FY 2015/16

Transnet National Ports Authority Tariff Application for Financial Year 2015/16

Illustration: Port of Port Elizabeth

Tariff Application to the Ports Regulator in terms of the National Ports Act, 2005
(Act No.12 of 2013)

Contents

ABBREVIATIONS AND ACRONYMS

AFS	Annual Financial Statements
APDP	Automotive Production Development Program
BER	Bureau of Economic Research
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
DIA	(Old) Durban International Airport
DMS	Dimson, Marsh and Staunton
DORC	Depreciated Optimised Replacement Cost
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
GDP	Gross Domestic Product
GRT	Gross Registered Tonnage
HCM	Human Capital Management
HOPS	Haulier-Road Operations Performance Standards
IAS	International Accounting Standards
IC	Interim Claw-back
JSE	Johannesburg Stock Exchange
KAM	Key Account Manager
m	Million
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
Mtpa	Millions tonnes per annum
NAAMSA	National Association of Automobile Manufacturers of South Africa
NBV	Net Book Value
NGQ	Ngqura
NPA	National Ports Authority
NPCC	National Port Consultative Committee
OD	Operating Divisions
OEMs	Original Equipment Manufacturers
Opex	Operating Costs

PCC	Port Consultative Committee
PE	Port Elizabeth
RAB	Regulatory Asset Base
RR	Revenue Requirement
RBCT	Richards Bay Coal Terminal
RCB	Richards Bay
ROD	Record of Decision
ROPS	Rail Operations Performance Standards
SA	South Africa
SARB	South African Reserve Bank
SARS	South African Reserve bank
SLD	Saldanha Bay
SOC	State Owned Enterprise
SRAB	Starting Regulatory Asset Base
TCC	Transnet Corporate Centre
TEU	Twenty-foot Equivalent Unit
TOC	Trended Original Cost
TOPS	Terminal Operator Performance Standards
TPT	Transnet Port Terminals
TSHD	Trailing Suction Hopper Dredger
UK	United Kingdom
USA	United States of America
WACC	Weighted Average Cost of Capital
WACD	Weighted Average Cost of Debt

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.

A set or approved Tariff Methodology assists in the application of the regulatory framework in order to determine the Authority's overall revenue requirement. In this regard, the Authority submitted its Tariff Methodology position paper to the Regulator in September 2012. This position paper was consulted with stakeholders during March 2013. The Regulator whilst considering the Authority's position paper issued an Interim Regulatory Manual for the FY 2014/15 tariff application.

On 31 July 2014, the Regulator approved a Tariff Methodology for the governance of the Authority's tariff setting process and matters relating to compliance. The Tariff Methodology considers a multi-year approach, applicable to the 2015/16 to 2017/18 tariff years. The Tariff Methodology 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.

It is worth noting that the regulatory environment is going through an important phase of evolution as the Regulator and the Authority embark on the first Multi-Year Tariff application which will cover a fixed tariff application for FY 2015/16 with indicative tariff adjustments for FY 2016/17 and FY 2017/18.

The approach (applicable to the tariff period FY2015/16 to FY2017/18) as per the Tariff Methodology is based on the Revenue Requirement (RR) formula and is as follows:

Revenue Requirement

$$= \text{Regulatory Asset Base (RAB)} \times \text{Weighted Average Cost of Capital (WACC)}$$

$$+ \text{Operating Costs} + \text{Depreciation} + \text{Taxation Expense} \pm \text{Claw-back}$$

$$\pm \text{Excessive Tariff Increase Margin Credit (ETIMC)}$$

In summary, the key principles included in the Tariff Methodology are as follows:

a) ***Regulatory Asset Base (RAB)***: The RAB represents the value of assets that the NPA is allowed to earn a return on.

b) ***Vanilla Weighted Average Cost of Capital (WACC):*** *A real WACC will be applied, given that the RAB is indexed for inflation.*

c) ***Operating Costs:*** *The NPA is required to provide detailed and complete motivation for each of the expenses applied for.*

d) ***Depreciation:*** *The depreciation of the assets in the RAB will be calculated as a straight line 40 year on the opening balance of the RAB.*

e) ***Taxation Expense:*** *The Regulator will use the pass-through tax approach where the vanilla WACC will be applied to the average RAB for the period under consideration, less the interest cost of debt and the corporate tax rate to determine the tax liability to be treated as an expense in the RR calculation.*

f) ***Claw-Back:*** *The Regulator will spread the total impact of over/under recovery of revenue over a period of two tariff determinations.*

g) ***Excessive Tariff Increase Margin Credit (ETIMC):*** *The Regulator considers it prudent to avoid future tariff spikes by retaining and increasing the NPA's ETIMC.*

The tariff application for FY 2015/16 to FY 2017/18 has been prepared using the aforementioned Revenue Requirement formula, in line with the Tariff Methodology. The application of the methodology is illustrated in the table below:

Table 1: Revenue Requirement

Details	FY 2015/16	FY 2016/17	FY 2017/18
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
RAB	67 000	72 995	81 532
Vanilla WACC	5.59%	5.78%	6.01%
Return on Capital	3 745	4 219	4 900
Plus: Depreciation	1 807	1 968	2 201
Plus: Operating Costs	5 020	5 489	5 905
Plus: Taxation Expense	964	1 064	1 219
Plus/Less: Clawback	(328)	310	-
Revenue Allowed	***11 208***	***13 050***	***14 225***
Less: Real Estate	(2 449)	(2 674)	(2 933)
Marine Revenue	***8 759***	***10 376***	***11 292***

Application of the aforementioned formula results in a Revenue Requirement of R11 208m **(Table 1)** for FY 2015/16 comprising of Real Estate Business revenue of R2 449m and Marine Business revenue of R8 759m. In order to determine the Marine Business revenue to be derived from tariff adjustments, the required revenue of R8 759m is compared with the expected revenue of R7 783m for FY 2014/15 increased for the expected growth in volumes of 2.8% for FY 2015/16.

For FY 2016/17, the tariff adjustment is derived by comparing the required Marine Business revenue of R10 376m to the required Marine Business revenue of R8 759m for FY 2015/16 increased for the expected growth in volumes of 2.2% for FY 2016/17. Accordingly, for FY 2017/18, the tariff adjustment is derived by comparing the required Marine Business revenue of R11 292m to the required Marine Business revenue of R10 376m for FY 2016/17 increased for the expected growth in volumes of 2.2% for FY 2017/18.

Table 2: Marine Revenue

Marine Revenue	FY 2015/16	FY 2016/17	FY 2017/18
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
Prior Year Revenue	7 783	8 759	10 376
Estimated Volume Growth	2.80%	2.20%	2.20%
Revenue after volume growth	8 001	8 952	10 604
Required Revenue	8 759	10 376	11 292
Tariff Increase	**9.47%**	**15.91%**	**6.49%**

This translates into an average tariff adjustment of 9.47% for FY 2015/16, and indicative tariff adjustments of 15.91% for FY 2016/17 and 6.49% for FY 2017/18.

The aforementioned indicative tariff adjustments for FY 2016/17 and FY 2017/18 illustrate that the roll-out of the Authority's Capital Expenditure (Capex) programme in terms of Transnet's Market Demand Strategy (MDS) will result in spikes and troughs for future tariff adjustments when applying the Revenue Requirement formula.

In accordance with the Tariff Methodology, the Authority hereby applies to the Regulator for revenue of R11 208m comprising of Marine Business revenue of R8 759m and Real Estate business revenue of R2 449m for FY 2015/16. This translates to an average overall tariff adjustment of **9.47%.**

The Tariff Methodology further states that the Authority is required to submit as part of the application any proposed changes to the existing tariff book that will reflect increases (or decreases) different from the average tariff increase applied for.

In alignment with the principles of the Authority's proposed Pricing Strategy i.e. differentiating between export and import tariffs to support the development of the industrial sector with a specific focus on value adding activities, the Authority further proposes that the average 9.47% tariff adjustment be differentiated as follows:

- **8.5% on cargo dues for export of full containers**
- **8.5% on cargo dues for motor vehicles exported on own wheels (RoRo); and**
- **9.6% on all other marine tariff categories and cargo dues.**

2. Introduction

The Authority is the landlord in the South African 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.

This application commences by introducing the primary legislation that deals with the Authority's tariffs and progresses to give an overview of the ports business and infrastructure plans. The tariff application has been prepared in line with the Regulator's approved Tariff Methodology using the Revenue Requirement formula, with the determinants for the Authority's revenue being described accordingly. In accordance with the multi-year approach as per the Tariff Methodology, the application has been prepared for a three year period (FY 2015/16 to FY 2017/18) with a fixed tariff adjustment for FY 2015/16 and indicative tariff adjustments for FY 2016/17 and FY 2017/18.

3. Legal Basis and Regulatory Requirements

The regulatory framework for the Authority's tariffs is informed by the Act, Regulations issued under such Act, the Directives promulgated by the Regulator. 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.

3.1 Section 72 of the Act sets out the Authority's obligations in relation to its tariff book: "Authority's tariff book"

72. (1) (a) The Authority must, with the approval of the Ports Regulator, determine tariffs for services and facilities offered by the Authority and annually publish a tariff book containing those tariffs;

(b) The Authority may, with the approval of the Ports Regulator, amend the tariff book whenever it is necessary to do so.

(2) The Authority must, prior to any substantial alteration of a tariff, consult with the National Port Consultative Committee.

(3) Subject to section 9 of the Competition Act, 1998 (Act No. 89 of 1998), the tariffs contemplated in subsection (1) may vary between ports.

(4) Notwithstanding the provisions of this section, the Authority may enter into an agreement with a licensed operator or a party to an agreement or a port user for the variation of any tariff contemplated in subsection (1).

3.2 The Ports Directives

3.2.1 The Regulator developed the Directives, which 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').

3.2.2 Directive 23(1) requires the Regulator to consider whether the tariffs proposed by the Authority reflect and balance:

a) A systematic tariff that is applicable on a comparable basis;
b) Fairness;
c) The avoidance of discrimination save where discrimination is in the public interest;
d) Simplicity and transparency;
e) Predictability and stability;
f) The avoidance of cross subsidisations save where cross subsidisation is in the public interest; and
g) The promotion of access to ports and efficient and effective management and operation in ports.

3.2.3 The opening statement of sub-directive 23(2), reads as follows: In considering the Authority's proposed tariffs, and any subsequent proposed significant variations, the Regulator must enable 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) Make a profit commensurate with the risk of owning, managing, controlling and administering ports and of providing port services and facilities.

3.2.4 This sub-directive prescribes that the Regulator must enable the Authority to recover its investment, costs and to earn a profit commensurate with the risk it bears.

3.3 Tariff Methodology for the tariff years 2015/16 to 2017/18

3.3.1 An approved tariff methodology assists in the application of the regulatory framework in order to determine the Authority's overall revenue requirement.

3.3.2 In this regard, on 31 July 2014 the Regulator issued a Regulatory Manual ("Tariff Methodology") applicable for the tariff years 2015/16 to 2017/18. The Tariff Methodology

will be multi-year in its approach, with the aim of continued improvement in the level of transparency and consistency in the tariff setting process.

3.3.3 The Tariff Methodology further states that the Regulator has allowed for an annual review and an annual adjustment of tariffs within the three year period as opposed to fixing the prices for the full period.

3.3.4 Furthermore, the Regulator is of the view that guidelines contained in the Tariff Methodology will assist in narrowing the gap between what is requested by the Authority and subsequently granted by the Regulator.

3.3.5 The approach (applicable to the 2015/16 – 2017/18 tariff years) decided upon is based on the Revenue Requirement methodology and the building blocks are set out below. The Tariff Methodology also states that the Regulator retains some degree of regulatory discretion to respond to unforeseen economic or other events, which may impact on the sustainability of the South African Ports system.

3.3.6 The components of the Tariff Methodology are discussed below:

3.3.6.1 **Regulatory Asset Base (RAB):** The value of total assets in the RAB is indexed to inflation each year - the Trended Original Cost ("TOC") approach. Each year, estimated Capex and depreciation is added to the closing balance for the previous year to arrive at an updated closing balance for the current year. The expected working capital balance is added to arrive at a total RAB estimate, which is averaged over the year to account for the progressive spending of Capital Works In Progress (CWIP) over the period. The RAB formula applicable to the FY 2015/16 to FY 2017/18 tariff years is as follows:

$$RAB_y = \frac{1}{2}[RABc, y + RABo, y] + wy$$

$$RABc,y = RABo,y\,(1 + CPIy)1 + CWIPy - Dy$$

Where:

RABy = value of the RAB used to determine the returns for period y

RABo,y = opening value of RAB for the period y

RABc,y = closing value of RAB for the period y

Wy = forecast average net working capital over period y

CWIPy = value of expected capital investment over the period y

Dy = depreciation allowance for assets over the review period y

CPIy = annual rate of general inflation expected over period y

3.3.6.2 **Depreciation**: The following formula which takes into consideration the principle of financial capital maintenance to fully account for capital expenditure and inflation, is used in the calculation of depreciation:

$$Depreciation = (RAB(o,y) + (RAB\ (o,y).CPI(y)) + (Capex(y)/2.CPI(y)))/40$$

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

3.3.6.4 **Capital Works In Progress (CWIP):** Detailed projections for the tariff period, including tariff year 2014/15, per asset class, service and project as well as monthly planned expenditure schedules must be provided to motivate the CWIP to be included in the RAB.

3.3.6.5 **Working Capital:** The estimate of working capital, equates to the actual *net* working capital as per the latest available NPA annual financial statements, consisting of accounts receivable plus inventory less accounts payable (i.e. operating cash is excluded), adjusted by forecast volume growth and CPI inflation for the following year. In addition, CWIP payables, which are estimated at $1/12^{th}$ of the capital expenditure projected for that year is included.

3.3.6.6 **Weighted Average Cost of Capital (WACC) – Vanilla WACC:** In general, the WACC represents the risk adjusted opportunity cost of capital and is the minimum return for investment in order to continue to attract capital, given risks.

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

$$WACCvanilla = k_d.g + k_e\ (1-g)$$

Where:

k_d = *pre-tax cost of debt*

k_e = *post tax cost of equity*

g = *gearing which is debt over total capital*

The components of the WACC are as follows:

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

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

Where:

r_f = *real risk free rate*

β = *Measure of NPA's exposure to market (non-diversifiable) risk*

MRP = *The market risk premium measuring the premium over and above the risk free rate that investors might expect in return*

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

The Real RFR is deduced by using the Fisher Equation.

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

Where:

i = *nominal rate*

r = *real rate*

$E(I)$ = *Expected inflation*

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

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

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

  For the tariff period covered, the Regulator will use the 0.50 asset beta decided upon and motivated in the previous Records of Decision (ROD).

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

- **Gearing (g):** The appropriate gearing for the entity for period is 50%.

- **Cost of Debt:** NPA's actual, embedded debt costs should be used to determine the cost of debt applied within the WACC. The average embedded Transnet group cost of debt (*pre-tax nominal*) of Transnet SOC Ltd should be used for the 2015/16 tariff year, as no current alternative exists.

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

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

The calculation of tax allowance must also reflect the flow of funds related to any claw-back calculated as well as ETIMC allowances to ensure adequate tax cover for the NPA.

3.3.6.8 **Operating Costs:** The NPA is required to provide detailed and complete motivation for the applied expenses, especially on large items like labour and energy costs.

Transnet group costs will be included in the total allowed expenses subject to the requirement that the NPA submits detailed explanation and motivation for the amount to be transferred to Transnet group.

In addition, the NPA shall provide externally audited financial reports with all supporting documentation and detailed explanations including basis of allocation and policy documents that support such allocations.

3.3.6.9 **Claw-back:** The key purpose of applying claw-back is to ensure that the NPA or any port user is fairly treated and is not subjected to any unfair gains or losses that are a result of incorrect forecasting, inaccurate information and system shocks. Its main application is to reduce the impact of differences between the allowed revenue (based on a number of forecasts and assumptions) calculated at the time of the tariff application and actual audited figures.

The variables to be estimated in line with the Tariff Methodology, annually, prior to the start of the following tariff year for claw-back purposes are the:

- RAB (including capex)
- Depreciation
- Operating Expenditure
- Tax allowance
- Volumes
- Inflation (CPI)

The total impact of over/under recovery of revenue will be spread over a period of two tariff determinations.

3.3.6.10 **Excessive Tariff Increase Margin Credit (ETIMC):** The Regulator regulates in the long term interest of the industry. This requires that the Regulator not only confine itself to the immediate tariff decision, but also consider ways to ease any future shocks to the system. It is generally accepted that capital expenditure will spike at some point in the foreseeable future, but that these projects have not as yet been specified to a level of detail that allows for accurate prediction. As such, the Regulator considers it prudent to avoid future tariff spikes by retaining and increasing the Authority's ETIMC.

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

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

3.3.6.12 **Introduction of efficiency incentive:** The Regulator will continue to monitor progress of the results of the Terminal Operator Performance Standards (TOPS) as well as Marine Operators Performance Standards (MOPS) and will introduce an efficiency component to the tariff determination when the Regulator is satisfied that a credible efficiency monitoring system has been established.

4. The Business of the Authority

4.1 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 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.

4.2 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 port operations (except as operator of last resort);
- does not employ cargo handling labour;
- fulfils a port regulatory 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.

4.3 Transnet Market Demand Strategy (MDS)

The South African ports occupy a central position in the transport and logistics chain with 98% of cargo volume passing through them annually. Ports are inherently required to play a leading role in influencing economic growth to respond to market conditions.

The MDS will enable growth in key commodities in the long term and will position South Africa globally as a key thermal coal exporter. According to a May 2014 Creamers Media Report on Global Iron Ore Trade, South Africa has now moved into third position on the global ranking of iron ore exporters. South African is also the fourth largest supplier of iron ore to China, leading manganese exporter globally, and the leading logistics hub for sub-Saharan Africa.

The MDS anticipates R312.2bn capital expenditure programme over 7 years for Transnet.

Over the next seven years, the anticipated funding requirement amounts to R103.6bn, with the funding requirements relatively evenly spread over the next six years by Transnet.

Transnet will continue to access the numerous funding sources established over time, such as the Domestic Medium – Term Note (DMTN) programme, Global Medium – Term Note (GMTN) programme, Export Credit Agency's (ECAs), Development Financial Institutions (DFIs) and financial institutions to explore alternative

new sources ensuring that Transnet has diversified funding sources and sufficient liquidity available in challenging market conditions yet still maintaining its investment grade credit rating (to the extent this is within Transnet's control).

