 4)
Cargo Dues	To recover the cargo contribution towards the provision and maintenance of basic port infrastructure	Raised per unit of cargo, differentiated between different commodities (Tariff Book Section 7)
Rentals	Lease of port land to terminal operators, port service and port facility providers	Rental arrangements including escalations are negotiated on a case-by-case basis and are not reflected in the tariff book.
Pilotage	Pilotage assistance to vessels entering/leaving the port	Raised as a basic fee per service, plus per vessel (per gross ton) (Tariff Book Section 3)
Tug Assistance	Tug assistance to vessels entering/leaving and shifting within the port	Raised per service, based on the size of the vessel (per gross ton) (Tariff Book Section 3)
Miscellaneous Tug/Vessel services	Tanker fire watch, firefighting and standby services	Raised per service, per hour (Tariff Book Section 3)
Berthing Services	Berthing services to tie/untie vessels at the berth	Raised per service (Tariff Book Section 3)
Running of Vessel Lines	Running of lines for vessels entering, leaving or shifting	Raised per service (Tariff Book Section 3)
Floating Crane Services	Floating crane services rendered to the vessels	Raised per service, per hour (Tariff Book Section 3)

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Ship Repair Facilities	Preparation, Docking and Undocking of vessels at repair facilities	Raised per service (Tariff Book Section 6)
Dry-dock, floating dock, synchrolift and slipways	Dry-dock, floating dock and synchrolift fees	Raised per service for the use of a facility, based on the size of the vessel (per gross ton) (Tariff Book Section 6)

The Authority has created a separate section in the Tariff Book, Section 5, where the licence, registration and permit fees are specified. This is summarized in the following table:

**Table 22: The Authority's License Fees**

Fees	Services Rendered	Application
Port Service Licence, Port Rule Licence, Port Rule Registrations and Port Rule Permit Fees	Fees payable for licences, registrations and permits in accordance with section 57 of the Act and with Port Rules issued in terms of section 80(2) of the Act.	Raised as a fee for the respective licences, registrations and permits issued (Tariff Book Section 5)

### ANNEXURE B: Capital Expenditure

The Authority's investment spending is primarily influenced by the strategic initiatives which are aimed at providing adequate port infrastructure ahead of demand.

The capital expenditure for FY 2018/19 to FY 2023/24 is segregated into various categories in order to demonstrate the strategic objectives, major projects considered and the impact of such capital expenditure. The tables that follow provide an analysis of the capital expenditure:

**Table 23: Strategic Capital Investment Objectives**

Strategic objective	LE	Projections					Total 6yr
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	
Re-engineering, Integration, Productivity and Efficiency	1 067	1 770	2 144	2 855	3 494	3 906	15 237
	176	228	164	64	82	244	957
	958	2 024	2 049	2 953	2 488	1 604	12 076
Safety, Risk and Effective Governance	155	294	353	467	728	254	2 252
	150	70	30	51	17	15	333
	12	0	1	91	201	119	425
	18	55	68	53	111	100	404
Human Capital	101	72	216	315	173	119	995
<b>Total (excl. borrowing cost)</b>	<b>2 636</b>	<b>4 513</b>	<b>5 026</b>	<b>6 849</b>	<b>7 295</b>	<b>6 360</b>	<b>32 678</b>

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**Table 24: Strategic Capital Investment Objectives**

Project	Port	Commodity
Provide additional rail facility for Duine area	RCB	Other
Bayvue rail yard expansion - Outcome from ECICS feasibility	RCB	Other
Deepening berth at Small Craft to -14 m CD with associated works (Refurbish repair quay and install floating dock)	RCB	
Execution: DCT berth deepening 203 to 205	DBN	Containers (Maritime)
Port Perway Upgrade	DBN	Other
Replace Water Pipelines & Billing System	DBN	Other
Execution: Pier 1 Phase 2 Infill (Salisbury Island)	DBN	Containers (Maritime)
Execution: Fire fighting infrastructure at berth 9 Island View	DBN	Liquid Bulk
Extend main breakwater and deepen entrance	EL	Other
Repairs to No 3 Quay	EL	
New entrance, Roads and Services	NGQ	Liquid Bulk
Manganese project	NGQ	Manganese
Two Replacement Tugs	CPT	Other
Bulk electrical power supply related to Third tippler	SLD	
2nd Grab hopper dredger	DRS	
Upgrade of Electrical Infrastructure	CPT	
Expansion of Container Terminal : CPT Phase 2B - FEL3	CPT	
Phakisa projects	All	

**Table 25: Expansion Business vs. Maintenance of Current Business**

FY 2018/19

Details	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Budget											
	2018/19											
	R'm											
Expand Business : - Growth initiatives	1 289	177	420	-	310	-	17	4	9	-	352	-
Maintain current Business : - Replacement Efficiency/ Service Quality	1 347	137	320	103	10	75	15	140	257	53	54	184
<b>Total (excl. borrowing cost)</b>	<b>2 636</b>	<b>314</b>	<b>740</b>	<b>103</b>	<b>320</b>	<b>75</b>	<b>32</b>	<b>144</b>	<b>266</b>	<b>53</b>	<b>406</b>	<b>184</b>

FY 2019/20

Details	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections											
	2019/20											
	Rm											
Expand Business : - Growth initiatives	2 245	496	1 007	3	524	2	4	-	33	6	156	15
Maintain current Business : - Replacement Efficiency/ Service Quality	2 267	188	569	190	5	127	41	683	333	70	2	60
<b>Total (excl. borrowing cost)</b>	<b>4 513</b>	<b>684</b>	<b>1 575</b>	<b>192</b>	<b>529</b>	<b>129</b>	<b>45</b>	<b>683</b>	<b>366</b>	<b>76</b>	<b>158</b>	<b>75</b>

FY 2020/21

Details	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections											
	2020/21											
	Rm											
Expand Business : - Growth initiatives	2 557	389	1 114	30	873	2	8	45	65	20	-	10
Maintain current Business : - Replacement Efficiency/ Service Quality	2 469	451	820	207	31	70	107	400	223	78	32	49
<b>Total (excl. borrowing cost)</b>	<b>5 026</b>	<b>841</b>	<b>1 934</b>	<b>237</b>	<b>904</b>	<b>72</b>	<b>115</b>	<b>445</b>	<b>288</b>	<b>98</b>	<b>32</b>	<b>59</b>