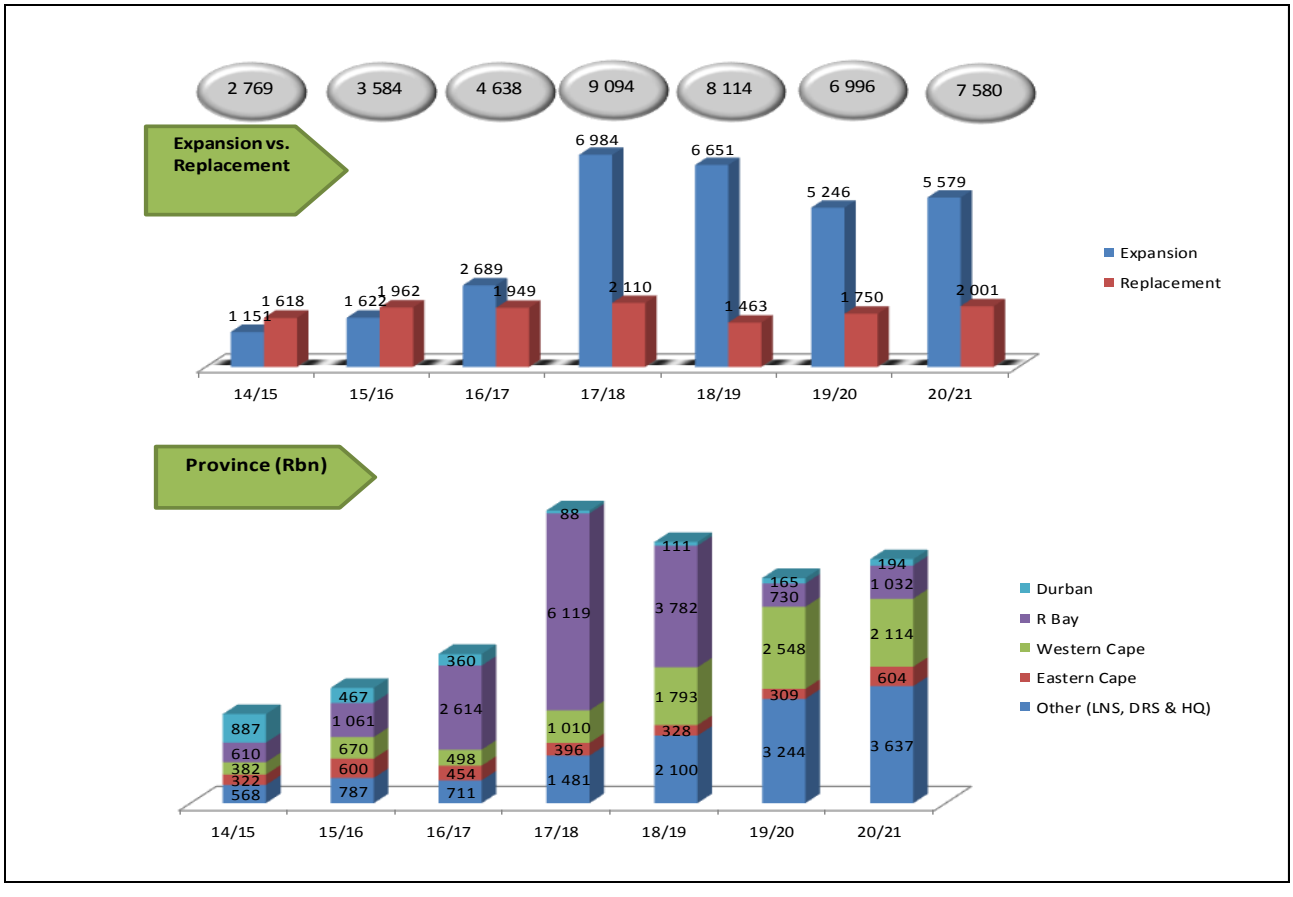
The majority of the MDS's investments will be in general freight and additional capacity across all other commodities. MDS is geared to improve rail connectivity ensuring that the port capacity will not be compromised by less than efficient railway operations.

The Authority is committed to its core strategy which is aligned to the MDS and Shareholder expectations. The Authority's planned investment programme contributes R42.7bn (excluding Durban International Airport) to the Transnet MDS Capex programme. The key pillars of the Authority's core strategy, which are aimed at lowering the cost of doing business and driving growth in the economy, are as follows:

- Create and manage infrastructure capacity ahead of demand;
- Improving port efficiency through increased productivity and operations oversight; and
- To facilitate an integrated logistics chain that will establish the port system as an integrated gateway for trade.

The MDS Capex programme is illustrated in the Diagram 1 as follows:

Diagram 1: MDS capex Spend



4.3.1 Operation Phakisa

Cabinet mandated the implementation of "Operation Phakisa" to accelerate Gross Domestic Product (GDP) growth and job creation in the marine transport and manufacturing (ship repair, rig repair and boat building), aquaculture, offshore oil & gas and the oceans governance sectors within the next five years.

A binding constraint to achieving the objectives of Operation Phakisa has been identified as inadequate and insufficient ship repair infrastructure/capacity to support the abovementioned sectors. As a key enabler of Operation Phakisa and in keeping with the "business unusual" and "big, fast results" methodology, the Authority has been mandated to accelerate the creation of port infrastructure to support marine manufacturing, offshore oil and gas exploration and aquaculture at South African ports. This includes, amongst others the urgent refurbishment and upgrade of existing ship repair facilities, the creation of purpose built oil and gas support infrastructure, the establishment of facilities to support boat building and support for aquaculture facilities.

As a result, the Authority has brought forward relevant infrastructure projects contained in the Transnet Corporate Plan and included several new infrastructure requirements along with consideration of the associated operating costs within the next five years.

The Presidency and Department of Environmental Affairs responsible for facilitating Operation Phakisa will shortly release specific details of Operation Phakisa. Given the timing of this tariff application, the accelerated programme and impact on funding is not reflected in the tariff application.

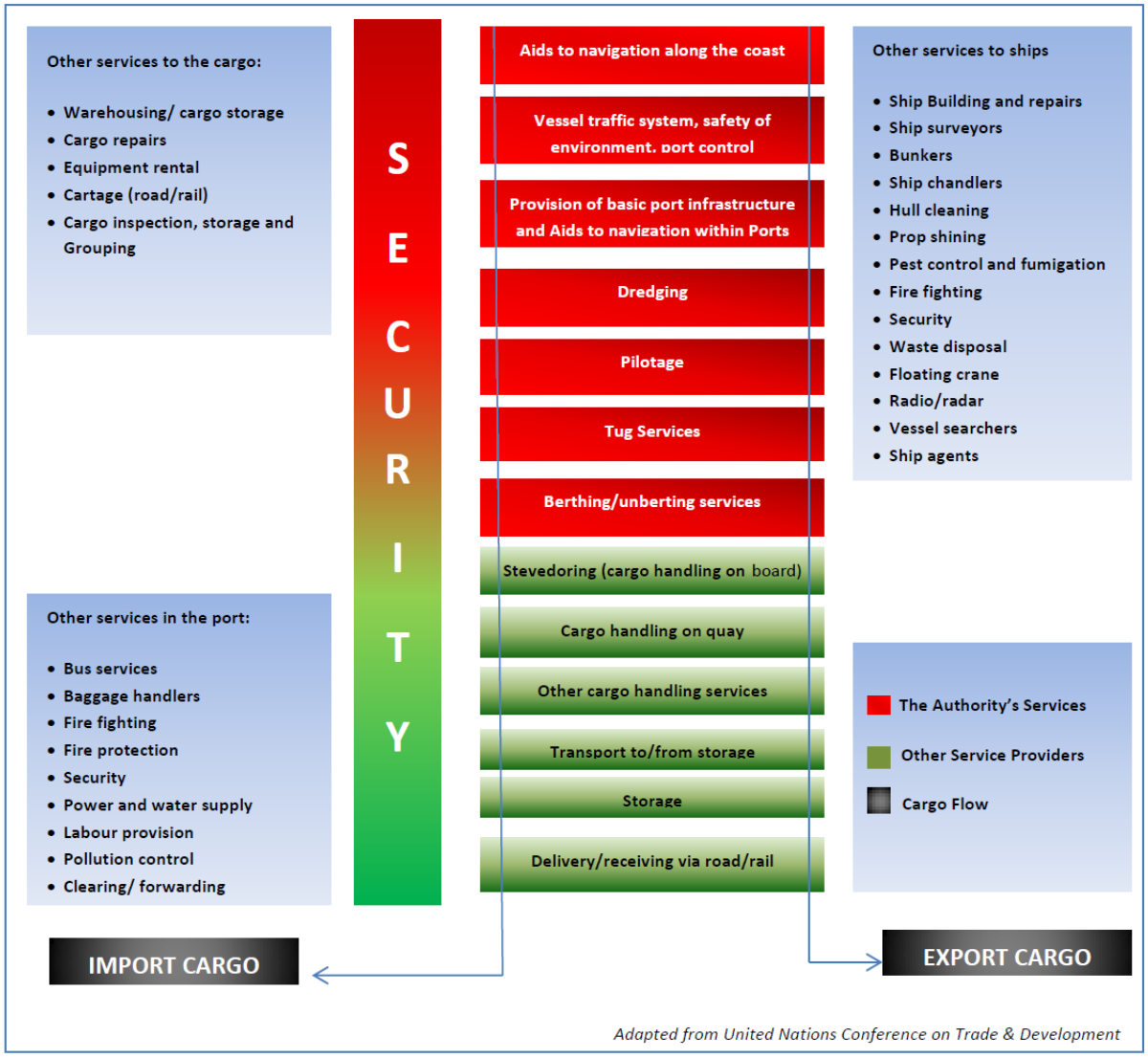
4.4 Tariffs in Perspective

The Authority, like any other port authority, needs to generate revenue by charging tariffs for the services that it renders, and to achieve the aforementioned MDS targets. The Authority may charge 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.

There are various services provided within a port and **Diagram 2**: Various Port Services (adapted from the United Nations Conference on Trade and Development) illustrates the flow of cargo and ships through the port system:

Diagram 2: Various 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.

The Authority's services and their respective revenue streams are set out in the table 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 as well as the cranes utilised in such 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

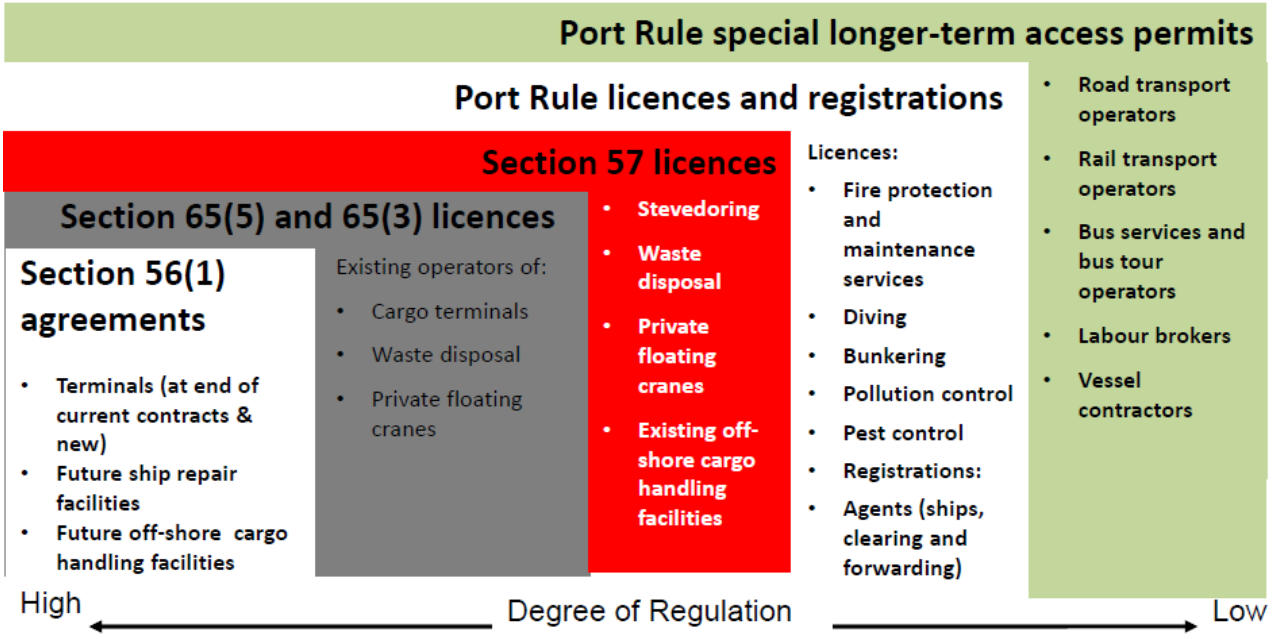
In the context of the South African ports system and the Act, the revenue generated from the Authority's services is utilised inter alia to:

- 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***).

Apart from the services that the Authority itself renders, the Authority is also the controller of port services and facilities that are provided by others in the ports. The Authority exercises such control in accordance with the provisions of the Act, by means of agreements, licences and permits. The Act and Port Rules issued by the Authority in terms of section 80(2) of the Act and the Authority's Guidelines of Agreements, Licences and Permits (25 April 2008), specify the degree of regulation that is being exercised in this regard. The type of regulation is illustrated in the **Diagram 3** that follows:

Diagram 3: Types of Regulation



Section 73(1) (c) and (d) provides that the Authority may charge fees for the granting of concessions and licences and for any services provided by the Authority in the performance of its functions.

5. Port Infrastructure Development Plan and Capital Expenditure required

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

5.1 Port Investment planning

"**Functions of the Authority"**

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;

5.2 The Authority's Capital Investment Progamme

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. The following initiatives of the Authority are aimed at supporting the MDS and volume growth:

- Improve management and delivery of capital projects :
- Ensure compliance to Project Lifecycle Process (PLP) model;
- Implement Enterprise Programme Management Office (EPMO) to track capital projects;
- Improve capital planning and budgeting processes;
- Improve procurement process to reduce turnaround time;
- Ensure disciplined execution of the capital and maintenance programmes.
- Implement integrated commercial management and integrated capacity planning processes with a total supply chain focus to improve customer service and achieve wider integration of the port system;
- Increase focus on business development;
- Improve land and other asset utilization;

The table below (Strategic Capital Objectives) illustrates the detailed projections for the fixed tariff year FY 2015/16 and the indicative tariff years of FY 2016/17 to FY 2017/18 which has been included as part of RAB in the Revenue Requirement.

Table 5: Strategic Capital Objectives

Strategic objective / Strategy	Details	Target	Projections		
			Fixed Tariff Year	Indicative Tariff Years	
		2014/15	2015/16	2016/17	2017/18
		Rm	Rm	Rm	Rm
Re-engineering, Integration, Productivity and Efficiency	To maximise return on investments by obtaining additional volumes	969	918	2 389	6 787
	To maximise return on investments by improving operating efficiencies	611	943	543	553
	To preserve current revenue streams without obtaining additional volumes (ie. revenue protection)	806	974	1 081	1 015
Safety, Risk and Effective Governance	Ensure Safety Optimisation	252	447	285	518
	Optimise Business Enterprise Offerings	51	150	148	47
	Optimally Satisfy Social Investments (non economic value creating projects)	-	6	90	86
	Environmental	10	75	32	19
Human Capital	Optimise Human Resources	31	72	71	70
Total (excl. borrowing cost)		**2 730**	**3 584**	**4 638**	**9 094**

6. The Authority's Total Revenue

6.1 Real Estate Revenue

The Authority has positioned itself as a landlord port authority, managing all fixed assets under its control in a responsible and productive manner.

Real Estate Management is driven by key principles that seek to support the vision of creating a world-class port system in South Africa, that supports the development goals of our country and the region as a conduit for import and export trade between South Africa and the world. The Authority leases out land to achieve optimum productivity within the ports.

Third party tenants enter into long – term leases to enable them to invest and develop facilities for their operations. Lease premiums are negotiated on a case by case basis and are therefore not reflected in the Authority's Tariff Book.

A diverse mix of terminal, handling and warehousing facilities have been developed at ports, inter alia: container terminals; automotive terminals; multi-purpose terminals for a variety of commodities; liquid bulk storage and tank farms for storage of products ranging from petrochemicals, oils, chemicals, dry bulk facilities for coal, iron ore, steel, manganese, etc.; cold storage facilities for fruit, fish and other perishables.

Some ports have other significant installations such as Island View's loading and storage facility in the Port of Durban neighbouring the petroleum refinery, and the coal terminal in Richards Bay. The infrastructure invested in such facilities by tenant's amounts to billions of rand, on massive footprints.

The salient details of the Authority's Real Estate portfolio are summarized in the table below to give a consolidated overview of the portfolio.

Table 6: Real Estate Salient Features

Salient Features of the Real Estate Business	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Details	Current Tariff Year	Fixed Tariff Year	Indicative Tariff Years	
Number of Ports	9	9	9	9
Gross Lettable Area	Approx 27m^2	Approx 27m^2	Approx 27m^2	Approx 27m^2
Number of Tenants	750	755	755	755
Total Number of Terminal Operators	89	89	89	89
Vacancy factor including Unserviced/Unused land	28%	20%	20%	20%
Vacancy factor excluding Unserviced/Unused land	8.2%	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 131 m	R2 449 m	R2 674 m	R2 933 m
Estimated Revenue (Subsequent Financial Year)	R2 449 m	R2 674 m	R2 933 m	R3 159 m
Forecast Revenue Growth	R318m	R225m	R259 m	R226 m

Real Estate business by nature of it being contract driven is not a subject of any tariff increase but is taken into consideration for the determination of the Authority's allowable revenue. This business is driven by a set of functions which are set out in the Act. In line with the Act the Authority must:

- control land use within ports and has the power to lease land under such condition as it may determine;
- ensure that adequate, affordable and efficient port service and facilities are provided;
- exercise licencing and controlling functions in respect of port services and port facilities to be able to perform efficiently;
- ensure that any person required to render any port services and port facilities is able to perform efficiently; and
- promote the achievement of equality by measures designed to advance persons or categories of persons historically disadvantaged by unfair discrimination in the operation of facilities in the ports environment.

6.2 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 provided by the Authority in five market segments namely, containers, dry bulk, liquid bulk, break-bulk and automotive. The main source of revenue is the tariffs which are charged by the Authority for providing the aforementioned services after approval by the Regulator. The tariffs charged are influenced by the expected volume growth which is further influenced by demand and the current economic outlook.

6.2.1 The Authority's Volumes

The main volume drivers for the Authority are ***Cargo*** and ***Marine services***.

The annual and forthcoming yearly projections for the Authority's volume budget process usually commence in October and spans until the Transnet Board approves the budgets in February of the following year.

The budget process generally gives an indication of the current year's performance (Latest Estimates); the following year's volumes (budget period) and the forecast for the next six years. This in essence allows Transnet to plan its goals for the short to medium term and determine its profitability over the period.

The volumes budget compilation follows a bottom-up approach, commencing with the Authority's Key Account Managers (KAM's) at port level communicating and liaising with customers concerning their operational and strategic plans and how this translates into volume forecasts for the six year period. The KAM's also liaise with all Port Terminals operating within their Ports for alignment purposes and will then consolidate at Port Level for all different Cargo categories and forward to Head Office for consolidation. During the budget evaluation process that follows various key factors such as historic, prevailing and anticipated future market conditions, operational efficiencies, and infrastructure capacity levels and anticipated improvements through-out the value chain is considered in order to validate the reasonableness of commodity volume projections over the period.

Transnet has also implemented periodic volume validation exercises which entail a formal interaction platform with key customers to validate customer volume forecasts. All divisions of Transnet participate in these volume validation exercises, with the objective of integrated and synchronised volume planning through the entire commodity value chain.

6.3 Cargo

Growth in cargo volumes through the port system is driven largely by both local and global demand and supply. The Authority has various categories of cargo that traverse port infrastructure and therefore generate revenue in the form of cargo dues. Cargo types are categorised according to the manner in which they are handled.

These cargo types are further differentiated between imports, exports, coastwise and transhipments.

- Imports are classified as cargo emanating from an international destination destined for South African Ports
- Exports are cargo shipped from any South African port destined for an international destination.
- Coastwise cargo is cargo emanating from within the borders of South Africa shipped from one South African port and destined to another South African port.
- Transhipment cargo is cargo emanating from an international source destined for another international destination (except South Africa), which is handled at a South African port. This cargo could be termed "cargo in transit".

The Authority's volume growth for FY 2015/16 to FY 2017/18 differentiated into the various cargo types are highlighted in the table below.

Table 7: Authority's Volume Growth

Details	Actual FY 2013/14	Latest Estimate FY 2014/15	% Deviation	Forecast FY 2015/16	% Deviation	Forecast FY 2016/17	% Deviation	Forecast FY 2017/18	% Deviation
Containers (TEUs)									
Deepsea Full: Imports	1 433 114	1 396 498	-2.55%	1 462 031	4.69%	1 518 704	3.88%	1 574 965	3.70%
Deepsea Full: Exports	1 100 661	1 166 173	5.95%	1 221 667	4.76%	1 266 004	3.63%	1 308 885	3.39%
Transhipments	1 060 563	1 048 825	-1.11%	1 111 657	5.99%	1 151 678	3.60%	1 154 061	0.21%
Other	1 046 865	1 008 368	-3.68%	1 039 133	3.05%	1 074 622	3.42%	1 111 654	3.45%
Total	***4 641 203***	***4 619 864***	***-0.46%***	***4 834 488***	***4.65%***	***5 011 008***	***3.65%***	***5 149 565***	***2.77%***
Vehicles (Units)									
Vehicle: Imports	436 146	391 964	-10.13%	410 970	4.85%	425 569	3.55%	421 885	-0.87%
Vehicle: Exports	235 646	263 459	11.80%	278 500	5.71%	276 863	-0.59%	299 813	8.29%
Other	20 496	8 000	-60.97%	8 240	3.00%	8 487	3.00%	8 741	2.99%
Total	***692 288***	***663 423***	***-4.17%***	***697 710***	***5.17%***	***710 919***	***1.89%***	***730 439***	***2.75%***
Break Bulk (Metric Tons)									
Break Bulk : Imports	3 188 194	2 432 031	-23.72%	2 567 710	5.58%	2 671 036	4.02%	2 774 088	3.86%
Break Bulk: Exports	5 320 472	5 342 358	0.41%	6 005 871	12.42%	6 056 358	0.84%	6 081 642	0.42%
Other	207 249	152 274	-26.53%	97 562	-35.93%	97 794	0.24%	97 998	0.21%
Total	***8 715 915***	***7 926 663***	***-9.06%***	***8 671 143***	***9.39%***	***8 825 188***	***1.78%***	***8 953 728***	***1.46%***
Dry Bulk (Metric Tons)									
Coal Exports	71 921 933	76 750 000	6.71%	79 252 931	3.26%	81 414 017	2.73%	84 596 708	3.91%
Iro Ore Exports	53 663 732	56 250 000	4.82%	58 105 245	3.30%	58 105 245	0.00%	58 105 245	0.00%
Manganese Ore Exports	8 915 352	7 760 000	-12.96%	7 927 532	2.16%	8 178 831	3.17%	8 262 597	1.02%
Other Dry Bulk	24 963 066	24 757 719	-0.82%	26 934 444	8.79%	28 289 617	5.03%	28 928 752	2.26%
Total	***159 464 083***	***165 517 719***	***3.80%***	***172 220 152***	***4.05%***	***175 987 710***	***2.19%***	***179 893 302***	***2.22%***
Liquid Bulk (kl)									
Petroleum	35 969 845	32 283 518	-10.25%	34 062 173	5.51%	33 189 177	-2.56%	33 623 444	1.31%
Chemicals	1 991 386	1 782 543	-10.49%	1 923 002	7.88%	1 995 690	3.78%	2 056 847	3.06%
Other Liquid bulk	1 317 228	1 139 493	-13.49%	1 332 224	16.91%	1 347 209	1.12%	1 362 511	1.14%
Total	***39 278 459***	***35 205 554***	***-10.37%***	***37 317 399***	***6.00%***	***36 532 076***	***-2.10%***	***37 042 802***	***1.40%***

6.3.1 Containers

The volume projection for South African ports is estimated at 4,834m Twenty-foot Equivalent Unit (TEUs) per annum for FY 2015/16, with a projected annual average growth rate of around 3.8% for the period April 2015 through March 2018. Growth in the container sector which is driven by consumer spending, has weakened over the last three years due to economic conditions and deteriorating confidence over the future as employment conditions remained weak.

The container sector volumes should continue to reflect a subdued domestic economic outlook in the medium-term particularly due to the low domestic manufacturing activity. It is envisaged that the Chinese economic growth will continue to decline, which would result in lower exports to China (mainly iron ore, manganese and coal). The overall impact of this decline is likely to be greater than the strengthening of other major export trading partners such as Germany, United States of America (USA) and the United Kingdom (UK). Nonetheless, GDP is still projected at 2.9% for FY 2015/16, driven by the increased demand

for South African (SA) manufactured goods. This growth in GDP is further supported by financial and business activities, transport, storage and communications and general Government services.

The Authority still expects subdued container exports volumes through the ports due to poor performance of the domestic manufacturing sector. Whilst the weak rand may assist manufacturers to produce more in value terms, achieving any meaningful increase in production would remain a challenge due to continuous industrial action occurring across various sectors. It is expected that such conditions will continue in the medium term, further straining performance in the manufacturing sector.

Whilst growth in container volumes is forecasted as sluggish, there remain elements that continue to contribute to growth. This growth is attributed to the following:

- Positive global economic prospects should further increase demand for domestic manufactured products thus supporting a moderate increase in containerised exports and also imports of inputs into the manufacturing production process.
- Containerised exports should also be driven by continued reefer shipping particularly of the agricultural products exported to Europe and Asia. Fruit exports to Asia are also forecasted to grow.
- The containerisation of dry bulk products including minerals, which is mainly due to port and rail handling capacity constraints, should also lead to increased container exports in the short to medium term until such time as sufficient cargo handling capacity becomes available throughout the logistics chain.
- Additional cargo handling equipment capacity to be deployed in the next 3 years will allow increased transhipments at the Port of Ngqura coupled with tariff incentives from the ports authority aimed at promoting transhipments through the SA port system.
- The switch in mode of transport from RoRo's to containers for the automobile production sector has also increased the imports of containers.

6.3.2 Automotives

According to National Association of Automobile Manufacturers of South Africa (NAAMSA) the domestic automotive market is likely to remain modest in the short to medium term. Current projections reflect sluggish growth due to economic pressure such as inflation, the depreciation of the rand exchange rate and the interest rate cycle turning upwards.

In terms of exports, the local Original Equipment Manufacturers (OEMs) are faced with increased global competition (i.e. emerging Chinese and Indian brands) resulting in lower export volumes handled at the Ports. However, this expected decrease in export volumes will be offset against the anticipated increased import volumes from the aforementioned brands to be handled at the Ports.

The main impact on exports is the threat of industrial action which appears to occur annually in the manufacturing industry, as well as high input costs.

6.3.3 Coal

Coal is one of South Africa's leading mineral revenue generators, with the country saleable coal production valued at approximately R96bn in 2012. The short term prospects for the mining sector are likely to remain subdued on the back of moderate global demand particularly from China despite the long term positive outlook dependent on the global economic recovery.

The modest average annual volume increase of 3.4% over the forecast period April 2015 to March 2018 would be achievable against a backdrop of additional cargo handling capacity being created in rail and port operations, despite also being significantly impacted negatively by the continuing downward trend in international coal prices, putting marginal producers under severe pressure.

6.3.4 Iron Ore

South African Iron Ore contributes 4% to the global iron ore market. In order to retain and grow the industry, Transnet embarked on an iron ore expansion project to increase the supply chain's capacity to meet customer demand. In support of this, volume projections over the respective period are aligned to the contractual arrangements between Iron Ore customers and Transnet which is influenced by the Customer Demand Exercise conducted with all role-players.

Export capacity through the Bulk Terminal in Saldanha is presently limited to 58.5Mtpa which will not increase over the forecast period, notwithstanding the commissioning of additional port terminal cargo handling equipment towards the end of the forecast period. This is based on the fact that certain existing port terminal cargo handling equipment is to be withdrawn for midlife refurbishment as soon as the new equipment are in productive use.

6.3.5 Manganese Ore

The Authority mainly handles manganese ore at the Port of Port Elizabeth which is currently faced with capacity constraints. Given the Transnet decision to relocate the manganese export terminal from Port Elizabeth to Ngqura, the PE terminal is capped at 4.9Mtpa mainly as a result of ageing cargo handling equipment. Major capital investment in a terminal that is to be decommissioned shortly is not economically feasible. Additional export capacity has been created by the handling of volumes through a skiptainer operation at the Multi-Purpose Terminal and the Container Terminal, with expected combined volumes of about 1.26Mtpa.

In addition to Port Elizabeth, customers supplement volumes by exporting through Bulk Connections terminal at the Port of Durban with a total throughput forecast in excess of 2Mtpa for the FY 2014/15, which is expected to continue throughout the forecast period. Export of manganese has also commenced at the Port of Saldanha through its Multi-Purpose Terminal, with the first shipment having occurred in May 2014. Estimated throughput for 2014/15 is 1.6Mt increasing to 2Mtpa over the forecast period.

Industry demand exceeds current port capacity, but with the relocation of the Manganese Terminal from Port Elizabeth to Ngqura, capacity will substantially increase to 12Mtpa and 16Mtpa by FY 2018/19 and FY 2019/20 respectively, with the first ore expected at the newly envisaged terminal during February 2019. The decommissioning of the Port Elizabeth Bulk Terminal is earmarked for August 2019.

6.3.6 Liquid Bulk

The South African liquid bulk industry has not shown much growth with volume demands remaining between 36m kl and 37.5m kl between 2010 and 2013. While there has been some modest GDP growth over the period, the continuing large-scale switching from petrol to diesel-powered motor vehicles is one of the factors contributing to slower growth in demand, as one of the benefits of diesel is a lower consumption rate per operating hour. The aging crude oil refining infrastructure and resultant higher maintenance requirements have negatively impacted supply conditions. Further investment in the industry appears restricted due to limited profitability of existing refineries with operators citing low returns on investment as reasons for their reluctance to upgrade or expand their facilities.

Also, the continuing commercial risk to the industry and the country as a whole is the instability in the OPEC countries which affects supply, and drives up the commodity price. Overall, the industry continues to experience low demand conditions and volatile rand exchange rate that has led to declining margins. The export of chemicals is affected by global market conditions and the state of European economies in particular, as this is the major market for South African exports. The continuing sluggish performance of European economies is therefore the primary cause of the modest growth in chemical volumes over the forecast period.

6.3.7 Marine Services

Marine volumes comprise of the number of ships arriving at South African ports and their associated Gross Registered Tonnage (GRT). The size of the vessel and the number of days spent in the port dictates the amount that shipping lines will pay for utilising basic port infrastructure and marine services operational charges, i.e. tugs, berthing and pilot assistance.

Based on the current economic outlook, the Authority projects a decline in the number of vessels arriving at the Ports. This also reflects the sentiments of a sluggish economy as discussed in the cargo categories above, as well as the continuing trend of larger vessels being utilised and consolidation of cargo by major shipping lines by means of combining of cargo volumes and vessel sharing in order to reduce costs.

7. Tariff Application Approach

The tariff application has been prepared based on the Tariff Methodology issued by the Regulator for the tariff period 2015/16 to 2017/18. The section that follows illustrates the application of the components of the Tariff Methodology.

7.1 Revenue Requirement Formula

The Revenue Requirement (RR) approach as per the Tariff Methodology for FY 2015/16 to FY 2017/18 will be the method used by the Regulator to determine the appropriate revenues for the Authority. The formula as prescribed is as follows:

Revenue Requirement

= Regulatory Asset Base (RAB) x Weighted Average Cost of Capital (WACC)

+ Operating Costs + Depreciation + Taxation Expense ±Claw-back

± Excessive Tariff Increase Margin Credit (ETIMC)

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

7.1.1 Regulatory Asset Base

The Authority is responsible for the management of the South African national ports system. The Authority owns, develops and maintains port land infrastructure. The valuation of the RAB is highlighted in Table 8 that follows:

Table 8: Regulatory Asset Base

Details	FY 2015/16	FY 2016/17	FY 2017/18
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
Opening Net Book Value	66 686	72 366	79 218
NBV Inflated	70 589	76 548	83 741
Less: Depreciation	(1 807)	(1 968)	(2 201)
Add: Capex	3 584	4 638	9 094
Closing NBV	72 366	79 218	90 634
Average Opening and Closing	69 526	75 792	84 926
Less: Working Capital	(2 526)	(2 797)	(3 394)
RAB Final	**67 000**	**72 995**	**81 532**

*7.1.1.1 **Asset Base***

The RAB on which the Authority is allowed to earn a return on by the Regulator involves all assets of the Authority. The Regulator retains the discretion to disallow any portion of the RAB as it deems necessary such as assets that fall outside the ambit of the National Ports Act.

The RAB of the Authority has been trended using the latest inflation forecast from the Bureau of Economic Research (BER).

The process used to determine the RAB is as follows:

a) In order to determine the value of the RAB on which a return will be calculated in the allowed revenue formula, both the closing and opening values of the RAB including capital expenditure are averaged throughout the period. This is done to recognise availability and incurrence of capital expenditure throughout the financial year rather than on the first day of the financial year.

b) The formula for the determination of the value to be allowed in the RAB for the tariff period is highlighted in Section 3.3 (subsection 3.3.6) above.

*7.1.1.2 **Depreciation***

- *Financial Reporting*

In terms on financial reporting, the Authority's Depreciation is recognised on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment. Land and assets in the course of construction are not depreciated. All other property, plant and equipment, including capitalised leased assets, are depreciated on a straight-line basis over their estimated useful lives or the term of the lease, if shorter. Major repairs and overhauls are depreciated over the remaining useful life of the related asset or to the date of the next major repair or overhaul, whichever is shorter. Depreciation commences when the asset is available for use. Assets are depreciated over the following periods:

Table 9: Depreciation Policy

SIGNIFICANT ACCOUNTING POLICIES	
PROPERTY, PLANT AND EQUIPMENT	
Asset class	**Years**
Buildings and structures	10 – 50
Buildings and structures components	10 – 25
Permanent way and works	3 – 95
Aircraft including components	5 – 8
Port infrastructure	12 – 100
Floating craft including components	5 – 40
Containers	10 – 20
Vehicles	3 – 15
Machinery, equipment and furniture	3 – 30

- *Tariff Application*

The RAB will be depreciated on a straight line, 40 year basis on the trended/inflated asset base. In line with the Tariff Methodology, 50% of the capex that is included in the RAB is inflated in determining depreciation. The resultant depreciation is R1 807m for FY 2015/16, R1 968m for FY 2016/17 and R2 201 for FY 2017/18.

*7.1.1.3 **Inflation Trending***

The Tariff Methodology prescribes the use of the Consumer Price Index (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.

7.1.1.4 Capital Works in Progress(CWIP)/ Capital Expenditure (Capex)

The formula for determination of the RAB includes CWIP/Capex. Capex refers to assets that are under construction. Capex is informed by the Capex program which is forecasted at R3 584m for FY 2015/16, R4 638m for FY 2016/17 and R9 094m for FY 2017/18. Detailed information relating to capital expenditure is demonstrated in ***Annexure B: Capital Expenditure***.