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FY 2021/22

	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO	
	Projections												
	2021/22												
	Rm												
Expand Business :													
- Growth initiatives	3 220	781	1 604	153	376	11	-	225	65	5	-	-	
Maintain current Business :													
- Replacement Efficiency/ Service Quality	3 629	543	1 513	391	81	94	102	589	131	68	62	54	
<b>Total (excl. borrowing cost)</b>	<b>6 849</b>	<b>1 323</b>	<b>3 117</b>	<b>545</b>	<b>458</b>	<b>105</b>	<b>102</b>	<b>814</b>	<b>196</b>	<b>73</b>	<b>62</b>	<b>54</b>	

Table 26: Ports Related Spending by Asset Type

FY 2018/19

	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Budget											
	2018/19											
	Rm											
Buildings and structures	216	106	23	15	-	-	25	13	16	15	-	2
Aircraft	202	101	101	-	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-	-	-	-	-
Machinery, equipment and furniture	333	12	64	4	3	6	1	4	18	37	2	182
Permanent way and works	66	66	-	-	-	-	-	-	-	-	-	-
Vehicles, Rolling stock & containers	1	-	-	1	-	-	-	-	-	-	-	-
Port Facilities	1 819	29	552	84	317	69	6	128	232	-	404	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines networks (etc)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total (excl. borrowing cost)</b>	<b>2 636</b>	<b>314</b>	<b>740</b>	<b>103</b>	<b>320</b>	<b>75</b>	<b>32</b>	<b>144</b>	<b>266</b>	<b>53</b>	<b>406</b>	<b>184</b>

FY 2019/20

	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections											
	2019/20											
	Rm											
Buildings and structures	352	89	91	45	4	4	9	45	58	4	-	3
Aircraft	147	74	73	-	-	-	-	-	-	-	-	-
Land	2	-	2	-	-	-	-	-	-	-	-	-
Machinery, equipment and furniture	361	56	81	2	3	38	1	12	21	71	2	73
Permanent way and works	184	184	-	-	-	-	-	-	-	-	-	-
Vehicles, Rolling stock & containers	32	2	2	26	-	2	-	-	-	-	-	-
Port Facilities	3 435	279	1 327	120	522	85	35	626	287	-	156	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines networks (etc)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total (excl. borrowing cost)</b>	<b>4 513</b>	<b>684</b>	<b>1 575</b>	<b>192</b>	<b>529</b>	<b>129</b>	<b>45</b>	<b>683</b>	<b>366</b>	<b>76</b>	<b>158</b>	<b>75</b>

FY 2020/21

	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections											
	2020/21											
	Rm											
Buildings and structures	531	72	167	88	29	1	2	45	103	-	-	26
Aircraft	366	171	195	-	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-	-	-	-	-
Machinery, equipment and furniture	478	91	187	3	3	5	17	5	4	98	32	33
Permanent way and works	84	52	32	-	-	-	-	-	-	-	-	-
Vehicles, Rolling stock & containers	8	-	2	4	-	2	-	-	-	-	-	-
Port Facilities	3 559	455	1 351	143	873	64	96	396	181	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines networks (etc)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total (excl. borrowing cost)</b>	<b>5 026</b>	<b>841</b>	<b>1 934</b>	<b>237</b>	<b>904</b>	<b>72</b>	<b>115</b>	<b>445</b>	<b>288</b>	<b>98</b>	<b>32</b>	<b>59</b>

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FY 2021/22

	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Actual											
	2021/22											
	R'm											
Buildings and structures	707	109	170	124	74	80	5	44	100	-	-	-
Aircraft	-	-	-	-	-	-	-	-	-	-	-	-
Land	47	47	-	-	-	-	-	-	-	-	-	-
Machinery, equipment and furniture	568	59	296	3	3	5	1	9	4	73	62	54
Permanent way and works	528	348	180	-	-	-	-	-	-	-	-	-
Vehicles, Rolling stock & containers	11	3	-	-	8	-	-	-	-	-	-	-
Port Facilities	4 988	758	2 471	418	373	20	96	762	93	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines networks (etc)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total (excl. borrowing cost)</b>	<b>6 849</b>	<b>1 323</b>	<b>3 117</b>	<b>545</b>	<b>458</b>	<b>105</b>	<b>102</b>	<b>814</b>	<b>196</b>	<b>73</b>	<b>62</b>	<b>54</b>

Table 27: Capital expenditure and throughput per commodity

### Containers

DETAILS	Containers						Major Capital Projects
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Containers</b>	<b>447</b>	<b>968</b>	<b>1 086</b>	<b>1 839</b>	<b>1 814</b>	<b>1 623</b>	- Execution: DCT berth deepening 203 to 205 (Dbn) ; Expansion of Container Terminal : Phase 2B (Cpt)
- Expand	447	968	1 076	1 819	1 739	1 583	
- Maintain	-	-	11	20	75	40	
<b>Volumes ('000 TEUs)</b>							- Automated mooring system at NCT D101 - 103 (Ngq)
- Budget and Projections	4 845	5 060	5 118	5 185	5 330	5 465	
- Capacity	7 643	7 643	7 643	7 643	9 443	9 443	
Total Capex spend over the 6 Year period					7 778		
Indicative return on capital					1699		
Depreciation					622		
<b>Total cumulative Revenue Required over the 6 year period</b>					<b>2 320</b>		

### Liquid Bulk

DETAILS	Liquid Bulk						Major Capital Projects
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Liquid Bulk</b>	<b>332</b>	<b>571</b>	<b>762</b>	<b>294</b>	<b>1 388</b>	<b>883</b>	- New Entrance, Roads and Services (Ngq) - Provide additional Bulk Liquid berth 207 (Rcb) - Execution Fire fighting infrastructure IVS berth 9 - IVS Berth 1&4 upgrade (Dbn)
- Expand	261	504	675	164	551	560	
- Maintain	71	68	87	130	837	323	
<b>Volumes (mkl)</b>							
- Budget and Projections	43	44	44	45	45	50	
- Capacity	92	92	92	92	96	96	
Total Capex spend over the 6 Year period					4 230		
Indicative return on capital					937		
Depreciation					343		
<b>Total cumulative Revenue Required over the 6 year period</b>					<b>1 280</b>		

### Iron Ore

DETAILS	Iron Ore						Major Capital Projects
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Iron Ore</b>	<b>183</b>	<b>228</b>	<b>72</b>	<b>3</b>	<b>56</b>	<b>397</b>	- Ore Expansion Phase 2 Berth Construction (Slid) - Bulk electrical power supply related to Third tippler (Slid)
- Expand	-	-	-	-	20	367	
- Maintain	183	228	72	3	36	30	
<b>Volumes (mt)</b>							
- Budget and Projections	59	59	59	59	59	60	
- Capacity	60	60	60	60	60	60	
Total Capex spend over the 6 Year period					938		
Indicative return on capital					233		
Depreciation					86		
<b>Total cumulative Revenue Required over the 6 year period</b>					<b>319</b>		



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### Coal

DETAILS	Coal						Major Capital Projects
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Coal</b>	-	5	5	50	34	5	- Deepening On RBCT Berth (Rcb)
- Expand	-	-	-	3	1	5	
- Maintain	-	5	5	47	33	-	
<b>Volumes (mt)</b>							
- Budget and Projections	81	82	87	88	88	91	
- Capacity	114	114	114	114	114	114	

### Manganese

DETAILS	Manganese						Major Capital Projects
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Manganese</b>	10	20	252	348	323	90	- Manganese project (Ngq) - Boundary wall Manganese terminal (PE)
- Expand	10	20	252	268	237	90	
- Maintain	-	-	-	80	86	-	
<b>Volumes (mt)</b>							
- Budget and Projections	13	14	15	15	15	16	
- Capacity	30	30	* 24	24	24	24	
* The Port of Port Elizabeth Manganese Terminal will be closed in this financial year							
Total Capex spend over the 6 Year period					1 042		
Indicative return on capital					219		
Depreciation					80		
Total cumulative Revenue Required over the 6 year period					299		

### Break-Bulk

DETAILS	Break Bulk						Major Capital Projects
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Break Bulk</b>	1	26	86	20	43	25	- Feasibility Maydon Wharf channel deepening (Dbn) - Stabilisation of Long Quay, Duncan Dock (Cpt)
- Expand	-	11	29	15	43	25	
- Maintain	1	15	57	5	-	-	
<b>Volumes (mt)</b>							
- Budget and Projections	7	7	7	7	8	8	
- Capacity	26	26	26	26	27	27	

### Automotives

DETAILS	Automotives						Major Capital Projects
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Automotives</b>	-	-	-	-	-	-	
- Expand	-	-	-	-	-	-	
- Maintain	-	-	-	-	-	-	
<b>Volumes (units)</b>							
- Budget and Projections	691 087	716 388	739 377	716 940	769 058	788 876	
- Capacity	2 100 000	2 100 000	2 100 000	2 100 000	2 300 000	2 300 000	

### Other

DETAILS	Other (incl LHS & Bulk Services)						Major Capital Projects
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Other (incl LHS &amp; Bulk Services)</b>	1 201	2 506	2 595	2 962	2 884	3 039	
- Expand	219	586	526	951	1 032	1 300	
- Maintain	982	1 920	2 069	2 012	1 851	1 739	

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### Fleet – Craft and Dredging Service

Fleet - Craft and Dredging Services							Major Capital Projects
DETAILS	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	
	R'm						
<b>Fleet - Craft</b>	57	31	136	1 270	752	266	- Acquisition of 2nd Grab hopper dredger & Cutter suction dredger - Acquisition of 2 replacement tugs (Cpt)
- Expand	-	-	-	-	-	241	
- Maintain	57	31	136	1 270	752	25	
<b>Dredging Services</b>	406	158	32	62	2	33	
- Expand	352	156	-	-	-	-	
- Maintain	54	2	32	62	2	33	

Table 28: Multi-Year Strategic Objectives

Strategic objective	Details	Budget	Projections					Total 6yr
		2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	
R'm								
<b>Re-engineering, Integration, Productivity and Efficiency</b>	To maximise return on investments by obtaining additional volumes	1 067	1 770	2 144	2 855	3 494	3 906	15 237
	To maximise return on investments by improving operating efficiencies	176	228	164	64	82	244	957
	To preserve current revenue streams without obtaining additional volumes (ie. revenue protection)	958	2 024	2 049	2 953	2 488	1 604	12 076
<b>Safety, Risk and Effective Governance</b>	Ensure Safety Optimisation	155	294	353	467	728	254	2 252
	Optimise Business Enterprise Offerings	150	70	30	51	17	15	333
	Optimally Satisfy Social Investments (non economic value creating projects)	12	0	1	91	201	119	425
	Environmental	18	55	68	53	111	100	404
<b>Human Capital</b>	Optimise Human Resources	101	72	216	315	173	119	995
<b>Total (excl. borrowing cost)</b>		<b>2 636</b>	<b>4 513</b>	<b>5 026</b>	<b>6 849</b>	<b>7 295</b>	<b>6 360</b>	<b>32 678</b>

Table 29: Multi-Year Capex per Port Service

Capex spend per Port Service / Facility	Budget	Projections					Total 6yr
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	
R'm							
Infrastructure	2 121	4 248	4 760	5 443	6 467	5 979	29 018
Marine services	57	31	136	1 270	752	266	2 511
Lighthouse services	53	76	98	73	74	83	457
Dredging services	406	158	32	62	2	33	693
<b>Total (excl. borrowing cost)</b>	<b>2 636</b>	<b>4 513</b>	<b>5 026</b>	<b>6 849</b>	<b>7 295</b>	<b>6 360</b>	<b>32 678</b>

Table 30: Multi-Year Ports Related by Asset type

Asset Type	Budget	Projections				
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
R'm						
Buildings and structures	216	352	531	707	849	1 052
Aircraft	202	147	366	-	-	-
Land	-	2	-	47	113	125
Machinery, equipment and furniture	333	361	478	568	627	218
Permanent way and works	66	184	84	528	651	506
Vehicles, Rolling stock & containers	1	32	8	11	10	-
Port Facilities	1 819	3 435	3 559	4 988	5 044	4 460
Other	-	-	-	-	-	-
Pipelines networks (etc)	-	-	-	-	-	-
<b>Total (excl. borrowing cost)</b>	<b>2 636</b>	<b>4 513</b>	<b>5 026</b>	<b>6 849</b>	<b>7 294</b>	<b>6 360</b>