7.1.1.5 Working Capital

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

Table 10: Working Capital

Indexation as per Regulatory Manual	AFS 2013/14	Indexation	FY 2014/15 Rm'	Indexation	FY 2015/16 Rm'	Indexation	FY 2016/17 Rm'	Indexation	FY 2017/18 Rm'
Current Assets	**1 234**		**1 278**		**1 316**		**1 347**		**1 379**
Trade Receivables	1 192	3.50%	1 234	2.80%	1 269	2.20%	1 297	2.20%	1 326
Inventories	42	5.90%	44	5.70%	47	5.60%	50	5.40%	53
Current Liabilities	**3 232**		**3 566**		**3 842**		**4 144**		**4 773**
Trade Payables	2 123	5.90%	2 248	5.70%	2 376	5.60%	2 509	5.40%	2 644
Vat Liability	1109	5.90%	1 174	5.70%	1 241	5.60%	1 310	5.40%	1 381
Capex Payables			144		225		325		748
Working Capital	**-1 998**		**-2 288**		**-2 526**		**-2 797**		**-3 394**
Trade Receivables indexed by Volume Growth on a cumulative basis									
All other components indexed by inflation on a cumulative basis									
Capex Payables is the difference between the tariff year under review and actual capex for FY 2013/14. (The difference is divided by 12 months plus VAT at 14%)									

7.1.2 Weighted Average Cost of Capital

The key components used to calculate the Vanilla WACC is highlighted in the table that follows:

Table 11: Weighted Average Cost of Capital (WACC)

Details	FY 2015/16	FY 2016/17	FY 2017/18
	Fixed Tariff Year	Indicative Tariff Years	
Risk Free rate (nominal)	8.43%	8.43%	8.43%
Real risk free rate	*2.58%*	*2.68%*	*2.87%*
MRP	5.60%	5.60%	5.60%
Asset Beta	0.50	0.50	0.50
Equity Beta (Using Hamada)	0.86	0.86	0.86
Gearing	50%	50%	50%
WACD (nominal)	9.68%	9.88%	9.96%
Inflation	5.70%	5.60%	5.40%
Tax rate	28.00%	28.00%	28.00%
Cost of Equity (real)	7.40%	7.50%	7.69%
WACD (real, pre-tax)	3.77%	4.05%	4.33%
Vanilla WACC	**5.59%**	**5.78%**	**6.01%**

Explanatory Notes:

- *Risk Free Rate: Calculated over a five year monthly average from August 2009 to July 2014 for FY 2015/16.*
- *MRP: Geometric mean with the use of the DMS dataset over a full 113 year period.*
- *Inflation: Based on latest Bureau of Economic Research (BER) forecasts*
- *Cost of Debt: Transnet Weighed Average Cost of Debt*
- *FY 2016/17 & FY 2017/18: The Risk Free rate and MRP for FY 2015/16 is used as a proxy to determine an indicative WACC as these indices are based on historical data.*

7.1.3 Taxation

The Revenue Requirement formula considers tax expense as a pass-through cost to be recovered from customers. For tax purposes, the Vanilla WACC applied to the average RAB for the period under review, will not include the cost of debt as it is a pre-tax determination. The calculation for tax is illustrated below:

Table 12: Tax Calculation

Details	FY 2015/16	FY 2016/17	FY 2017/18
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
Gross Income	**9 306**	**10 194**	**11 241**
Pre Tax debt return	-	-	-
Equity Return on RAB	2 479	2 737	3 135
ETIMC	-	-	-
Clawback	-	-	-
Depreciation	1 807	1 968	2 201
Opex	5 020	5 489	5 905
Deductions	**6 827**	**7 457**	**8 106**
Depreciation	1 807	1 968	2 201
Opex	5 020	5 489	5 905
Taxable income	2 479	2 737	3 135
Gross up for tax	3 443	3 801	4 354
Tax at 28%	***964***	***1 064***	***1 219***

7.1.4 Operating Costs

The Authority's operating costs (Opex) are a reflection of growth in expenditure (in line with the organisations forecasts) due to the day to day operations of the organisation and in support of the strategic initiatives which aim to improve productivity, efficiency as well as enhance port safety. Consequently, most of the Authority's operating costs are of a fixed nature.

This section provides an analysis of the Authority's material operating expenditure items as shown in the table below. Full details relating to Opex is provided in (***Annexure C***).

Table 13: Operating Costs Including Group Costs

Cost Category	Actual 2013/14 R Million	Budget 2014/15 R Million	Forecast 2015/16 R Million	Dev '14/15 vs 15/16 R Million	Dev '14/15 vs 15/16 Percentage	% of Opex 15/16 Percentage	Forecast 2016/17 R Million	Forecast 2017/18 R Million	CAGR 2015/16 - 2017/18
Labour Costs	1 767	1 877	2 159	282	15.0%	49%	2 439	2 657	7%
Rates & taxes	290	302	328	25	8%	7%	345	364	4%
Maintenance	296	273	405	132	48%	9%	468	539	10%
Contract Payments	56	60	69	9	14%	2%	73	77	4%
Energy	399	424	526	102	24%	12%	565	611	5%
Professional services	20	28	41	13	47%	1%	54	57	11%
Material	85	87	107	20	23%	2%	114	119	4%
Computer & Info systems	100	117	171	54	46%	4%	180	190	4%
Rental	61	61	68	6	10%	2%	71	75	4%
Security costs	64	71	80	9	12%	2%	71	75	-2%
Pre -Feasibility Studies	47	51	220	169	328%	5%	194	190	-5%
Sundry operating costs	51	67	228	161	240%	5%	265	270	6%
Total operating cost (excluding depreciation)	***3 237***	***3 419***	***4 401***	***982***	***29%***	***100%***	***4 840***	***5 223***	***6%***
Group Costs	398	591	619	28	5%	12%	650	681	3%
Total operating cost (Including Group Costs)	**3 635**	**4 010**	**5 020**	**1 010**	**25%**	**112%**	**5 489**	**5 905**	**1%**

Operating costs reflect significant increases particularly around Labour, Maintenance, Energy, Professional Services, Computer Info Systems, Pre-Feasibility studies & Sundry Operating costs. Labour cost is a function of delivering on the Authority's mandate in terms of operations efficiency, oversight and maintenance. Maintenance is driven by system repair works but in general owing to ageing infrastructure and new assets. Computer Info Systems relate to software development and licensing to administer oversight. Pre-feasibility studies and Sundry operating costs is largely attributed to delivery on capital programmes and delivery of Section 56 projects.

7.1.5 Revenue Claw-back

As stated in the Tariff Methodology, the key purpose of applying a claw back is to ensure that the Authority or any port user does not gain or lose out from discrepancies 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 (CPI).

The claw-back is initially calculated on forecasts as per the tariff application of the Authority. The final claw-back is then re-calculated when actual information or financial results are available.

*7.1.5.1 **Re-computed Claw-back FY 2013/14***

Based on the performance of the Authority for FY 2013/14, the final calculation of claw back for the financial year equates to an over recovery of R564m. Due to the Regulator allowing the Authority a provisional claw-back of R51m in favour of the Authority, in the FY 2014/15 tariff determination, the total residual claw-back to be returned to customers is R615m. The over-recovery is driven mainly by under expenditure in capex and a resultant delay in operating expenditure related to this capex.

The approach used in the calculation was to re-determine the revenue requirement given the full information on actual Capex spending, operating expenditure and depreciation.

The FY 2013/14 Revenue of R9 850m reflects the actual revenue in the FY 2013/14 annual financial statements. The calculation of the claw-back is as follows:

- Revenue of R9 126m is the composition of the return on RAB of R58 701m, vanilla WACC of 5.21% and depreciation of R1 562m. Opex is confirmed from the Annual Financial Statements as R3 662m and Tax is recomputed as a pass-through cost as R844m. This gives the re-computed revenue requirement for FY 2013/14 of R9 126m and is illustrated as follows:

Table 14: Re-computation of RR for FY 2013/14

Details	FY 2013/14	
RAB	58 701	
WACC	5.21%	
Return		3 058
Opex	-	3 662
Depreciation		1 562
		8 282
Plus: Tax		844
Re-computed Revenue Requirement		**9 126**

The recalculated revenue requirement of R9 126m less the claw-back of R1 218m already taken in the previous year is added to the ETIMC of R1 378m resulting in recomputed allowed revenue of R9 286m. This re-computed allowed revenue compared to the actual revenue of R9 850m gives rise to a recalculated claw back of R564m, plus the provisional claw back provided in FY 2014/15 of R51m, results in a total claw-back of R615m due to customers.

The final claw-back for FY 2013/14 is calculated as follows:

Table 15: Claw-back calculation FY 2013/14

Actual Clawback	FY 2013/14 R'm
Re-computed Revenue Requirement	9 126
Less:Clawback taken	(1 218)
Plus:ETIMC	1 378
	9 286
2013/14 AFS Revenue	9 850
Clawback FY 2013/14	-564
Provisional allowed in ROD FY 2014/15	-51
Final Clawback FY 2013/14 (Adj in FY 2015/16)	**-615**

7.1.5.2 Estimate Claw-back FY 2014/15

The claw back provision for FY 2014/15 is based on the latest estimate of revenue to be earned up to the end of the financial year as compared to what the Regulator has allowed in the FY 2014/15 ROD. The latest estimate of the Revenue to be earned in FY 2014/15 is R10 054m compared to R10 674m allowed in the ROD for FY 2014/15. The deviation between the latest estimate revenue and revenues allowed is attributed to the volumes not materialising. This results in a claw-back of R620m in favour of the Authority. In line with the rules of the Tariff Methodology, fifty percent (50%) of the claw-back due is adjusted for in FY 2015/16, with the other half (50%) adjusted for in FY 2016/17. The calculations are highlighted in the table below:

Table 16: Claw-back estimation FY2014/15

Estimate Clawback	FY 2014/15 R'm
Allowed Revenue per ROD FY 2014/15	10 674
Latest Estimate Revenue	10 054
Estimated Clawback	620
50% Clawback Adjustment in FY 2015/16	**310**
Total Clawback due to customers FY 2015/16	
Clawback FY 2013/14	(615)
Return on Clawback FY 2013/14	(23)
Estimate FY 2014/15	310
Net Clawback FY 2015/16	**(328)**
Clawback Adjustment for FY 2014/15 in FY 2016/17 due to the Authority	
50% Clawback Adjustment in FY 2016/17	310

Included in the calculations, is a return or finance cost on the claw-back for FY 2013/14. The return is calculated based on the WACC of 5.21% allowed by the Regulator for FY 2013/14 and adjusted for the notional portion of tax expense payable to the South African Revenue Services (SARS).

7.2 Revenue Requirement

The application of the methodology using the respective components described above is illustrated in the table below:

Table 17: Revenue Requirement

Details	FY 2015/16	FY 2016/17	FY 2017/18
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
RAB	67 000	72 995	81 532
Vanilla WACC	5.59%	5.78%	6.01%
Return on Capital	3 745	4 219	4 900
Plus: Depreciation	1 807	1 968	2 201
Plus: Operating Costs	5 020	5 489	5 905
Plus: Taxation Expense	964	1 064	1 219
Plus/Less: Clawback	(328)	310	-
Revenue Allowed	***11 208***	***13 050***	***14 225***
Less: Real Estate	(2 449)	(2 674)	(2 933)
Marine Revenue	***8 759***	***10 376***	***11 292***

Application of the Revenue Requirement formula results in a revenue requirement of R11 208m comprising of Real Estate business revenue of R2 449m and Marine Business revenue of R8 759m.

7.3 Tariff Application

In order to determine Marine Business revenue to be derived from tariff adjustments, the required revenue of R8 759m is compared with the expected revenue of R7 783m for FY 2014/15 and increased with the expected weighted average growth in volumes of 2.8% for FY 2015/16.

The same process is rolled forward for FY 2016/17 and FY 2017/18 on an indicative basis.

The table that follows indicates the revenue contribution solely on volume movement indicating a weighted average volume growth of 2.8%.

Table 18: Revenues related to volume growth (FY 2015/16)

Details	2014/15 Volumes : Latest Estimatet	2014/15 Revenue : Tariff Book Budget R million	2015/16 Volumes : Increase Budget	2015/16 Revenue : Volume increase before Tariff Increase Budget R million
Containers TEU's				
Deepsea Full: Imports	1 396 498	2 760	65 533	130
Deepsea Full: Exports	1 166 173	759	55 494	36
Transhipment	1 048 826	81	62 831	5
Other	1 008 369	45	30 765	1
Total Container (TEUs)	**4 619 865**	**3 645**	**214 623**	**172**
Vehicles (Units)				
Vehicles: Imports	319 367	282	15 372	13
Vehicles: Exports	262 303	98	15 008	6
Other	81 754	128	3 905	6
Total Ro-Ro (Units)	**663 424**	**508**	**34 286**	**25**
Breakbulk (Metric Tons)				
Breakbulk: Imports	2 355 471	73	135 188	4
Breakbulk: Exports	5 232 703	136	656 046	17
Other	338 490	12	(46 754)	(0)
Total Breakbulk (Tons)	**7 926 663**	**220**	**744 480**	**21**
Dry Bulk (Metric Tons)				
Drybulk: Imports	8 970 050	162	534 218	6
Drybulk: Exports	219 518 547	1 095	7 865 560	54
Other	1 039 122	20	325 433	8
Total Dry Bulk (Tons)	**165 517 719**	**915**	**6 702 433**	**50**
Liquid Bulk (Kl)				
Liquidbulk: Imports	27 741 062	387	1 384 333	13
Liquidbulk: Exports	2 019 459	69	655 747	22
Other	5 445 034	77	71 764	(0)
Total Liquid Bulk (Kilo litres)	**35 205 555**	**533**	**2 111 844**	**35**
Cargo Dues Revenue		**5 821**		**303**

REVENUE	2014/15 Revenue Budget R million	2015/16 Weighted Average Revenue	2015/16 Revenue: Volume Increase R million	2015/16 Revenue: Before Tariff Increase R Million
Containers	3 645	4.7%	172	3 816
Break Bulk	220	9.6%	21	242
Dry Bulk	915	5.5%	50	966
Liquid Bulk	533	6.5%	35	568
Automotive	508	5.0%	25	533
TOTAL CARGO DUES	**5 821**	**5.2%**	**303**	**6 125**
Marine & other revenue	1 962	-4.3%	(84)	1 878
TOTAL TARIFF BOOK REVENUE	**7 783**	**2.8%**	**219**	**8 002**
Real estate revenue	2 271	7.9%	178	2 449
TOTAL REVENUE	**10 054**	**4.0%**	**397**	**10 452**

Application of the weighted average volume growth of 2.8% results into an average tariff adjustment of 9.47% for FY 2015/16.

Table 19: Marine Revenue

Marine Revenue	FY 2015/16	FY 2016/17	FY 2017/18
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
Prior Year Revenue	7 783	8 759	10 376
Estimated Volume Growth	2.80%	2.20%	2.20%
Revenue after volume growth	8 001	8 952	10 604
Required Revenue	8 759	10 376	11 292
Tariff Increase	**9.47%**	**15.91%**	**6.49%**

The indicative tariff adjustments for FY 2016/17 and FY 2017/18 illustrates that the roll-out of the Authority's Capex programme in terms of the MDS will result in spikes and troughs for future tariff adjustments when applying the Revenue Requirement formula.

Therefore for FY 2015/16 , based on the application of the Tariff Methodology, the Authority applies to the Regulator for a revenue of R11 208m comprising Marine Business revenue of R8 759m and Real Estate business revenue of R 2 449m. This translates to an average overall tariff adjustment of **9.47%**.

8. Tariff book

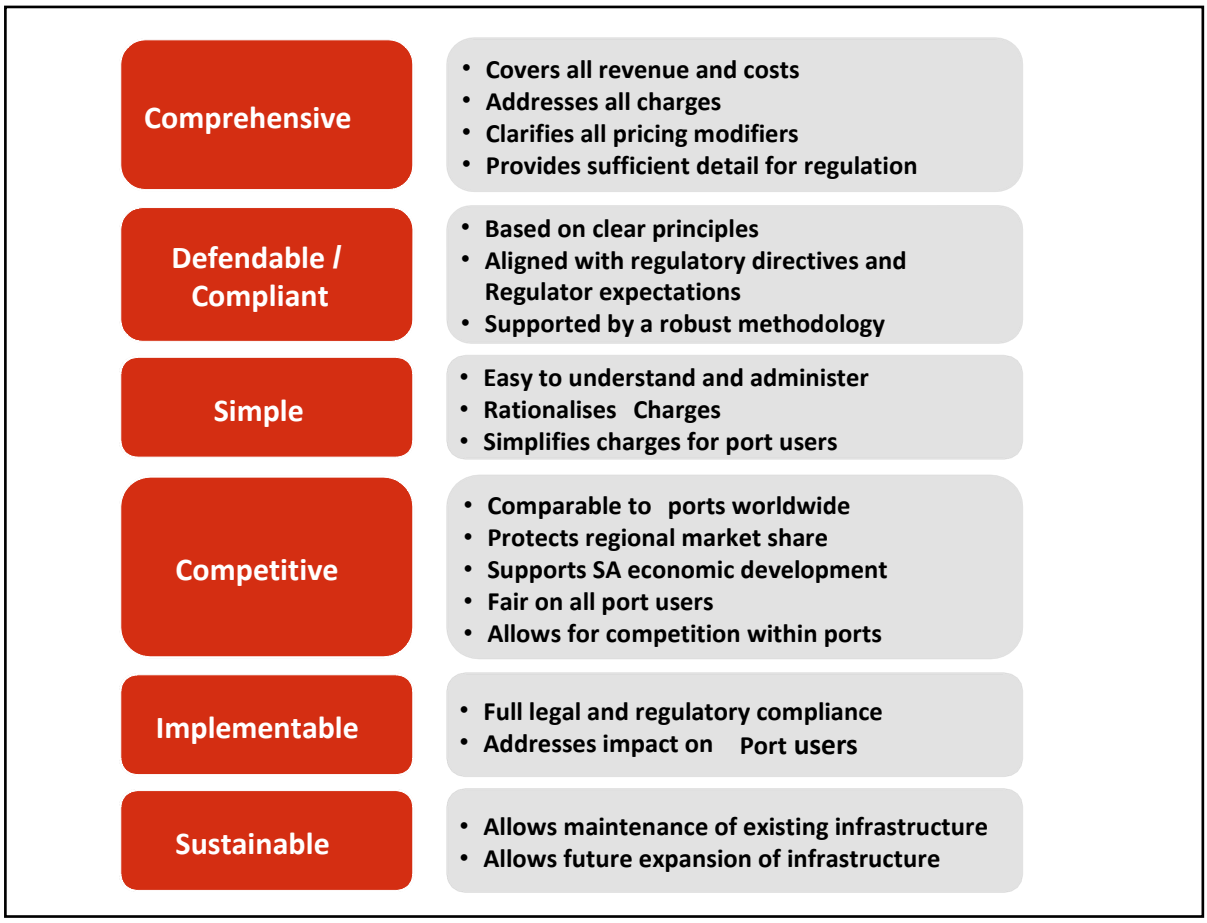
Revenue to the Authority is a compensation for the utilisation of the port infrastructure and services for all port users. It is therefore incumbent on the Authority to raise tariffs reasonably in order to sustain the organisation into the future and allow the economy to grow as well.