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**Table 31: Multi-Year Port Related per Commodity**

Major Commodity	Budget		Projections				
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total Gyr
	Rm						
Containers	447	968	1 086	1 839	1 814	1 623	7 778
Liquid Bulk	332	571	762	294	1 388	883	4 230
Iron Ore	183	228	72	3	56	397	938
Coal	-	5	5	50	34	5	99
Manganese	10	20	252	348	323	90	1 042
Break Bulk	1	26	86	20	43	25	200
Automotive	-	-	-	-	-	-	-
Fleet - craft	57	31	136	1 270	752	266	2 511
Dredging Services	406	158	32	62	2	33	693
Other (incl LHS)	1 201	2 506	2 595	2 962	2 884	3 039	15 186
<b>Total (excl. borrowing cost)</b>	<b>2 636</b>	<b>4 513</b>	<b>5 026</b>	<b>6 849</b>	<b>7 295</b>	<b>6 360</b>	<b>32 678</b>

## ANNEXURE C: Volumes

**Table 32: Cargo Dues Revenue from Volume Increase Before Tariff Increase**

DETAILS	2018/19	2018/19	2019/20	2019/20
	Volumes: Latest Estimate	Revenue: Tariff Book Latest Estimate R'm	Volumes: Increase Budget	Revenue: Volume increase before Tariff Increase Budget R'm
<b>Containers TEU's</b>				
Deepsea Full: Imports	1 556 567	3 342	66 128	141,96
Deepsea Full: Exports	1 240 278	789	56 440	35,90
Transshipment	986 596	70	49 948	3,53
Other	1 061 127	54	42 710	2,12
<b>Total Container (TEUs)</b>	<b>4 844 567</b>	<b>4 254</b>	<b>215 225</b>	<b>184</b>
<b>Vehicles (Units)</b>				
Vehicles: Imports	309 263	264	15 008	12,59
Vehicles: Exports	330 193	112	18 853	6,19
Other	51 630	2	-8 559	-0,32
<b>Total Ro-Ro ( Units)</b>	<b>691 087</b>	<b>378</b>	<b>25 302</b>	<b>18</b>
<b>Breakbulk (Metric Tons)</b>				
Breakbulk: Imports	2 270 581	69	-42 515	-1,40
Breakbulk: Exports	4 790 700	166	188 570	6,51
Other	206 661	3	-25 396	-0,48
<b>Total Breakbulk (Tons)</b>	<b>7 267 942</b>	<b>238</b>	<b>120 660</b>	<b>5</b>
<b>Dry Bulk (Metric Tons)</b>				
Coal Exports	80 531 000	311	1 475 415	5,63
Iron Ore Exports	58 500 000	393	-0	-6,51
Manganese Ore Exports	13 088 000	123	1 132 000	10,63
Other	29 187 679	381	1 955 559	23,18
<b>Total Dry Bulk (Tons)</b>	<b>181 306 679</b>	<b>1 208</b>	<b>4 562 974</b>	<b>33</b>
<b>Liquid Bulk (KI)</b>				
Petroleum	34 548 682	564	901 839	14,78
Chemicals	2 407 582	138	115 913	6,47
Other	6 027 708	149	74 726	0,28
<b>Total Liquid Bulk (Kilo litres)</b>	<b>42 983 973</b>	<b>852</b>	<b>1 092 478</b>	<b>22</b>
<b>Cargo Dues Revenue</b>	-	<b>6 930</b>		<b>261</b>

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### ANNEXURE D: Operating Expenditure

Table 33: Operating Expenditure

Cost Category	Actual 2017/18 R Million	Budget 2018/19 R Million	Forecast 2019/20 R Million	Dev '18/19 vs 19/20 R Million	Dev '18/19 vs 19/20 Percentage	% of Opex 19/20	Forecast 2020/21 R Million	Forecast 2021/22 R Million	CAGR 2019/20 - 2021/22
Labour Costs	2 551	2 777	3 142	365	13%	54%	3 440	3 697	8%
Rates & taxes	341	375	395	20	5%	7%	417	440	6%
Maintenance	410	459	504	45	10%	9%	625	801	26%
Contract Payments	42	80	85	4	5%	1%	89	94	5%
Energy	509	575	623	48	8%	11%	684	731	8%
Professional services	19	105	120	15	14%	2%	128	137	7%
Material	83	92	102	10	11%	2%	112	119	8%
Computer & Info systems	161	226	249	23	10%	4%	263	278	6%
Rental	209	186	203	16	9%	3%	213	225	5%
Security costs	97	100	107	7	7%	2%	114	122	7%
Pre -Feasibility Studies	43	96	116	19	20%	2%	105	109	-3%
Sundry operating costs	36	177	181	4	2%	3%	185	193	3%
<b>Total operating cost (excluding depreciation)</b>	<b>4 499</b>	<b>5 250</b>	<b>5 826</b>	<b>575</b>	<b>11%</b>	<b>100%</b>	<b>6 375</b>	<b>6 946</b>	<b>9%</b>
<b>Group Costs</b>	<b>526</b>	<b>458</b>	<b>466</b>	<b>8</b>	<b>2%</b>		<b>478</b>	<b>500</b>	<b>4%</b>
<b>Total operating cost (Including Group Costs)</b>	<b>5 025</b>	<b>5 708</b>	<b>6 291</b>	<b>584</b>	<b>10%</b>		<b>6 853</b>	<b>7 446</b>	<b>9%</b>

The Authority's total opex is R 6 291 m for FY 2019/20. This includes the Transnet Group allocated overhead costs of R466m.

The opex represents all the expenses incurred on a day to day basis in the course of running the business of the Authority at the different ports and business units. Operating costs are planned to grow at 11% (R575m) in FY 2019/20.

The sections that follow provide a summarised explanation for cost items per Table 33 above.

#### Labour Cost

The Authority is labour intensive as it fulfils its role in terms of its mandate to ensure security of supply by providing appropriate port infrastructure and marine operations in a cost-effective and efficient manner, within the acceptable benchmarks. Labour costs therefore forms a substantial portion of the overall opex, comprising of 54% of the total opex for FY 2019/20.

The expected growth in labour costs for FY 2019/20 is approximately 13% (R365m). This averages 8% in the 3 year tariff period. Growth is inclusive of headcount as well as the salary increments over the 3 year tariff period. The labour cost is further unpacked as follows:

##### o **Headcount**

Resourcing of the Authority is informed by its mandate including operational requirements, oversight role in the port system as well as execution of projects in an efficient manner, the costs projected as well as the headcount is presented as follows:

Forecasted total number of permanent employees:

Table 34: Total Number of Employees

Cost Category	Actual 2017/18	Budget 2018/19	Forecast 2019/20	Deviation 18/19 vs 19/20	Deviation % 18/19 vs 19/20	Forecast 2020/21	Forecast 2021/22
Total Number of Employees	4 351	4 999	5 214	215	4.3%	5 330	5 385

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The key drivers for growth in headcount are as a result of the following:

Not much progress has been made in 2017/18 in terms of recruiting the required personnel (5 093 planned 2017/18 vs 4 351 actual 2017/18) and hence the planned increase in headcount from 2017/18 to 2019/20.

The key drivers for growth in headcount are as a result of the following:

- Employment of port engineering personnel in order to create adequate port infrastructure capacity ahead of demand and maintaining existing and new assets;
- Meeting minimum manning levels of marine at 100% service and matching manning levels with the number of tugs required per shift linked to meet the MOPS requirements;
- Marine seafarer and MEO personnel;
- Trainees required for marine pipeline in scarce marine grades, (i.e. Chief Marine Engineering officers and Tug Masters);
- Manning of the port operational centres to ensure systematic views of port performance;
- Increase Fire Services personnel to ensure correct manning levels in terms of operating new fire trucks as well as the monitoring of the LPG Sunrise energy terminal;
- Enterprise Risk Management (ERM) personnel to ensure oversight and compliance with risk management requirements;
- Additional support services staff to assist with administration within the ports system;
- Security personnel to assist with CCTV monitoring, access control and overall safety within the ports;
- Trainers required for marine engineering schools in the Port. Training in the Port of Ngqura is scheduled to commence in January 2020 with 25 learners and will increase by 25 learners each year to reach a full capacity of 100 learners; and
- The key operations functions filled with staff include Artisans, Chief marine engineering personnel, Electrician, Tug Master, etc.

### ○ **Remuneration**

Remuneration is made up of annual salary adjustments. An increasing headcount leads to increased remuneration.

### ○ **Training**

Adequate training and development of human capital is a core focus area for the Authority. This ensures continuous growth and advancement of the Authority and therefore remains a priority. The Authority continues with various training initiatives including cadet training, pilot training, tug master training and chief marine engineer officer training.

The Authority has extended the Operation Phakisa programme by establishing Marine Engineering training schools in the Ports of Durban, Cape Town, Ngqura and Port Elizabeth, Mossel Bay and East London. These schools are intended to create opportunities for the communities to participate in the port sector with the aim to address poverty, unemployment and inequality. The Authority has entered into a partnership with the Umfolozi FET College to train 20 x Artisans. (Electricians and Plumbers) Additional training is planned for the Africa Leadership training across all the ports. Port of Mossel Bay

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has commenced training in February 2018. An SLA is already in place between the Authority and PETROSA who will be providing training to learners recruited by the Authority.

The Authority continues with its normal training initiatives relating to cadet training; helicopter pilot training, aircraft maintenance and aircraft avionics training.

### Rates and Taxes

Rates and taxes relate to municipal rates and are based on the methodology employed by the municipalities in accordance with the Municipal Rates and Taxes Act.

Rates and taxes are expected to increase by 6% over the 3 year period.

### Maintenance

The maintenance cost covers safety and marine environment protection; the upkeep of aged infrastructure as well as routine maintenance for newer infrastructure assets, newer marine craft and increased maintenance focused on the ship repair business.

It is necessary to ensure that Aids to Navigation infrastructure and other assets are maintained to ensure general safety of navigation and protection of the marine environment.

The average growth in maintenance over the three year period of approximately 26% is mainly attributed to the following:

- The National Infrastructure Maintenance Strategy (NIMS) provides maintenance benchmarks for SOE's which is set at 5% of the book value of port infrastructure. The Authority currently spends approximately 1% of book value on port infrastructure with the aim to gradually align to a benchmark level of 5%. This is an accelerated spending on maintenance over the next few years as the Authority intends on reaching an initial target of 2.5%;
- Ports handle larger container vessels than they were designed to accommodate, necessitating a higher frequency of maintenance dredging;
- Ports are handling bigger, deeper ships with a very small under keel clearance. This has led to scouring of the seabed which then requires additional dredging;
- Ongoing maintenance of ageing infrastructure including.
  - Rail infrastructure
  - Rehabilitation of Seawalls
  - Sinkholes
  - Road maintenance
  - Navigational Aids
  - Ship Repair infrastructure
  - Quay wall repairs
  - Hazmat drain flush
  - Storm water jetting
  - Building Repairs
  - CFI Mechanical Valves, hydrant repairs and general Statutory inspections

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- Per way labour and material
- Break water cranes
- Repairs to cranes, pumps and valves at dry-dock.
- Maintenance of marine craft, ensuring compliance to SAMSA requirements and craft being operational at all times.
- Increase in the Maintenance of electrical network (High masts and substations)
- CCTV maintenance carried out by the Security Department

### Contract Payments

The increase on contract payment for FY 2019/20 is approximately 5% with the average increase over the three year tariff application period of approximately 5%.

Contract payments mainly relates to the helicopter pilot services in the Port of Durban and Richards Bay which includes maintenance of the crafts. Wave monitoring services and IPOSS upgrade payments are also included.

### Energy

Energy costs are mainly attributable to the fuel and electricity consumption of the Authority. The increase in costs for FY 2019/20 is approximately 8% (R48m) and is mainly due to the following:

- Electricity tariff increases estimated at 8% over the 3 year period.
- Fuel costs relating to the new marine craft with capacities higher than the older craft.