8.1 The Authority's Pricing Strategy

The Pricing Strategy is informed by Section 72(1)(a) of the Act. 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.

The Authority is currently in the process of engaging the Regulator on the proposed Pricing Strategy (i.e. tariff structure). The aim of the Pricing Strategy is to adjust imbalances in the current tariff book, and this in its nature requires a time period longer than one year in order to allow a phased-in approach to cushion the impact on port users in cases where the required adjustments are significant. The key pillars of the Pricing Strategy are highlighted in the diagram that follows:

Diagram 4: Key Pillars of the Pricing Strategy



In development of the Pricing Strategy; the Authority adopted an economic allocation of costs approach which is premised on the principle of 'user pay' resulting in cost reflective tariffs. This includes revisiting the contribution of revenue from terminal operators through rental income. Internationally, landlord ports derive a larger portion of revenue from rental income. The rationale behind this being that terminal operators economically benefit the most from access to port infrastructure as compared to other port users. In addition the higher the rent levied against terminal operators, the greater the incentive for terminal operators to maximise efficiencies and productivity in order to enhance their own profitability.

8.2 Implementation of the Pricing Strategy

The Authority's Pricing Strategy, includes a proposal for a new tariff structure on the basis of cost recovery, user pay principle and public interest in allocating costs to the three port user groups, namely Cargo Owners, Shipping Lines and Terminal Operators. This new tariff structure was based on the results of the provisional asset allocation exercise which indicated that a fair split of assets could result in 33% of assets allocated to Terminal Operators, 46% to Cargo Owners and 21% to Shipping Lines (which has not yet been

agreed to by the Regulator). Stemming from the proposed Pricing Strategy, the following tariff reductions were implemented in FY 2013/14:

- Container full export cargo dues reduced by 43.2%
- Container full import cargo dues reduced by 14.3%
- Motor vehicles exported on own wheels (Ro-Ro) cargo dues reduced by 21.1%

For FY 2014/15 the Regulator allowed an inflationary tariff increase of 5.9% in all tariff categories with the exception of some dry bulk commodities (Coal, Manganese and Iron Ore) and marine tariffs which was allowed to increase by 8.15% in order to rebalance the contribution to revenue by these categories.

Ports form part of national and international transport chains. The volume of trade moving through these chains depends largely on both micro and macro-economic factors such as the level of economic activity in a country such as production, consumption etc.

8.3 Tariff Book Proposal for FY 2015/16

The Authority continues to reduce tariffs for containers and Ro-Ro's as in the previous tariff cycles, in an effort to ensure the rebalancing of tariffs to fairly allocate costs to all port user groups.

The Authority has also considered an approach that continues to support Government's economic objectives of differentiation between export and import tariffs to ensure the development of the industrial sector with a specific focus on value adding activities.

The aforementioned objectives have been balanced with the need to further consider the following peculiar aspects of the South African economy:

- The South African economy is heavily reliant on exports of minerals and as a result dependent on the economic performance (growth) of major trading partners;
- A world economic growth that is growing at much a lower rate than previously forecasted with some of the major trading partners like China and India slowing down; and
- Major export partners including Germany and America growing at much lower rates.

In line with the above and the need to promote the productive use of port infrastructure and efficiency, the Authority has differentiated the tariffs as follows:

- **8.5% on cargo dues for export of full containers**
- **8.5% on cargo dues for motor vehicles exported on own wheels (RoRo); and**
- **9.6% on all other marine tariff categories and cargo dues.**

The weighted average tariff adjustment of 9.47% for FY 2015/16, with differentiated tariff approach to address some of the issues highlighted above results in the following table:

Table 20: Differentiated Tariff Approach results

Details	2014/15 Volumes : Budget	2014/15 Revenue : Tariff Book Budget R million	2015/16 Volumes : Increase Budget	2015/16 Revenue : Volume increase before Tariff Increase Budget R million	2015/16 Revenue : Only Tariff Increase Budget R million	2015/16 Average Tariff Increase %	2015/16 Total Revenue Budget R million	2015/16 Total Volume Estimate
Containers TEU's								
Deepsea Full: Imports	1 396 498	2 760	65 533	130	277	9.6%	3 166	1 462 031
Deepsea Full: Exports	1 166 173	759	55 494	36	68	8.5%	862	1 221 667
Transhipment	1 048 826	81	62 831	5	8	9.6%	94	1 111 657
Other	1 008 369	45	30 765	1	4	9.6%	51	1 039 133
Total Container (TEUs)	**4 619 865**	**3 645**	**214 623**	**172**	**357**	**9.3%**	**4 173**	**4 834 488**
Vehicles (Units)								
Vehicles: Imports	319 367	282	15 372	13	36	12.3%	332	334 739
Vehicles: Exports	262 303	98	15 008	6	12	11.8%	116	277 311
Other	81 754	128	3 905	6	(0)	0.0%	134	85 659
Total Ro-Ro (Units)	**663 424**	**508**	**34 286**	**25**	**49**	**9.1%**	**582**	**697 709**
Breakbulk (Metric Tons)								
Breakbulk: Imports	2 355 471	73	135 188	4	7	9.6%	84	2 490 659
Breakbulk: Exports	5 232 703	136	656 046	17	15	9.6%	168	5 888 748
Other	338 490	12	(46 754)	(0)	1	9.6%	13	291 736
Total Breakbulk (Tons)	**7 926 663**	**220**	**744 480**	**21**	**23**	**9.6%**	**265**	**8 671 143**
Dry Bulk (Metric Tons)								
Drybulk: Imports	8 970 050	162	534 218	6	16	9.6%	184	9 504 268
Drybulk: Exports	219 518 547	1 095	7 865 560	54	110	9.6%	1 259	227 384 107
Other	1 039 122	20	325 433	8	3	9.6%	31	1 364 555
Total Dry Bulk (Tons)	**165 517 719**	**915**	**6 702 433**	**50**	**92**	**9.6%**	**1 058**	**172 220 152**
Liquid Bulk (Kl)								
Liquidbulk: Imports	27 741 062	387	1 384 333	13	38	9.6%	438	29 125 395
Liquidbulk: Exports	2 019 459	69	655 747	22	9	9.6%	100	2 675 206
Other	5 445 034	77	71 764	(0)	9	11.2%	85	5 516 799
Total Liquid Bulk (Kilo litres)	**35 205 555**	**533**	**2 111 844**	**35**	**56**	**9.8%**	**623**	**37 317 399**
Cargo Dues Revenue		**5 821**		**303**	**576**		**6 701**	

REVENUE	2014/15 Revenue Budget R million	2015/16 Weighted Average Revenue Volume Increase %	2015/16 Revenue: Volume Increase R million	2015/16 Revenue: Tariff Increase R million	2015/16 Weighted Average Revenue Tariff Increase %	2015/16 Revenue Budget R million
Containers	3 645	4.7%	172	357	9.3%	4 173
Break Bulk	220	9.6%	21	23	9.6%	265
Dry Bulk	915	5.5%	50	92	9.6%	1 058
Liquid Bulk	533	6.5%	35	56	9.8%	623
Automotive	508	5.0%	25	49	9.1%	582
TOTAL CARGO DUES	**5 821**	**5.2%**	**303**	**576**	**9.4%**	**6 701**
Marine & other revenue	1 962	-4.3%	(84)	180	9.6%	2 058
TOTAL TARIFF BOOK REVENUE	**7 783**	**2.8%**	**219**	**757**	**9.5%**	**8 759**
Real estate revenue	2 271	7.9%	178	-		2 449
TOTAL REVENUE	**10 054**	**4.0%**	**397**	**757**		**11 208**

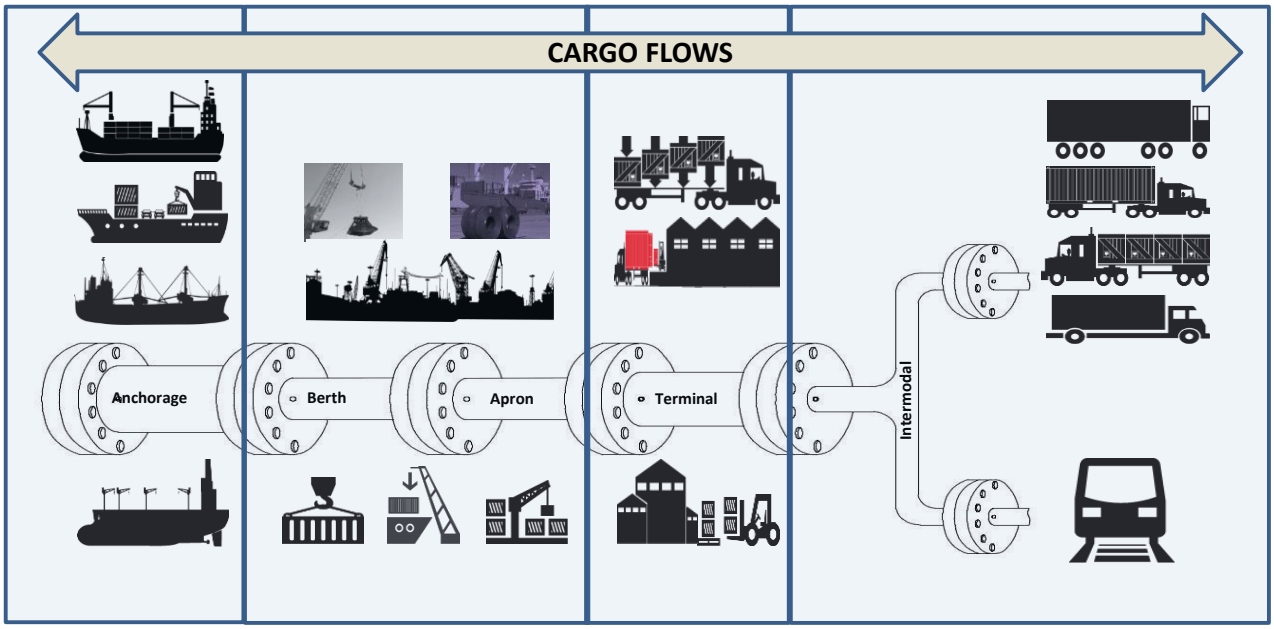
9. Port Efficiency

The South African ports system handles approximately 95% of South Africa's internationally traded cargo. The performance of the ports system is therefore of strategic importance to the South African economy. The Authority is responsible for ensuring that relevant port capacity is available ahead of demand and that the existing port capacity is optimally utilised. The former implies that new or additional port capacity may be created when necessary while the latter implies that existing port capacity must perform at optimal levels of efficiency before the creation of new capacity can be considered. This has implications for port service levels, port costs and the prosperity of port users.

The National Ports Act No 12 of 2005 ("the Act") mandates the Authority to improve the overall performance of South African ports with specific emphasis on port efficiency. The Act is explicit regarding performance standards for licences issued and agreements concluded by the Authority and implicit regarding the Authority's role in the overall efficiency improvement of the port supply chain. The Authority is also responsible for oversight that would ensure that the required levels of efficiency are achieved.

The Authority has developed a ports performance model to structure improvements in port efficiency (**Diagram 5**: **Port Performance Model**). This model views a port as a holistic supply chain and focuses on the components of the total port vessel dwell time and total port cargo dwell time. This approach enables the quantification of port capacity, determining performance standards, assessing actual performance against standards and assigning responsibility for performance to the relevant port user. This model has been consulted with port users and relevant stakeholders.

Diagram 5: Port Performance Model



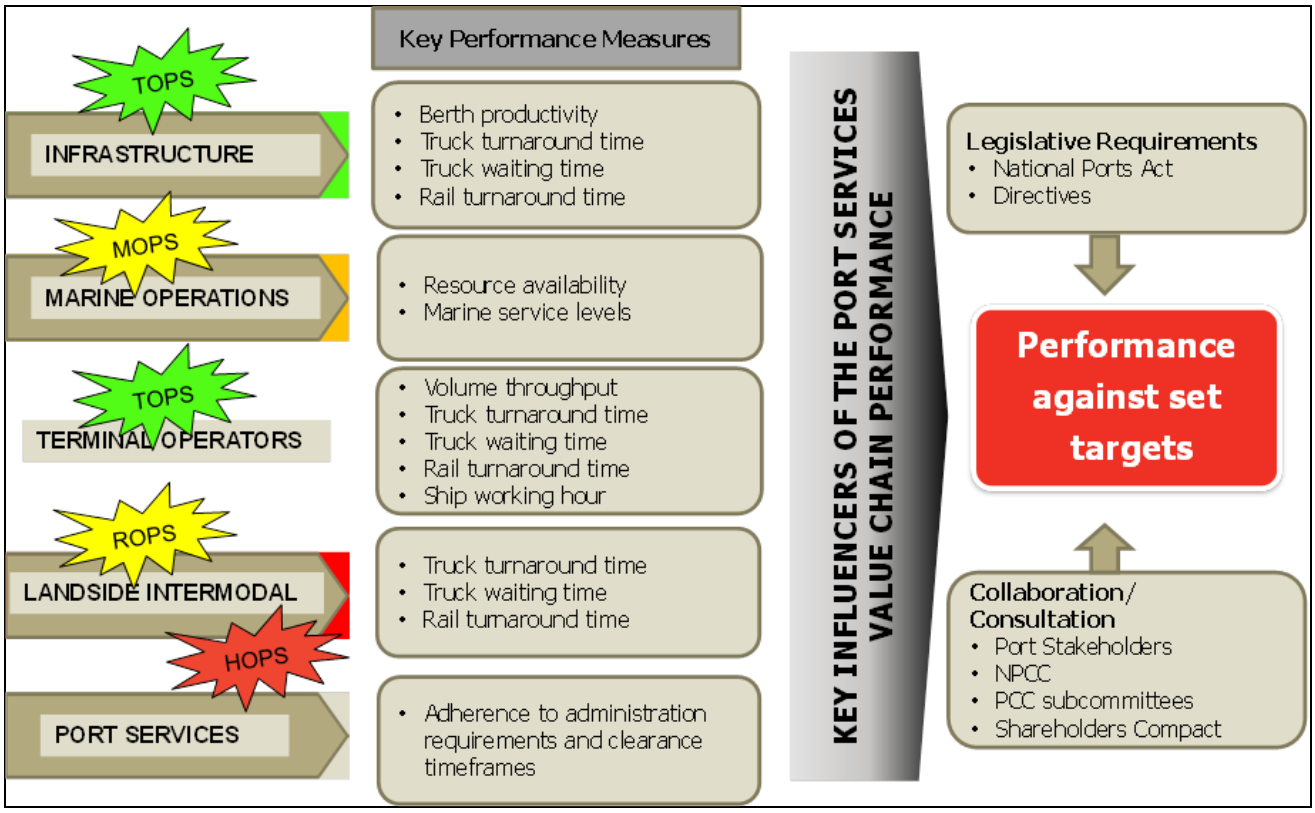
Terminal Operator Performance Standards (TOPS) have been implemented for all Terminal Operators across the ports system in July 2013. TOPS are a set of consulted performance measures with targets informed primarily by port capacity. A Terminal Operator's performance against TOPS is assessed by the

Authority on a quarterly interval and reviewed on an annual basis. With Terminal Operators accounting for approximately 95% of port ship turnaround time and cargo dwell time, TOPS will assist in ensuring that port capacity is utilised efficiently.

The improvement of port efficiency is data driven and underpinned by an understanding of port capacity. The Authority is currently conducting an independent assessment of port terminal design, installed and operating capacities in order to better inform performance standards and to quantify spare capacity in the ports system.

The development of efficiency improvement initiatives for supporting operational services such as port rail and port road services which are key to the port supply chain as illustrated in **Diagram 6: Port Efficiency Improvement Initiatives** are currently underway. Marine Operations Performance Standards (MOPS), Rail Operations Performance Standards (ROPS) and Haulier – Road Operations Performance Standards (HOPS) will be informed by consulting with port users quantification, setting performance standards, performance monitoring and review.

Diagram 6: Port Efficiency Improvement Initiatives



The Authority has made significant progress towards developing institutional capacity and improving human resource levels to address port efficiency improvement. Port Oversight Committees have been established per port to administer efficiency improvement initiatives and oversight. Port Oversight Committees will ensure, amongst others that remedial actions are implemented where performance standards are not achieved in practice. The Authority is in the process of establishing Port Operations Centres which will monitor the performance of port operations against relevant targets or standards.

The Authority is confident that the above focus will lead to improved capacity utilisation and increased levels of port efficiency.

9.1 Terminal Operations Licencing Oversight

The Terminal Operating Licence establishes the framework and the conditions that the Authority prescribes for terminal operators within its respective port precincts.

Some of the key components of the Licence include the Safety, Health and Environmental Management compliance, Maintenance regime for its assets, as well as the operational performance requirements.

Since the issue of the eighty nine (89) Terminal Operator Licences in July 2012, in terms of Section 57 read with Section 65 of the Act, a detailed Oversight Regime has been developed and implemented

In so far as terminal operational performance is concerned, the various measures for the 89 terminals have been finalised in conjunction with the Terminal Operators and are being monitored and refined on an ongoing basis.

10. Marine Operations Management

The Authority is committed to ensuring a seamless service is provided to vessels entering or exiting South African ports.

This will include a process of stringent monitoring and measurement of the causative factors, which could result in ships being delayed due to Pilotage, Tugs or Berthing Services (which are under the direct control of the Authority). Approved targets have been set for each of the aforementioned categories and are monitored at various managerial platforms.

10.1.1 Pilotage

Pilotage delays are caused due to pilot license restrictions or the pilot being occupied with other shipping at the required service time.

In order to reduce the abovementioned type of delay the following initiatives are currently being implemented:

- On-going focus of ensuring that pilots are qualified to higher license levels (up to open license) thereby ensuring an appropriate spread of experience across all shifts; and
- On-going proficiency training which will include simulator training as well as in class training sessions.

The Authority currently offers pilotage via helicopters at the ports of Durban and Richards Bay. An external service provider has been operating the Authority's helicopter service since 1995. For the past 19 years, no capacity building was undertaken in this area of expertise and the Authority has no helicopter pilots and engineers to man this operation. The Authority has taken a decision to develop capacity in this area and the helicopter service is expected to be insourced within the next 60 months. The fully integrated service will

further strengthen Authority's internal controls and create opportunities for growth and development of previously disadvantaged individuals.