### Professional Services

Professional fees relate to Operational Audits, Transnet Certification, and Real Estate projects relating to Land use audit projects, Anticipated Section 56 consultants and Investment Property Valuation Fees. These include the pre-feasibility study for the development of LNG Import Facilities at the port of Richards Bay as part of the country's medium to long term energy supply strategy.

Studies planned for the 2019/20 include:

- Infrastructure assessment sewerage, water, storm water and rail network,
- Island view land development, consultants will be assisting with transactional advisory on the land use as well as commodity mix.
- Desalination plant in the port of Cape Town, consultants will be assisting with applications for the permits, concept designs and specialist studies.

### Material

Material costs relate to material used in the maintenance of marine fleet and civil maintenance and are therefore directly influenced by maintenance activity. The material costs increase from FY 2019/20 is 11% with the average increase in material costs over the 3 year tariff application period amounting to 8%. The explanations provided above under Maintenance have a direct bearing on material as well.

### **Computer and Information Systems**

Computer and information systems include network costs, software licences, information system support, development cost, computer consumables and on-going maintenance thereof.

The average increase over the three year period is approximately 6%. The major part of this cost increase is attributable to the implementation of the Smart People's Port programme. This is an all-encompassing, integrated digital platform created to enhance efficiencies and improve port operations control. It encompasses functions such as Smart Ports capacity planning, Smart Ports logistics location and scheduling control, Smart Ports traffic management and Smart Ports container management.

The Smart People's Port programme is aimed at availing many key enablers to enhance Port operations in that it serves the following:

- All port function activities are aggregated into a single repository creating a single source of information;
- It provides operations insight, digitized infrastructure and operations automation as it enables real time communication to all port operations and this assists in securing a stable network coverage for all land and sea activities;
- Tracking of all assets required to ensure full visibility to better manage port operations and incident management activities;
- Mapping of all port processes to create visualisation of all activities from the control centre;
- The human resources in the ports are able to achieve a far richer visibility of the port operations continuously and this will assist in management decisions and creating a safer environment; and
- Improving turnaround times of vessels, trains and trucks.

### **Rental**

Rental costs relate to the short term hiring of internal and external land and buildings, leasing of vehicles, low value equipment, computers and furniture. The average increase over the three year period is approximately 5% and are part of negotiated contract terms.

### **Security**

Security costs relate to the use of private security firms at the ports and the expected increase from FY 2018/19 to FY 2019/20 is 7% with the 3 year average growth of 7%.

### **Pre-Feasibility Studies**

Pre-feasibility studies are undertaken to determine future capital investments in a pre-feasibility phase to determine the best alternative for construction, preliminary design work and costing to assess overall viability of the project.

The increase in pre-feasibility costs for FY 2019/20 is 20% (R19m).



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The Authority will be embarking on studies for a number of projects in line with the Authority's capital investment plans.

- Increased power supply in the Port of Durban;
- Roads study interlinked with metro;
- Point and Bayhead precinct development plans,
- Wind and long wave mitigation studies,
- Cape Town container terminal expansion,
- Port Elizabeth investigation for a passenger liner terminal and a car terminal.
- Bayhead Park Roads Upgrade
- Island View Berth 4
- Berth Deepening M/Wharf 5-11 & 15
- Air-conditioning Plant at various Buildings
- Upgrade Maydon Wharf Roads
- Upgrade Island View Roads
- Reconstruct Bluff Berths
- Increase Electricity Power Supply Capacity
- Port of Ngqura Precinct Plans
- Sand Bypass Studies increase by
- Automated Mooring System (AMS)/Shore Tension Feasibility Study
- Conveyor belt corridor for cement and clinker
- Strategic Environmental Assessments
- Sand Trap Study
- Study to equip Tugs with a plough dredger
- Investigation on relocation of Tug Jetty port of Port Elizabeth
- Studies on Charl Malan Quay Refurbishment
- Investigation on alternative uses of Tanker Berth
- Continuation of PE Waterfront study
- Richards Bay Expansion Program (RBEP)
- Bayvue Railyard Configuration FEL 2
- South Dunes Liquid Bulk Services

### Sundry Operating Costs

The detailed costs relating to sundry expenses are highlighted in Table 37 below. Sundry Costs include expenses relating to insurance, stationery and printing, transport, promotions and advertising, and other miscellaneous operating expenditure.

The main cost drivers relating to sundry expenses are as follows:

- Legal Costs
- Health and Sanitation
- Insurance
- Other (i.e. mainly consulting)

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The port of Richard Bay has identified savings in the future years and these are reflected under sponsorship.

Further to the above, the request for proposals for the Section 56 projects and public hearings thereof will lead to continuous increased environmental management, legal fees, printing/stationary, promotions and advertising and feasibility studies.

**Table 35: The Authority's Sundry Operating Costs**

Cost Category	Actual 2017/18 R Million	Budget 2018/19 R Million	Forecast 2019/20 R Million	Dev '17/18 vs 18/19 R Million	Dev '17/18 vs 18/19 Percentage	% of Opex 19/20	Forecast 2020/21 R Million	Forecast 2021/22 R Million	CAGR 2019/20 - 2021/22
External property auxiliary costs revenue	-261	-281	-296	-15	5%	-5%	-312	-330	6%
Intra NPA recoveries	-395	-449	-536	-86	19%	-9%	-556	-588	5%
Intra cc recoveries	265	340	383	42	12%	7%	395	417	4%
Intra cc charges	64	50	53	3	6%	1%	57	60	6%
Miscellaneous revenue	-69	-35	-34	1	-4%	-1%	-36	-38	5%
External Audit Fees	10	17	18	1	5%	0%	19	20	5%
Entertainment	5	12	13	1	6%	0%	14	15	5%
Environmental management	23	21	33	12	55%	1%	28	29	-6%
Fines and Penalties	7	-	0	0	0%	0%	-	-	0%
Health and Sanitation	38	46	51	6	13%	1%	54	57	5%
Insurance Operations	31	46	49	3	6%	1%	52	56	7%
Legal Costs - Tax Deductible	23	26	28	2	9%	0%	30	31	5%
Internal Audit	19	16	17	1	4%	0%	18	18	5%
Membership Fees	5	9	9	1	7%	0%	10	10	5%
Bank Charges	0	0	0	0	6%	0%	0	0	6%
Catering Costs	1	6	7	0	5%	0%	7	8	5%
Claims Paid	2	16	17	1	5%	0%	18	19	5%
Commission Paid	3	-	0	0	0%	0%	-	-	0%
Discount Allowed	-	-	0	0	0%	0%	-	-	0%
Gifts	0	0	0	0	5%	0%	0	0	5%
License Fees	2	4	4	0	5%	0%	4	4	5%
Magazines, Books and Periodicals	0	1	1	0	5%	0%	1	1	5%
Newspapers	-	-	0	0	0%	0%	-	-	0%
Nursery / Flower Expenditure	9	10	13	3	26%	0%	13	14	5%
Water	79	76	81	5	6%	1%	85	91	6%
Other 1	25	28	31	3	9%	1%	30	32	2%
Navigation, Landing and Parking	34	25	36	11	42%	1%	38	40	5%
Postage	0	0	0	0	8%	0%	0	0	6%
Printing and Stationery	8	20	19	-1	-3%	0%	21	22	8%
Promotions and Advertising	26	52	57	5	9%	1%	60	63	5%
RDP Costs / Social Investment	-	-	0	0	0%	0%	-	-	0%
Regional Services Levies	-	-	0	0	0%	0%	-	-	0%
Telecommunication Services : External	15	20	21	1	6%	0%	22	23	5%
Travel Benefits / Concessions	-	-	0	0	0%	0%	-	-	0%
Transport Cost : External	2	4	4	0	5%	0%	5	5	5%
Travel - Local	53	70	74	4	5%	1%	78	82	5%
Travel - Overseas : Deductible	4	12	13	1	5%	0%	14	14	5%
Other operating expenses : 2 (Consulting fees)	6	14	15	1	5%	0%	16	17	5%
<b>Total sundry operating expenses</b>	<b>36</b>	<b>177</b>	<b>181</b>	<b>3</b>	<b>2%</b>	<b>3%</b>	<b>185</b>	<b>193</b>	<b>3%</b>

### Other 1

This cost category relates mainly to consulting fees, corporate identity, corporate social investment, conferences and intra charges.

**Table 36: Breakdown of Other 1 Cost**

Cost Category	Actual 2017/18 R Million	Budget 2018/19 R Million	Forecast 2019/20 R Million	Dev '18/19 vs 19/20 R Million	% of Opex vs 19/20 Percentage	% of Opex 19/20	Forecast 2019/20 R Million	Forecast 2020/21 R Million	CAGR 2018/19 - 2020/21
<b>Total Other 1</b>	<b>25</b>	<b>28</b>	<b>31</b>	<b>3</b>	<b>9%</b>	<b>1%</b>	<b>30</b>	<b>32</b>	<b>2%</b>
Promat Levy	-	-	-	-	0%	0%	-	-	0%
Credit Management Fees	-	-	-	-	0%	0%	-	-	0%
Inter Divisional Miscellaneous Leasing & Contract	-	0	0	0	5%	0%	0	0	6%
Capital Project Clearance	-	-	-	-	0%	0%	-	-	0%
Contributions	0	0	0	0	5%	0%	0	0	6%
Corporate Identity	1	4	4	0	5%	0%	4	4	5%
Bouquets & Wreaths	0	0	0	0	6%	0%	0	0	6%
Revenue Stamps & Other Taxes	-	-	-	-	0%	0%	-	-	0%
Sponsorships	2	3	4	1	47%	0%	2	2	-23%
Corporate Social Investment	8	9	10	0	5%	0%	10	11	5%
Accounts Pay Clearance Account	-	0	0	0	5%	0%	0	0	6%
Suspense Account	0	-	-	-	0%	0%	-	-	0%
General Ledger Clearance Account	-	-	-	-	0%	0%	-	-	0%
Strike Related Cost	-	-	-	-	0%	0%	-	-	0%
Plant Hire Credits Sanction Work	-	-	-	-	0%	0%	-	-	0%
Interest Paid	0	0	0	0	6%	0%	0	0	6%
Conference: Portnet	3	3	3	0	5%	0%	3	4	5%
Foreign Exchange Cost	0	-	-	-	0%	0%	-	-	0%
Intra Pad Miscellaneous Charges	11	8	9	0	5%	0%	9	10	6%

## **Group Overhead Costs**

The services provided by each Transnet corporate cost centre to the respective ODs vary in accordance with the OD requirements and the nature of its activities. Shared costs are based on a top down costs centre allocation approach as opposed to a top down expenditure line item allocation approach.

Meaning that the total costs relating to a particular cost centre are allocated to the ODs using a cost driver predetermined by and agreed with the cost centre managers for that particular cost centre and this consequently informs the allocation of the expenditure line items such as personnel costs, fuel costs etc. within that cost centre.

Furthermore, where possible, identified costs per general ledger account that could be traced to ODs are allocated directly without the use of predetermined cost drivers. These may include but are not limited to the incentive bonuses provision, impairments on trade receivables and other internal income and expense recoveries.

Year on year differences in allocated corporate overhead costs or differences between budgeted cost and actual cost allocations will be as a result of changes in spending priorities due to cost optimisation as well as changes in cost driver percentages (per cost centre) with cost driver remaining the same.

The corporate overhead cost allocated for both actuals and projections are audited by Transnet's external auditors.

An allocation of 13.41% of the total Group Corporate overhead costs for FY2019/20 has been allocated to the Authority. The remaining 86.59% has been allocated to other Transnet ODs. It is worth noting that the allocation to the Authority has increased by R8 million from R458 million in FY 2018/19 to R466 million in FY 2019/20. This increase can be explained as follows:

Changes in cost driver percentages - Cost drivers do not change; however the percentage proportions between the ODs change on an annual basis. A decrease of 0.14% in percentage proportion allocated between the FY 2018/19 (13.55%) and FY 2019/20 (13.41%) can be noted.

Changes in total group corporate overhead costs - The total group corporate overhead costs increased by 2% in FY 2019/20. Transnet is continuously striving to contain the increase in group corporate overheads to be within a reasonable inflationary range.