The first phase of this project commenced in the second half of 2012/13 and aims to develop human capacity in this area through a skills development programme. A total of thirty (30) aviation cadets are currently in training as part of the insourcing project execution.

10.1.2 Towage

Tug delays are caused by tugs not being available at the required service time due to mechanical breakdowns, the tugs being busy with other shipping, or due to a shortage of tug capacity (which will include manning levels).

In order to reduce the abovementioned types of delays, the following initiatives are currently being implemented:

- The on-going upgrade of the existing marine fleet which includes the delivery of new tugs which are now operational in the various ports;
- As of 01 August 2014, TNPA has also invested in the commencement of building of 8 x 70Tonne and 1 x 100Tonne bollard pull tugs with a local shipyard in South Africa over a period of 42 months . These tugs are replacements for Saldanha, Port Elizabeth, Durban and Richards Bay.
- On-going focus on the Tug Maintenance regime to ensure maximum availability;
- Implementation of the Marine Operational Performance Standards [MOPS] to manage performance.

The changes in the regulations namely Merchant Shipping Act, 1951 (Act No. 57 of 1951)- Merchant Shipping (Safe Manning, Training and Certification) Regulations, 2013 come into force on the 01 January 2017. This means that the qualifications and certificates of competence required by the Authority to man the tugs, must comply line with the regulations. Hence, a significant effort by the Authority to ensure that all the necessary training and development is in place to meet with compliance of the South African Maritime Safety Authority that enforces the regulations.

10.1.3 Berthing Services

Berthing delays are generally caused due to insufficient berthing gangs being at the allocated to a berth or not being available at the required service time due to servicing another vessel.

In order to reduce the abovementioned type of delays, a quad shift system at the ports of Cape Town, Durban, Saldanha and Richards Bay as well as additional number of personnel per gang have been implemented which will ensure that the berthing services shift patterns are aligned with the pilotage; tug operations and that the personnel in the gangs are self-relieving [catering for leave, sick and training].

Marine Operations will review all marine operational processes, and this includes marine operational planning, resourcing, technology and infrastructure. The functional structures are continuously being monitored to improve efficiency levels. It is expected that this will also ensure that the current number of shipping delays are reduced, thereby further enhancing the overall efficiency of the ports system.

Efficiencies will be measured in accordance with the Marine Operations Performance Standards and will be monitored and recorded by the Operations Centres.

11. Conclusion

South Africa's network of national economic infrastructure positioned the country favourably to take advantage of the move towards trade globalisation. However, as cited in the National Development Plan, the real challenge now is to take this economic infrastructure to the next level in order to actively compete for new opportunities. The successful achievement would result in the reduction in the current rate of unemployment and alleviate the extent of poverty in the country.

The South African ports occupy a central position in the transport and logistics chain with 95% of cargo traffic passing through them annually. The Authority is inherently required to play a leading role beyond landlordism in influencing economic growth through a responsive growth strategy as represented by the MDS programme.

The key pillars of the Authority's core strategy which is aligned to the MDS and aimed at reducing the cost of doing business and contributing to higher economic growth are as follows:

- Create and maintain adequate port infrastructure ahead of demand to enable volume growth;
- Improve port efficiency; and
- Assume a collaborative role to enhance port integration, logistics performance and market growth.

In fulfilling its strategic role, the Authority will continue to deepen its role in the economy by influencing economic growth through market collaboration.

The benefits of optimal level of port infrastructure are real and can be quantified as they accrue to exporters, cargo owners, shippers and macroeconomic trade in general. Much wider benefits accrue to the following stakeholders:

- **Government** – at the macroeconomic level improvement of external trade competitiveness, port efficiency, and better coordination of sea and land transport
- **Transport Sectors** – cost effective port operations and services allow for efficient and better use of transport assets, better competitive position for transport operators and business growth
- **Shippers, Exporters and Importers** – enhanced competitive position through lower port costs, lower maritime freight rates resulting in lower import and export costs
- **End Consumer** – Lower prices for consumer goods and increased access to wider range of products

As the Authority enters into the 4th of year of its MDS, the focus is on leadership to drive the implementation plan for infrastructure delivery and operational efficiencies. This drive will have to be met with sacrifices by stakeholders given the current state of the economy but is considered necessary so as to ensure that the port system is ready to take advantage and in some cases lead economic recovery.

In terms of the Port 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 tariff application for FY 2015/16 has been prepared in accordance with the approved Tariff Methodology issued by the Regulator and based on the Revenue Requirement formula.

Based on the application of the approved Tariff Methodology, and the Revenue Requirement Formula the Authority hereby applies to the Regulator for a revenue of R11 208m comprising Marine Business revenue of R8 759m and Real Estate business revenue of R2 449m. This translates to an average overall tariff adjustment of 9.47%.

The Tariff Methodology further states that the Authority is required to submit as part of the application any proposed changes to the existing tariff book that will reflect increase (or decreases) different from the average tariff increase applied for.

In alignment with the principles of the Pricing Strategy, of differentiating between export and import tariffs to support the development of the industrial sector with a specific focus on value adding activities, the Authority further proposes that the average 9.47% tariff adjustment be differentiated as follows:

- **8.5% on cargo dues for export of full containers**
- **8.5% on cargo dues for motor vehicles exported on own wheels (RoRo); and**
- **9.6% on all other marine tariff categories and cargo dues.**

ANNEXURE A: The Authority's Tariff Book

Table 21: The Authority's Tariff Definitions

Tariffs	Service Rendered	Application
Light dues	The provision of navigation aids to vessels along the South African 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 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, fire fighting 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)
Ship Repair Facilities[1]	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)

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	Service 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)

[1] The Authority has re-evaluated its involvement in ship repair facilities and the operation thereof. The decision has been taken that the Authority will continue to operate its ship repair facilities until the approval of the ship repair strategy.

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 2014/15 to FY 2017/18 is segregated into various categories in order to demonstrate the strategic objectives, major projects considered and the impact of such capital expenditure. In order to provide a view on future capex, information for a 7 year period has also been included. The figures presented below do not include any investments related to the Durban International Airport (Durban Dig Out Port) as guided by the Ports Regulator previously and in the approved Tariff Methodology.

Capital expenditure relating to ship repair and which is included the total capex is highlighted in Table 32.

The tables that follow illustrate the capital expenditure:

Table 23: Strategic Capital Objectives

Strategic objective / Strategy	Details	Target	Projections		
			Fixed Tariff Year	Indicative Tariff Years	
		2014/15	2015/16	2016/17	2017/18
		Rm	Rm	Rm	Rm
Re-engineering, Integration, Productivity and Efficiency	To maximise return on investments by obtaining additional volumes	969	918	2 389	6 787
	To maximise return on investments by improving operating efficiencies	611	943	543	553
	To preserve current revenue streams without obtaining additional volumes (ie. revenue protection)	806	974	1 081	1 015
Safety, Risk and Effective Governance	Ensure Safety Optimisation	252	447	285	518
	Optimise Business Enterprise Offerings	51	150	148	47
	Optimally Satisfy Social Investments (non economic value creating projects)	-	6	90	86
	Environmental	10	75	32	19
Human Capital	Optimise Human Resources	31	72	71	70
Total (excl. borrowing cost)		**2 730**	**3 584**	**4 638**	**9 094**

Table 24: List of Major Projects for the Authority

Project	Corridor	Commodity
Acquisition of 9 tugs (Rcb, Dbn, PE & Sld)	RCB/DBN/PE/SLD	All
Reconstruction of Sheet-Pile Quay Walls at Maydon Wharf	DBN	Break Bulk
Edwin Swales Link Road FEL 4	DBN	Other
Execution: DCT berth deepening 203 to 205	DBN	Containers (Maritime)
Execution: Pier 1 Phase 2 Infill (Salisbury Island)	DBN	Containers (Maritime)
Extend main breakwater and deepen entrance	EL	Other
Operationalise Port for Containers (Prelim & Execution)	NGQ	Containers (Maritime)
Tank farm Berth A100, roads, port entrance and services	NGQ	Liquid Bulk
Manganese Terminal	NGQ	Manganese
Ore Expansion Phase 2 Berth Construction	SLD	Export Iron Ore
Provision of second new TSHD	DRS	Other

Table 25: Expansion Business vs. Maintenance of Current Business

- FY 2014/15

Purpose	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Target 2014/15											
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Expand Business : - Growth initiatives	1 151	128	107	0	168	-	2	0	31	-	713	3
Maintain current Business : - Replacement Efficiency/ Service Quality	1 579	194	461	125	8	270	5	116	228	31	55	86
Total (excl. borrowing cost)	2 730	322	568	125	176	270	7	116	259	31	767	88

- FY 2015/16

	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections 2015/16											
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Expand Business : - Growth initiatives	1 622	267	164	68	535	15	27	-	269	4	215	59
Maintain current Business : - Replacement Efficiency/ Service Quality	1 962	333	623	186	11	246	3	246	125	51	2	137
Total (excl. borrowing cost)	3 584	600	787	254	546	261	30	246	394	55	216	196

- FY 2016/17

	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections											
	2016/17											
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Expand Business : - Growth initiatives	2 689	197	133	30	2 042	25	-	-	2	-	173	87
Maintain current Business : - Replacement Efficiency/ Service Quality	1 949	258	578	154	51	313	7	286	203	40	2	59
Total (excl. borrowing cost)	4 638	454	711	184	2 093	338	7	286	206	40	175	146

- FY 2017/18

	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections											
	2017/18											
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Expand Business : - Growth initiatives	6 984	180	299	48	5 676	5	5	-	760	-	-	12
Maintain current Business : - Replacement Efficiency/ Service Quality	2 110	216	1 183	97	185	109	8	195	42	41	2	33
Total (excl. borrowing cost)	9 094	396	1 481	145	5 860	114	13	195	802	41	2	45

Table 26: Ports Related Spending by Asset Type

- FY 2014/15

Asset Type	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Target											
	2014/15											
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Buildings and structures	352	175	59	37	0	22	6	28	3	11	-	12
Aircraft	-	-	-	-	-	-	-	-	-	-	-	-
Land	6	6	-	-	-	-	-	-	-	-	-	-
Machinery, equipment and furniture	242	17	24	2	2	3	1	84	5	20	9	76
Permanent way and works	-2	1	0	-	-	-	-	-3	-	-	-	-
Vehicles, Rolling stock & containers	-	-	-	-	-	-	-	-	-	-	-	-
Port Facilities	2 130	123	483	87	174	245	-	8	251	-	758	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines networks (etc)	1	-	1	-	-	-	-	-	-	-	-	-
Total (excl. borrowing cost)	2 730	322	568	125	176	270	7	116	259	31	767	88

- FY 2015/16

Asset Type	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections 2015/16											
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Buildings and structures	597	329	31	105	2	10	26	78	6	-	-	11
Aircraft	-	-	-	-	-	-	-	-	-	-	-	-
Land	1	-	1	-	-	-	-	-	-	-	-	-
Machinery, equipment and furniture	602	18	90	5	101	8	1	135	4	55	2	185
Permanent way and works	15	3	2	8	-	2	-	-	-	-	-	-
Vehicles, Rolling stock & containers	5	-	-	5	-	-	-	-	-	-	-	-
Port Facilities	2 330	249	628	132	442	242	3	34	385	-	215	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines networks (etc)	35	-	35	-	-	-	-	-	-	-	-	-
Total (excl. borrowing cost)	3 584	600	787	254	546	261	30	246	394	55	216	196

- FY 2016/17

Asset Type	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections 2016/17											
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Buildings and structures	599	200	85	83	26	80	3	122	-	-	-	-
Aircraft	-	-	-	-	-	-	-	-	-	-	-	-
Land	91	87	4	-	-	-	-	-	-	-	-	-
Machinery, equipment and furniture	1 608	9	50	2	1 282	53	1	25	-	40	2	146
Permanent way and works	83	25	50	8	-	-	-	-	-	-	-	-
Vehicles, Rolling stock & containers	6	-	-	1	5	-	-	-	-	-	-	-
Port Facilities	2 248	134	519	90	780	205	3	139	206	-	173	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines networks (etc)	3	-	3	-	-	-	-	-	-	-	-	-
Total (excl. borrowing cost)	4 638	454	711	184	2 093	338	7	286	206	40	175	146

- FY 2017/18

Asset Type	TNPA	RCB	DBN	EL	NGQ	PE	MSB	CPT	SLD	LHS	DRS	HO
	Projections 2017/18											
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Buildings and structures	766	98	280	63	123	91	5	89	18	-	-	-
Aircraft	70	20	50	-	-	-	-	-	-	-	-	-
Land	18	3	15	-	-	-	-	-	-	-	-	-
Machinery, equipment and furniture	4 314	15	140	2	4 028	23	6	10	4	41	2	45
Permanent way and works	169	111	50	8	-	-	-	-	-	-	-	-
Vehicles, Rolling stock & containers	57	-	-	42	15	-	-	-	-	-	-	-
Port Facilities	3 695	149	942	30	1 694	-	3	96	780	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines networks (etc)	5	-	5	-	-	-	-	-	-	-	-	-
Total (excl. borrowing cost)	9 094	396	1 481	145	5 860	114	13	195	802	41	2	45

Table 27: Capital expenditure and throughput per commodity

- Containers

Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	
	R'm							Major Capital Projects
Containers	**123**	**345**	**394**	**395**	**1 481**	**2 080**	**2 400**	- Dbn: DCT berth deepening berth 203 to 205
-Expand	*120*	*345*	*374*	*245*	*1 281*	*1 950*	*2 400*	- Dbn: Pier 1 phase 2 Infill (Salisbury Island)
-Maintain	*3*	-	*20*	*150*	*200*	*130*	-	- NGQ: Automated mooring system D101 -103
Volumes ('000 TEUs)								
-Budget and Projections	*4 620*	*4 834*	*5 011*	*5 150*	*5 257*	*5 432*	*5 845*	
-Capacity	*8 543*	*8 543*	*8 543*	*8 543*	*8 543*	*8 943*	*8 943*	
Total capex spend to this year						4 818		
Indicative return on capital						*269*		
Depreciation						*120*		
Additional Revenue Required						***390***		

- Liquid Bulk

Liquid Bulk								
Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	
	R'm							Major Capital Projects
Liquid Bulk	**132**	**270**	**300**	**1 685**	**1 014**	**328**	**200**	- NGQ: tank farm Berth A100, roads, port entrance and services
-Expand	*9*	*100*	*85*	*1 233*	*942*	*35*	*120*	- NGQ: Quays and services for expansion up Coega River (liquid bulk refinery)
-Maintain	*123*	*170*	*215*	*452*	*71*	*293*	*80*	
Volumes (mKl)								
-Budget and Projections	*35*	*37*	*37*	*37*	*41*	*42*	*42*	
-Capacity	*77*	*77*	*77*	*78*	*78*	*80*	*80*	
Total capex spend to this year						3 729		
Indicative return on capital						*208*		
Depreciation						*93*		
Additional Revenue Required						***302***		

- Iron Ore

Iron Ore								
Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	
	R'm							Major Capital Projects
Iron Ore	**18**	**100**	**-**	**367**	**922**	**1 502**	**300**	- SLD: Ore Expansion Phase 2 berth Construction (to 82.5mtpa)
-Expand	*15*	*100*	-	*367*	*922*	*1 502*	*300*	
-Maintain	*3*	-	-	-	-	-	-	
Volumes (mt)								
-Budget and Projections	*56*	*58*	*58*	*58*	*62*	*68*	*68*	
-Capacity	*58*	*67*	*67*	*67*	*67*	*83*	*83*	
Total capex spend to this year						2 909		
Indicative return on capital						*163*		
Depreciation						*73*		
Additional Revenue Required						***235***		

- Coal

Coal								
Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	
	R'm							Major Capital Projects
Coal	**6**	**128**	**30**	**80**	**-**	**-**	**-**	- RCB: Construct common user berth 307 - coal other than RBCT
-Expand	*2*	*128*	*30*	*80*	-	-	-	
-Maintain	*4*	-	-	-	-	-	-	
Volumes (mt)								
-Budget and Projections	*77*	*79*	*81*	*85*	*88*	*92*	*98*	
-Capacity	*113*	*113*	*113*	*115*	*115*	*115*	*115*	

- Manganese

Manganese								
Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Major Capital Projects
	R'm							
Manganese	**64**	**106**	**1 667**	**4 269**	**2 174**	**400**	**-**	- NGQ: Manganese terminal
-Expand	*64*	*106*	*1 587*	*4 183*	*2 174*	*400*	-	- NGQ: Manganese Operator portion
-Maintain	-	-	*80*	*86*	-	-	-	
Volumes (mt)								
-Budget and Projections	*8*	*8*	*8*	*8*	*8*	*11*	*12*	
-Capacity	*10*	*10*	*10*	*24*	*24*	*24*	*24*	
Total capex spend to this year				6 106				
Indicative return on capital				*341*				
Depreciation				*153*				
Additional Revenue Required				***494***				

- Break-Bulk

Break Bulk								
Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Major Capital Projects
	R'm							
Break Bulk	**318**	**580**	**204**	**720**	**803**	**905**	**1 578**	- DBN: Reconstruction of Sheet-Pile quay Walls at Maydon Wharf
-Expand	*16*	*168*	*7*	*383*	*803*	*905*	*1 573*	- SLD: Refurbishment of rock quay
-Maintain	*302*	*412*	*197*	*337*	-	-	*5*	
Volumes (mt)								
-Budget and Projections	*8*	*9*	*9*	*9*	*9*	*9*	*9*	
-Capacity	*30*	*30*	*30*	*30*	*30*	*30*	*30*	

- Automotives

Automotives								
Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Major Capital Projects
	R'm							
Automotives	**-**	**-**	**-**	**5**	**10**	**10**	**20**	- PE: Provision of Car Terminal at the Southern Part of Port
-Expand	-	-	-	*5*	*10*	*10*	*20*	
-Maintain	-	-	-	-	-	-	-	
								- Increased capacity is due to additional slots at Durban Car Terminal
Volumes (units)								
-Budget and Projections	*663 424*	*697 709*	*710 919*	*730 439*	*732 504*	*762 970*	*775 126*	
-Capacity	*850 000*	*850 000*	*890 000*	*890 000*	*890 000*	*1 010 000*	*1 010 000*	