## Transnet National Ports Authority Tariff Application for Financial Year 2019/20

Table 37: Group Overhead Costs

Transnet Group Corporate Overhead Costs							
Description	FY 2017/18 Actual	FY 2018/19 Budget	FY 2019/20 Proj	FY 2018/19 vs 2019/20 Diff (R)	FY 2018/19 vs 2019/20 Diff	FY 2020/21 Proj	FY 2021/22 Proj
Revenue external	-728 159	-	-	-	0.0%	-	-
Revenue internal	-	-	-	-	0.0%	-	-
Internal recoveries	-	-52 406 195	-49 774 107	2 632 088	-5.0%	-51 852 147	-54 174 904
<b>Revenue</b>	<b>-728 159</b>	<b>-52 406 195</b>	<b>-49 774 107</b>	<b>2 632 088</b>	<b>-5.0%</b>	<b>-51 852 147</b>	<b>-54 174 904</b>
<b>Net operating expenses excluding depreciation and amortisation</b>	<b>446 890 208</b>	<b>401 942 274</b>	<b>416 654 979</b>	<b>14 712 705</b>	<b>3.7%</b>	<b>442 351 945</b>	<b>468 790 524</b>
Personnel costs	165 509 293	139 997 052	143 873 806	3 876 754	2.8%	153 576 790	163 550 165
Fuel costs	81 428	178 829	187 364	8 534	4.8%	199 299	211 119
Electricity costs	2 076 811	2 465 951	2 556 585	90 635	3.7%	2 704 659	2 836 936
Material costs	68 320	279 925	296 520	16 596	5.9%	314 295	333 052
Other operating costs	279 154 357	259 020 517	269 740 703	10 720 186	4.1%	285 556 902	301 859 254
<i>Accommodation and Refreshments</i>	2 925 528	5 222 866	5 507 166	284 301	5.4%	5 859 015	6 226 458
<i>Professional Fees</i>	104 395 485	53 897 068	55 287 961	1 390 893	2.6%	58 605 238	62 121 552
<i>Electronic Data Costs</i>	52 521 613	89 040 024	92 824 084	3 784 060	4.2%	5 555 988	102 580 607
<i>Internal Audit</i>	29 859 940	4 944 145	5 240 879	296 734	6.0%	97 749 897	5 889 947
<i>Social Investment</i>	27 263 697	26 178 279	27 748 976	1 570 697	6.0%	29 413 914	31 178 749
<i>Miscellaneous Costs</i>	62 188 094	79 738 136	83 131 637	3 393 501	4.3%	88 372 850	93 861 941
<b>Profit from operations before depreciation, amortisation and items listed below</b>	<b>446 162 049</b>	<b>349 536 079</b>	<b>366 880 872</b>	<b>17 344 793</b>	<b>5.0%</b>	<b>390 499 798</b>	<b>414 615 621</b>
Depreciation and amortisation	46 249 782	62 863 399	52 654 444	-10 208 955	-16.2%	40 269 588	35 678 467
<b>Profit from operations before the items listed below</b>	<b>492 411 831</b>	<b>412 399 478</b>	<b>419 535 316</b>	<b>7 135 838</b>	<b>1.7%</b>	<b>430 769 386</b>	<b>450 294 088</b>
Profit on sale of interest in businesses	-	-	-	-	0.0%	-	-
Impairment of assets	399 018	153 705	159 069	5 364	3.5%	168 255	176 331
Dividends received	-	-	-	-	0.0%	-	-
Post-retirement benefit obligation costs	20 332 573	20 011 250	20 780 318	769 068	3.8%	21 987 065	23 080 386
Fair value adjustments	65 862	179 813	186 088	6 275	3.5%	196 834	206 282
Income from associates	-	-	-	-	0.0%	-	-
<b>Profit from operations before net finance costs</b>	<b>513 209 285</b>	<b>432 744 245</b>	<b>440 660 790</b>	<b>7 916 545</b>	<b>1.8%</b>	<b>453 121 540</b>	<b>473 757 086</b>
Transnet Group Capital	16 281 003	24 845 984	25 025 421	179 437	0.7%	25 115 083	26 299 665
Transnet Foundation	-3 398 367	-	-	-	0.0%	-	-
<b>Total Overhead Costs allocated to TNPA</b>	<b>526 091 921</b>	<b>457 590 229</b>	<b>465 686 211</b>	<b>8 095 982</b>	<b>1.8%</b>	<b>478 236 623</b>	<b>500 056 751</b>
Total Overhead Costs - YOY % increase	-	-13.02%	1.77%	-	-	2.70%	4.56%
% of Group corporate overhead cost allocated to TNPA	14.84%	13.55%	13.41%	-	-	13.46%	13.47%

**ANNEXURE E: FY 2018/19 Tariff Book Changes**

Table 38: Proposed Tariff Book changes

Issue	Current read	Suggestion
<b>Tariffs</b>		
<p>1. Floating Crane <b>Page 3.6</b></p>	<p>For handling loads, per hour or part thereof:  At the Port of Durban .....R13 706,01 At the Port of Cape Town.....R.27 412,01</p>	<p>For handling loads, per hour or part thereof:  At the Port of Durban .....R13 706,01  <b>Rationale</b> No Floating Crane available in Cape Town.</p>
<p>2. Fresh Water <b>Page 4.9</b></p>	<p>Fees for the supply of fresh water are available on application.</p>	<p>Fees for the supply of fresh water when available on application. <b>Rationale</b> Fresh water may not always be available due to water restrictions from Municipalities.</p>
<p>3. Penalties <b>Page 6.2</b></p>	<p>Should the booking not be taken up or cancelled within 21 consecutive days prior to the booked date, the deposit will be forfeited. If the booking is cancelled greater than 21 days, a full refund will be given.</p>	<p>Should the booking not be taken up or cancelled within 60 consecutive days prior to the booked date, the deposit will be forfeited. If the booking is cancelled greater than 60 days, a full refund will be given.  <b>Rationale</b> To incentivise a more robust booking system.</p>
<p>4. Crane 206 – Port of Cape Town <b>Page 6.8</b></p>	<p><b>8.3 Crane 206 — Port of Cape Town</b> Working Hours Rate per hour.....R2 092.86 Overtime Rate per hour.....R2 511.46 Public Holidays and Sunday Rate per hour. ....R2 930.03</p>	<p><b>Remove</b> <b>Rationale</b> No Crane 206 available in Cape Town.</p>