- Other (Incl. LHS & Bulk Services)

Other (incl LHS & Bulk Services)								
Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Major Capital Projects
	R'm							
Other (incl LHS & Bulk Services)	**717**	**1 282**	**1 401**	**1 392**	**1 437**	**1 416**	**1 879**	- This includes all other investments at Ports
-Expand	*56*	*161*	*271*	*419*	*448*	*402*	*1 009*	including port entrances, roads, electrical
-Maintain	*661*	*1 120*	*1 130*	*973*	*989*	*1 014*	*870*	networks, sewerage networks etc

- Fleet- Craft & Dredging Services

Fleet-Craft and Dredging Services								
Details	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Major Capital Projects
	R'm							
Fleet - Craft	**584**	**557**	**467**	**179**	**270**	**353**	**1 111**	- DRS: Provision of 2nd TSHD
-Expand	*156*	*300*	*162*	*70*	*70*	*42*	*157*	- Tugs: Acquisition of 9 tugs (RCB,DBN,PE,SLD)
-Maintain	*427*	*258*	*305*	*109*	*200*	*312*	*954*	- Tugs: Acquisition of 6 tugs (DBN)
Dredging Services	**767**	**216**	**175**	**2**	**2**	**2**	**92**	
-Expand	*713*	*215*	*173*	-	-	-	-	
-Maintain	*55*	*2*	*2*	*2*	*2*	*2*	*92*	

Table 28: Multi-Year Strategic Objectives

Strategy	Target	Projections						
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total 7yr
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Re-engineering, Integration, Productivity and Efficiency	969	918	2 389	6 787	6 544	5 159	5 285	28 050
	611	943	543	553	133	53	85	2 921
	806	974	1 081	1 015	1 036	1 391	2 077	8 380
Safety, Risk and Effective Governance	252	447	285	518	318	318	133	2 270
	51	150	148	47	70	70	-	536
	-	6	90	86	-	-	-	181
	10	75	32	19	3	1	-	139
Human Capital	31	72	71	70	10	5	-	259
Total (excl. borrowing cost)	**2 730**	**3 584**	**4 638**	**9 094**	**8 114**	**6 996**	**7 580**	**42 736**

Table 29: Multi-Year Capex Spending Per Port Service

Capex spend per Port Service / Facility	Target	Projections						
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total 7yr
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Infrastructure	1 348	2 756	3 956	8 872	7 806	6 551	6 279	37 567
Marine services	584	557	467	179	270	353	1 111	3 521
Lighthouse services	31	55	40	41	36	90	98	391
Dredging services	767	216	175	2	2	2	92	1 257
Total (excl. borrowing cost)	**2 730**	**3 584**	**4 638**	**9 094**	**8 114**	**6 996**	**7 580**	**42 736**

Table 30: Multi-Year Ports Related Spending by Asset type

Asset Type	Target	Projections						
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total 7yr
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Buildings and structures	352	597	599	766	479	521	652	3 967
Aircraft	-	-	-	70	136	12	-	218
Land	6	1	91	18	-	2	-	118
Machinery, equipment and furniture	242	602	1 608	4 314	2 405	668	278	10 118
Permanent way and works	-2	15	83	169	201	199	-	664
Vehicles, Rolling stock & containers	-	5	6	57	16	-	-	83
Port Facilities	2 130	2 330	2 248	3 695	4 876	5 594	6 650	27 523
Other	-	-	-	-	-	-	-	-
Pipelines networks (etc)	1	35	3	5	-	-	-	45
Total (excl. borrowing cost)	**2 730**	**3 584**	**4 638**	**9 094**	**8 114**	**6 996**	**7 580**	**42 736**

Table 31: Multi-Year Port Related Spending per Commodity

Commodity	Target	Projection						
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total 7yr
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Containers	123	345	394	395	1 481	2 080	2 400	7 218
Liquid Bulk	132	270	300	1 685	1 014	328	200	3 929
Iron Ore	18	100	-	367	922	1 502	300	3 209
Coal	6	128	30	80	-	-	-	244
Manganese	64	106	1 667	4 269	2 174	400	-	8 681
Break Bulk	318	580	204	720	803	905	1 578	5 108
Automotive	-	-	-	5	10	10	20	45
Fleet - craft	584	557	467	179	270	353	1 111	3 521
Dredging Services	767	216	175	2	2	2	92	1 257
Other (incl LHS)	717	1 282	1 401	1 392	1 437	1 416	1 879	9 524
Total (excl. borrowing cost)	**2 730**	**3 584**	**4 638**	**9 094**	**8 114**	**6 996**	**7 580**	**42 736**

Table 32: Total Ship Repairs

Total Shiprepair included in draft capex	Target	Projections						
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total 7yr
	Rm							
Total Ship repair	65	286	182	477	936	982	1 655	**4 583**

- **Port Consultative Committees (PCCs)**

During the PCC meetings of FY 2013/14 a request for roadshows to be held in order for each Port to present capital projects to both PCC members as well as general Port stakeholders. This process was communicated through various mediums such as adverts and e-mails to organised bodies. The table below indicates the various dates when the PCC roadshows occurred.

Table 33: PCC Roadshow dates

Port Name	PCC Presentation Date
Mossel Bay	14 April 2014
Saldanha Bay	15 April 2014
Cape Town	16 April 2014
Port Elizabeth	17 April 2014
Ngqura	17 April 2014
Richards Bay	29 April 2014
Durban	30 April 2014
East London	19 May 2014

Through this process, it is the Authority's understanding that the proposed Capex programme per port has been supported at the aforementioned roadshows. All roadshow presentations are available on www.pccsa.org.za.

In line with the approved Tariff Methodology, and as per discussions with the Regulator, the Ports have been requested to share its capital programmes for the tariff period FY 2015/16 to FY 2017/18 at their respective PCC meetings. The capital programme was circulated prior to the August/September 2014 PCC's. The table below highlights the dates at which capex programmes for FY 2015/16 to FY 2017/18 were presented at the respective PCC's.

Table 34: PCC Capex Presentation Dates

Port Name	PCC Presentation Date
Mossel Bay	25 August 2014
Saldanha Bay	27 August 2014
Cape Town	28 August 2014
Durban	29 August 2014
Richards Bay	01 September 2014
East London	08 September 2014*
Port Elizabeth	10 September 2014*
Ngqura	11 September 2014 *

* Denotes PCC's that will take place post tariff submission date of 01 Septenber 2014

Similarly, it is the Authority's understanding that the proposed Capex programme per port has been supported at the aforementioned PCC's .All PCC presentations is available on www.pccsa.org.za.

ANNEXURE C: The Authority's Total Costs

The total cost analysis of the Authority's operating expenditure including group costs for the tariff period is shown in the table below:

Table 35: Authority's Operating Costs Including Group Overheads (FY 2015/16 – FY2017/18)

Cost Category	Actual 2013/14 R Million	Budget 2014/15 R Million	Forecast 2015/16 R Million	Dev '14/15 vs 15/16 R Million	Dev '14/15 vs 15/16 Percentage	% of Opex 15/16 Percentage	Forecast 2016/17 R Million	Forecast 2017/18 R Million	CAGR 2015/16 - 2017/18
Labour Costs	1 767	1 877	2 159	282	15.0%	49%	2 439	2 657	7%
Rates & taxes	290	302	328	25	8%	7%	345	364	4%
Maintenance	296	273	405	132	48%	9%	468	539	10%
Contract Payments	56	60	69	9	14%	2%	73	77	4%
Energy	399	424	526	102	24%	12%	565	611	5%
Professional services	20	28	41	13	47%	1%	54	57	11%
Material	85	87	107	20	23%	2%	114	119	4%
Computer & Info systems	100	117	171	54	46%	4%	180	190	4%
Rental	61	61	68	6	10%	2%	71	75	4%
Security costs	64	71	80	9	12%	2%	71	75	-2%
Pre -Feasibility Studies	47	51	220	169	328%	5%	194	190	-5%
Sundry operating costs	51	67	228	161	240%	5%	265	270	6%
Total operating cost (excluding depreciation)	***3 237***	***3 419***	***4 401***	***982***	***29%***	***100%***	***4 840***	***5 223***	***6%***
Group Costs	398	591	619	28	5%	12%	650	681	3%
Total operating cost (Including Group Costs)	**3 635**	**4 010**	**5 020**	**1 010**	**25%**	**114%**	**5 489**	**5 905**	**1%**

The Authority's total cost for FY 2015/16 amounts to R5 020m inclusive of Group overhead costs. The split of costs into different operations of the Authority's business such as Marine and Real Estate will be informed by the Pricing Strategy.

Operating costs reflect significant increases particularly around Labour, Maintenance, Energy, Professional Services, Computer Info Systems, Pre-Feasibility studies & Sundry Operating costs. Labour cost is a function of delivering on the Authority's mandate in terms of operations efficiency, oversight and maintenance. Maintenance is driven by system repair works but in general owing to ageing infrastructure and new assets. Computer Info Systems relate to software development and licensing to administer oversight. Pre-feasibility studies and Sundry operating costs is largely attributed to delivery on capital programmes and delivery of Section 56 projects.

Below is an explanation for each of the cost items listed above. In line with the tariff methodology, explanations regarding Group Costs are also provided.

Labour Cost

The average growth in labour over the 3 year tariff application period amounts to 7.2%. The number of permanent employees at the Authority is planned as follows:

Table 36: Total Number of Employees

Cost Category	Actual 2013/14	Budget 2014/15	Forecast 2015/16	Deviation 14/15 vs 15/16	Deviation % 14/15 vs 15/16	Forecast 2016/17	Forecast 2017/18
Total Number of Employees	3 802	4 436	4 619	183	4.1%	4 790	4 883

Given the nature of the Authority's role in terms of the Ports Act, the organisation is fairly dependent on human capital which explains labour cost comprising 49% of the total operating costs for FY 2015/16. In order to fully deliver on its mandate, as the Authority, additional resources as well as development of current human capital are considered necessary. As a result, Labour costs are expected to grow by 15% (R282m) in FY 2015/16. The R282m growth in labour can be explained as follows:

Remuneration

Remuneration is explained as follows

- Annual Salary adjustments
- Proportionate costs of new employees recruited in FY 2014/15 becoming annual costs in FY 2015/16
- Increase in Headcount
- Additional training and development costs

The critical skills that will be acquired by the Authority in order to meet objectives of the MDS Strategy and to support delivery in key focus areas are as follows:

- ***Operations/Marine/Security***
  - The manning of port operational centres to ensure systematic views of port performance. These centres will significantly enhance capabilities in monitoring port and logistic chain performance
  - Marine services as a result of the quad-shift system in order to improve efficiencies;
  - Aviation services which are currently out-sourced, however a Cadet training programme has been established with the aim of providing aviation in-house in the future;
  - Gradual provision of security services in-house as opposed to outsourcing
  - Repositioning security within the Authority in terms of legislative requirements given that the commercial ports are considered to be ports of entry.
  - Increase human capacity within the ship repair business to support the ship repair strategy

- ***Infrastructure and Procurement***
  - Port Engineering, project management and procurement resources to create adequate port infrastructure capacity ahead of demand
  - Port Engineering and procurement resources to uphold adequate port infrastructure capacity by maintaining existing and new assets

- ***Oversight and regulatory***
  - Risk management competencies (including safety, health and environmental management). Particular attention will be focused on emerging risk relating to the capital programme and the sustainability/security of information technology processes and systems.
  - To implement and manage performance standards and oversight structures.

- ***Support Services***
  - To align support functions within business in order to proactively deliver on business initiatives i.e. human capacity, development, reporting & recording, systems support

- ***Real Estate and Commercial***
  - Real Estate management;
  - New business development
  - Management of the Section 56 licensing process

- ***IT (attributable to ops centres)***
  - To maintain the new port operational centres, integrated port management system and digital signage.

Training

- R10m (6%) relating to an inflationary increase
- R20m (14%) relating to various initiatives such as Change Management; Diversity Training; BBBE Learner ships; Customer Wide Training (Commercial); Bursaries for Maritime Studies, Marine Engineers.

The cost of labour includes various training initiatives which the Authority has started in FY 2012/13 continuing into the future. These initiatives are highlighted as follows:

- Marine cadet training;
- helicopter pilot training; and
- aircraft maintenance & 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. An increase on this cost category is therefore not aligned to the inflation rate and is increasing by 8% for FY 2015/16. The average growth in rates and taxes over the 3 year tariff application period amounts to 4%.

Maintenance

Repairs and maintenance remains one of the Authority's key focus areas, as a result Maintenance will be increased from FY 2014/15 to FY 2015/16 in order to ensure the efficient continuity of operations in line with required standards. The average growth in maintenance over the 3 year tariff application period amounts to 10%.

Maintenance is driven by planned maintenance, aged infrastructure, new infrastructure assets, new marine craft (including new dredgers) and increased maintenance focus on the ship repair business.

Contract Payments

Contract payments relate mainly to the helicopter pilot service. The insourcing of the Authority's own aviation operations will be phased in over the next years, to manage the risk related to the complex operations. The average growth over the 3 year tariff application period is expected to be 4%.

Energy

The main driver for increased energy cost is electricity and is linked to electricity tariff increases implemented by municipalities and Eskom. The trend of higher fuel and electricity costs are expected to continue into the immediate future as global markets experience higher oil prices and the local economy gears up for increased capital expenditure by Eskom, resulting in higher tariffs. Electricity costs also include a margin charged by municipalities which are the source of supply to the ports. Included in the 24% (R102m) increase between financial years ending 2015 and 2016 is the incremental energy supply relating to the new marine craft including the new dredger with large capacities than the older craft.

Professional Services

Professional fees relate to internal and external audit fees (financial and operational/ environmental) and legal fees whilst the remainder relates to other professional services expected. The average growth in professional fees over the 3 year tariff application period amounts to 11%. The 47% (R13m) increase on professional services between financial years ending 2015 and 2016 can be primarily attributable to following initiatives:

- ***Operations:***
  - Capacity Simulation exercise for implementation of TOPS phase 2 in all 8 commercial Ports
  - Operational Audits & Transnet Certification

- ***Real Estate:***
  - Land use audit projects
  - Anticipated Section 56 consultants
  - Investment Property Valuation Fees

- ***General***
  - Time and Attendance Audit
  - Organizational Design principles
  - Skills Audit

Material

These costs are influenced by material price increases and exchange rate fluctuations on maintenance material used for the marine fleet and civil maintenance. The average growth in materials over the 3 year tariff application period amounts to 4%, influenced by the increase in maintenance.

Computer and Information Systems

The increase in computer and information systems for the FY2015/16 is higher than inflation. The average growth in rental over the 3 year tariff application period amounts to 4%. The 46% (R54m) increase on rental between financial years ending 2015 and 2016 can be split as follows:

- R10m (6%) attributable to inflationary increases
- R44m (40%) attributable to network costs; MSA and IBM Software support contract for maintenance

Rental

The increase in rental for the FY2015/16 is higher than inflation. The average growth in rental over the 3 year tariff application period amounts to 4%. The 10% (R6m) increase on rental between financial years ending 2015 and 2016 can be split as follows:

- R4m (6%) attributable to inflationary increases
- R2m (4%) attributable to offsite storage for records management project undertaken by Information Systems Technology

Security

The Authority is using private security firms in the ports. Security costs are expected to increase by 12% for FY 2015/16. The 12% (R9m) increase on security between financial years ending 2015 and 2016 can be split as follows:

- R5m (6%) attributable to inflationary increases
- 6% due to initiatives to hire a higher level of skilled security staff arising from ISPS obligations, which require stringent compliance to international standards. Increased security to address the risk of increase in trespassing, theft of copper cables and requirements in terms of Ports Act.

Pre-Feasibility Studies

These costs relate to studies for 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. . Major capital projects are listed on Table 23 above. Costs will vary from year to year depending on the

future capital programme. Pre-feasibility study costs for FY 2015/16 is attributed to, amongst other projects, ship repair facilities for the Authority's Port System, deepening and widening of the entrance channel at the Port of East London and Port services and logistics master plan such as Edwin Swales Link Road FEL 4 (Dbn) and Berth A100 (oil tank farm), roads ,port entrance and services (Ngq).

Sundry Operating Cost

Sundry Costs includes expenses relating to insurance, stationery and printing, transport, promotions and advertising, cleaning services, environmental and other miscellaneous operating expenditure. Table 36 below illustrates the cost items included in Sundry Operating Costs.

Miscellaneous revenue captured under sundry operating costs relates to income received from penalties and levies raised by the Authority from time to time.

The increase in insurance costs relate to the new marine craft and dredgers.

Increases on legal fees relate to the outstanding construction claims on Capex projects undertaken to date where disputes have arisen.

Increased travel and printing/stationary owing to increased headcount numbers and pre-feasibility studies

The request for proposals for the S56 projects and public hearings thereof will necessarily lead to increased environmental management, legal fees, printing/stationary, promotions and advertising and feasibility studies.

Table 37: The Authority's Sundry Operating Costs

Cost Category	Actual 2013/14 R Million	Budget 2014/15 R Million	Forecast 2015/16 R Million	Dev '14/15 vs 15/16 R Million	Dev '14/15 vs 15/16 Percentage	% of Opex 15/16	Forecast 2016/17 R Million	Forecast 2017/18 R Million	CAGR 2015/16 - 2017/18
External property anxilary costs revenue	(209)	(223)	(222)	1	-1%	-5%	(234)	(247)	4%
Intra NPA recoveries	(259)	(304)	(334)	(31)	10%	-8%	(350)	(374)	4%
Intra cc recoveries	140	193	211	17	9%	5%	226	234	4%
Intra cc charges	44	48	51	3	6%	1%	54	57	4%
Miscellaneous revenue	(41)	(51)	(37)	14	-28%	-1%	(40)	(43)	5%
External Audit Fees	6	26	23	(2)	-9%	1%	25	26	4%
Bad Debts Written Off - Tax Deductible	0	0	0	0		0%	0	0	0%
Entertainment	16	16	20	4	28%	0%	21	23	4%
Environmental management	26	10	15	5	50%	0%	16	17	4%
Fines and Penalties	0	0	0	0		0%	0	0	0%
Health and Sanitation	32	34	41	7	20%	1%	43	45	4%
Insurance Operations	31	28	32	4	16%	1%	34	37	5%
Legal Costs - Tax Deductible	26	13	25	12	94%	1%	26	28	4%
Internal Audit	29	33	35	2	6%	1%	37	39	4%
Membership Fees	5	5	8	2	43%	0%	8	8	4%
Bank Charges	0	0	0	0	43%	0%	0	0	4%
Catering Costs	0	1	1	1	93%	0%	1	1	4%
Claims Paid	-3	0	0	0	6%	0%	0	0	4%
Commission Paid	0	0	0	0	10%	0%	0	0	4%
Discount Allowed	0	0	0	0		0%	0	0	0%
Gifts	3	0	0	0	31%	0%	0	0	4%
License Fees	2	2	2	0	13%	0%	2	2	4%
Magazines, Books and Periodicals	0	0	1	1	183%	0%	1	1	4%
Newspapers	0	0	0	0		0%	0	0	0%
Nursery / Flower Expenditure	5	6	9	3	51%	0%	13	14	14%
Water	64	57	61	4	7%	1%	65	70	5%
Other 1	28	36	94	57	157%	2%	103	108	5%
Navigation, Landing and Parking	20	22	26	4	19%	1%	27	29	4%
Postage	0	0	0	0	7%	0%	0	0	4%
Printing and Stationery	7	8	16	8	103%	0%	17	18	4%
Promotions and Advertising	10	21	40	19	91%	1%	48	50	8%
RDP Costs / Social Investment	0	0	0	0		0%	0	0	0%
Regional Services Levies	0	0	0	0		0%	0	0	0%
Telecommunication Services : External	20	23	26	3	13%	1%	28	29	4%
Travel Benefits / Concessions	0	0	0	0		0%	0	0	0%
Transport Cost : External	2	1	2	1	64%	0%	3	3	4%
Travel - Local	29	40	50	10	25%	1%	56	59	6%
Travel - Overseas : Deductible	1	3	8	5	155%	0%	8	8	4%
Accommodation and refreshments	16	19	24	5	29%	1%	26	27	4%
Total sundry operating expenses	**51**	**67**	**228**	**161**	**240%**	**5%**	**265**	**270**	**6%**

Consulting Fees

The Authority's business warrants the use of subject specialists from time to time, which in some cases, may have to be sourced abroad at higher than normal consulting rates. For FY 2015/16 professional services will be required for various Section 56 processes including the Port of Ngqura container terminal, Port of Ngqura manganese terminal and the Cruise Liner terminals. These expenses are grouped under consulting fees, illustrated in the table below:

Table 38: Breakdown of Other 1 Cost

Cost Category	Actual 2013/14 R Million	Budget 2014/15 R Million	Forecast 2015/16 R Million	Dev '14/15 vs 15/16 R Million	Dev '14/15 vs 15/16 Percentage	% of Opex 15/16	Forecast 2016/17 R Million	Forecast 2017/18 R Million	CAGR 2015/16 - 2017/18
Total Other 1	**(28)**	**36**	**94**	**57**	**157%**	**2%**	**103**	**108**	**5%**
Promat Levy	-	-	4	4	0%	0%	4	5	4%
Consulting Fees	(4)	11	56	45	423%	1%	59	62	4%
Credit Management Fees	-	-	-	-	0%	0%	-	-	0%
Inter Divisional Miscellaneous Leasing &	(0)	0	0	0	5%	0%	0	0	4%
Capital Project Clearance	-	-	-	-	0%	0%	-	-	0%
Contributions	(0)	0	0	0	6%	0%	0	0	4%
Corporate Identity	(3)	3	3	0	7%	0%	3	4	4%
Bouquets & Wreaths	(0)	0	0	0	40%	0%	0	0	4%
Revenue Stamps & Other Taxes	-	-	-	-	0%	0%	-	-	0%
Sponsorships	(11)	13	18	6	44%	0%	24	25	11%
Accounts Pay Clearance Account	-	-	-	-	0%	0%	-	-	0%
Suspense Account	-	-	0	0	0%	0%	0	0	4%
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	4%
Conference: Portnet	(1)	2	4	2	68%	0%	4	4	4%
Foreign Exchange Cost	0	0	0	0	6%	0%	0	0	4%
Intra Pad Miscellaneous Charges	(9)	7	7	0	6%	0%	8	8	4%

Group Overhead Costs

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

This effectively means that 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 cost drivers. An example in this regard is the Incentive bonuses provision, Impairments and Other internal revenue recoveries in the 2013/14 allocation.

The predetermined cost drivers as well as the amounts budgeted for each cost centre is set out in the "Transnet Corporate Overhead Costs Policy".

Year on year differences in allocated corporate overhead costs or differences between budgeted corporate overhead costs allocations and actual corporate overhead costs allocations will always be primarily as a result of changes in the base rand amounts (e.g. budgeted corporate overhead costs versus actual corporate overhead costs per cost centre) as well as changes in cost driver percentages (per cost centre) with cost driver remaining the same.

Table 39: Group Overhead Costs

CORPORATE OVERHEAD COSTS: INCOME STATEMENT	Budget	Actual	Budget	Budget	Projection	Projection
	R' Million			R' Million	R' Million	
Details	FY 2013/14	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Revenue external	(2 369 521)	(1 581 573)	(2 194 703)	-	-	-
Revenue internal						
Internal recoveries		(15 611 154)				
Revenue	**(2 369 521)**	**(17 192 726)**	**(2 194 703)**	**-**	**-**	**-**
Net operating expenses excluding depreciation and amortisation	**579 566 534**	**347 368 849**	**553 012 469**	**543 724 209**	**572 613 912**	**599 515 023**
Personnel costs	210 075 292	110 538 103	144 904 749	248 406 482	255 609 157	266 098 446
Fuel costs	98 666	63 911	98 511	176 047	182 909	191 441
Electricity costs	2 656 455	1 233 900	3 115 148	1 351 732	1 378 616	1 435 297
Material costs	190 931	7 337	190 052	340 424	355 143	371 935
Other operating costs	366 545 190	235 525 599	404 704 009	293 449 524	315 088 086	331 417 905
Accommodation and Refreshments	4 102 608	2 307 441	6 371 483	3 823 516	3 939 681	4 083 919
Professional Fees	186 694 783	92 299 113	180 789 638	78 400 520	81 869 235	85 765 878
Electronic Data Costs	11 004 230	29 880 337	10 893 750	21 267 069	23 809 260	27 506 702
Internal Audit	15 675 725	17 739 143	16 062 529	25 306 817	26 473 986	27 604 799
Social Investment	42 398 448	23 571 329	36 895 479	37 217 970	37 857 920	39 562 548
Miscellaneous Costs	106 669 396	69 728 236	153 691 130	127 433 633	141 138 005	146 894 060
Profit from operations before depreciation, amortisation and items listed below	**577 197 013**	**330 176 123**	**550 817 766**	**543 724 209**	**572 613 912**	**599 515 023**
Depreciation and amortisation	13 254 317	9 910 645	12 454 086	45 547 775	47 349 238	50 284 647
Profit from operations before the items listed below	**590 451 330**	**340 086 768**	**563 271 852**	**589 271 984**	**619 963 149**	**649 799 671**
Profit on sale of interest in businesses						
Impairment of assets	1 232 083		1 933 965	-	-	-
Dividends received		(5 496 926)				
Post-retirement benefit obligation costs	27 472 500	57 971 112	25 445 635	26 481 320	26 936 657	28 149 533
Fair value adjustments	94 825	(341 855)	100 040	88 766	94 817	100 577
Income from associates						
Profit from operations before net finance costs	**619 250 739**	**392 219 099**	**590 751 492**	**615 842 070**	**646 994 623**	**678 049 781**
Transnet Capital Projects	1 133 080	1 529 036	597 404	3 148 319	3 390 590	3 148 651
Transnet Foundation	(383 819)	3 981 024	(348 896)	(95 482)	(274 949)	(83 832)
Transnet Corporate Overhead Costs: TNPA	**620 000 000**	**397 729 160**	**591 000 000**	**618 894 907**	**650 110 264**	**681 114 600**
Transnet Corporate Overhead Costs	**3 580 685 112**	**3 236 675 673**	**4 223 503 474**	**4 605 278 651**	**4 922 807 723**	**5 252 360 559**
Percentage allocation: TNPA	**17.32%**	**12.29%**	**13.99%**	**13.44%**	**13.21%**	**12.97%**
Year On Year % Change: TNPA			**48.59%**	**4.72%**	**5.04%**	**4.77%**

On average the overall allocation of Transnet corporate overhead costs to the Authority is approximately 13.18% from FY 2013/14 "Actual" to FY 2017/18.

The Authority's allocated share of Transnet corporate overhead costs for FY 2013/14 was effectively 12.29% as opposed to the budgeted 17.32% mainly as a result of costs cutting initiatives at Transnet which

resulted in a 9.2% decrease (from the budgeted R3 580m to R3 236m) in Transnet corporate overhead costs as well as changes in the costs driver percentages whilst costs drivers remained the same.

The FY 2013/14 "Budget" includes the Authority's specific provision for incentive bonuses whilst the FY 2013/14 FY "Actual" excludes it as this is already included in the books of the Authority for the 2013/14 FY "Actual".

It is the practice of Transnet to carry the budgeted provision for incentive bonuses of all Transnet employees at its Corporate Centre until the year end where OD specific incentive bonuses are released from the Corporate Centre to be carried in the books of the specific ODs.

The FY 2015/16 allocation of Transnet corporate overhead costs to the Authority amounts to R618.8m (which includes a provision for incentive bonuses specific to the Authority), this is an increase of 4.72% from FY 2014/15 allocation of Transnet corporate overhead costs to the Authority of R591m (which includes a provision for incentive bonuses specific to the Authority).

The increase in the corporate overhead costs allocated to the Authority of 4.72% (from FY 2014/15 to FY 2015/16) is mainly as a result of the following reasons:

- **Personnel costs** increase by 71.43% (from R144.9m in FY 2014/15 to R248.4m in FY 2015/16) due to the appropriate classification of the provision for incentive bonuses allocated to the Authority as personnel costs; previously this provision was inappropriately classified under miscellaneous costs. If the provision for incentive bonuses is excluded, personnel costs allocated to the Authority decrease by 13.4% mainly as a result of changes in the percentages of costs drivers albeit costs drivers remaining the same as well as appropriately redefining certain costs drivers.
- **Fuel costs** increase by 78.71% from FY 2014/15 to FY 2015/16 and are mainly due to the acquisition of six vehicles at the Transnet School of Security as well as the acquisition of straddle carriers by the Marine School of Excellence (MSOE) for the purposes of training.
- **Material costs** increase by 79.12% from FY 2014/15 to FY 2015/16, mainly attributable to Transnet School of Security and MSOE.
- **Electronic data costs** (LAN, WAN etc.) increase by 95.22% from FY 2014/15 to FY 2015/16 mainly as a result of OD electronic data costs now being carried centrally at Transnet Corporate by Enterprise Information Management Services (EIMS).
- **Internal audit costs** increase by 57.55% from FY 2014/15 to FY 2015/16 mainly as a result of increases in the scope of audit work and audit rates charged.
- **Depreciation and amortisation** increase by 265.73% from FY 2014/15 to FY 2015/16 mainly as a result of increases in capital expenditure budgeted for projects to be implemented or currently under execution (mainly Human Capital Management (HCM) Programme, Fixed Asset Stabilisation and other projects) which are carried centrally in the books of Transnet corporate.
- Changes in the percentages of the costs drivers used albeit costs drivers remaining the same.

ANNEXURE D: Additional Operating Costs Information

The Tariff Methodology states that the Authority must submit detailed and complete motivation for each of the expenses applied for, especially on large items like labour and energy costs. In compliance with the Tariff Methodology, additional information requested is illustrated below:

1. ***Estimations on internal transfers and payments within the Transnet Group and clarity on cash holdings and resulting benefits :***
   - *Transnet's Cash Management Policy and practice is to sweep all cash balances, both positive and negative, to a central treasury account which is under the administration of Group Treasury. The swept balances are then processed to the Group Current Account within TNPA's accounting records with the equal and opposite entry being processed in the Group accounting records. At present the Authority is in a net borrowing position due to the various intercompany entries that are processed thorough the Current Account i.e. intercompany expenses, project costs, re-gearing dividends, sweeping of cash balances, interest on Group Current Account etc. Should the Authority have positive cash balance and this is swept to the Group Current Account it would result in the Authority owing Transnet Group less and hence a lower interest cost will be charged at the end of the respective month and vice versa.*
   - *Internal transfers relating to labour is demonstrated in Table 44 below.*

2. ***The number of posts in the approved establishment (organogram)***

Table 40: Number of employees

Amount of posts in the approved establishment	
Approved posts end July 2014 (organogram)	4 345
Budgeted Posts FY 2014/15	4 436

3. ***Current employees***

Table 41: Current Employees

Current Employees	
Number of employees as at end July 2014	3 849
Total Labour Cost for July 2014 (R'm)	143

4. ***Vacant Posts***

Table 42: Vacancy Posts

Vacant Posts	
Vacant posts end July 2014 (Organogram)	496
Budgeted Vacant Posts FY 2014/15	587

5. *The percentage of posts of the total for each of the years that have been vacant over the last 5 years (number and cost)*

Table 43: Vacancy Rate

TNPA Employees	FY 2009/10	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14
Total permanent number of staff - Budgeted in that year	3 429	3 711	3 587	4 044	4 409
Total permanent number of staff - Actual in that year	3 139	3 258	3 422	3 584	3 802
Vacancies	290	453	165	460	607
Vacancy Rate	8.5%	12.2%	4.6%	11.4%	13.8%

6. *The value of services/labour that is "purchased" from Transnet group or any of its divisions*

Table 44: Services/Labour purchased from Transnet Group

Cost Category	2009/10		2010/11		2011/12		2012/13		2013/14	
	Actual R'Million	Budget R'Million	Actual R'Million	Budget R'Million	Actual R'Million	Budget R'Million	Actual R'Million	Budget R'Million	Actual R'Million	Budget R'Million
Inter Transnet Repairs & Maintenance	60.13	43.69	66.80	59.19	83.76	74.23	97.60	77.51	93.48	87.93
Inter Divisional Repairs & Maintenance	6.39	1.74	6.52	3.65	3.97	4.07	2.71	3.74	2.51	4.92
Intra POD Repairs & Maintenance	(0.02)	-	-	-	-	-	-	-	-	-
Intra PAD Repairs & Maintenance	13.05	11.12	12.63	10.80	18.38	14.69	17.33	15.58	27.19	23.70
Inter Transnet: Prof, Tech & Admin	1.07	4.73	1.91	7.45	2.39	6.02	2.87	6.44	9.77	8.21
Inter Divisional: Prof, Tech & Admin	1.00	1.29	1.31	1.25	0.36	1.11	0.53	1.05	0.64	0.79
Inter Divisional Miscellaneous Leasing & Contract	0.00	0.01	0.02	0.02	0.00	0.02	-	-	0.02	-
Intra Pad Miscellaneous Charges	2.04	2.08	1.45	1.71	1.55	1.53	3.01	3.69	9.09	7.29
Operational Outsourcing: Inter Transnet	-	0.01	-	0.00	-	0.00	-	-	-	-
Inter Transnet: Cargo Handling Equipment	-	-	-	-	-	-	-	-	-	-
Operating Leases Internal(Subsidiaries):Land	1.38	1.39	1.55	1.60	1.75	2.15	2.22	2.20	3.08	3.21
Operating Leases Internal(Subsidiaries):Buildings & Structur	3.75	4.27	4.19	4.50	4.52	4.65	4.96	5.08	4.12	6.76
Operating Leases Internal(Subsidiaries):Machinery,Equipment	4.67	6.39	6.64	6.32	0.72	1.38	0.67	3.92	(1.03)	4.30
Operating Leases Internal(Subsidiaries):Vehicles	1.79	2.50	3.08	3.55	2.57	4.08	2.96	3.18	2.72	2.97
Operating Leases Internal(Divisions)	-	-	-	-	-	-	-	-	-	-
Fees: Internal	1.44	(3.41)	9.90	1.90	5.01	5.92	7.02	4.94	2.37	(4.19)
Fees: Inter Divisional	0.00	0.02	-	0.02	0.02	0.11	0.03	0.15	-	-
Training - internal trainer costs	-	-	-	-	-	-	-	-	1.80	3.14
Training - internal trainer costs	-	-	-	-	-	-	-	-	-	0.11
Training - internal trainer costs	-	-	-	-	-	-	-	-	0.82	1.75
Training - internal trainer costs	-	-	-	-	-	-	0.02	-	0.13	0.56
Training - internal trainer costs	-	-	-	-	-	-	-	-	-	0.08
Training - internal trainer costs	-	-	-	-	-	-	-	-	-	0.05
Total	**96.69**	**75.84**	**116.00**	**101.96**	**125.00**	**119.97**	**141.92**	**127.49**	**156.71**	**151.61**

7. *The value of services/labour that is provided by the NPA to Transnet or any of its divisions without recovery of the costs of providing such labour/service*

The Authority does not have any services it provides without recovery

8. *The split between expenditure on electricity and other kinds of energy (liquid fuels etc.)*

Table 45: Split of Energy Sources

Cost Category	2009/10		2010/11		2011/12		2012/13		2013/14	
	Actual R'Million	Budget R'Million	Actual R'Million	Budget R'Million	Actual R'Million	Budget R'Million	Actual R'Million	Budget R'Million	Actual R'Million	Budget R'Million
Petrol	4.39	4.04	3.53	5.32	3.80	4.07	4.86	4.43	5.78	5.94
Diesel	75.11	73.26	57.10	101.58	75.58	75.59	99.05	90.94	133.36	134.50
Oil & Lubricants	3.64	2.78	4.89	3.43	4.28	4.02	5.22	3.10	5.26	4.96
	83.14	80.08	65.52	110.33	83.66	83.67	109.12	98.48	144.40	145.40
Electricity	68.20	56.26	97.49	87.62	131.79	147.22	165.28	180.46	254.57	299.49
	68.20	56.26	97.49	87.62	131.79	147.22	165.28	180.46	254.57	299.49
Total Energy	**151.33**	**136.33**	**163.01**	**197.95**	**215.45**	**230.90**	**274.40**	**278.94**	**398.96**	**444.88**

End.