Transnet National Ports Authority

Proposal for a new tariff structure

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1.1 Preface

In terms of Section 72(1)(a) of the National Ports Act, 2005 (Act No. 12 of 2005) (”the Act”), Transnet National Ports Authority (“TNPA”) is required, with the approval of the Ports Regulator (“the Regulator”), to determine tariffs for services and facilities offered by TNPA and to annually publish a tariff book containing those tariffs. The Directives in terms of Section 30(3) of the Act, which were approved on the 13th July 2009 (gazetted on the 6th August 2009) and amended on 29 January 2010 require that the Regulator, when considering the proposed tariffs for TNPA, must ensure that such tariffs allow TNPA to:

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

In line with the Directives, the revenue generated from TNPA’s services is utilised inter alia to:

- Maintain basic port infrastructure;
- Provide current and future port infrastructure;
- Maintain and provide the current and future marine fleet;
- 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. TNPA’s Tariff Book sets out the various tariffs that are charged by TNPA to maintain and develop the South African port system. In order to set the various tariffs, TNPA needs to first determine the total amount of revenue required to fulfil its functions listed above, including the provision of future infrastructure, and then determine how the total revenue gets apportioned to the individual tariffs for specific services and facilities. Determination of the total revenue is based on the tariff methodology, while determination of the individual tariffs is based on the tariff structure.

1.2 Tariff methodology

The total amount of revenue generated from TNPA's services is currently determined based on a revenue requirement methodology. Per this methodology, the revenue requirement approach is defined as follows:

Revenue requirement = Return on regulatory asset base ("RAB")
+ Operating costs
+ Depreciation
+ Taxation expense
– +Claw back
+ETIMC(Excessive Tariff Increase Margin Credit
+ F-Factor

The revenue requirement methodology, although not articulated expressly by the regulatory framework, is not specifically excluded, and can therefore be considered a valid and compliant approach. In submitting this application, TNPA has therefore assumed that the revenue requirement methodology will still be applied. However, the Regulator and TNPA have also agreed that the tariff methodology needs to be reviewed in the near future and have started a consultation process.

1.3 Tariff structure

TNPA's services at the ports can be divided into two basic groups: basic port infrastructure, and operational services to port users. The various tariffs related to the services are reviewed on an annual basis and published in the Tariff Book. The current tariff structure was developed as part of a tariff reform exercise conducted in 2002 and has since not been updated. TNPA acknowledges that the tariff structure presents several issues and has therefore embarked on a thorough redesign exercise. This document presents the outcomes of this exercise with the objective of obtaining approval from the Regulator for the new proposed tariff structure.

The key issues related to the current tariff structure can be summarised as follows:

- Lack of a clear set of principles and rules to be applied in determining the individual tariffs for the various services and facilities;
- Lack of clarity and transparency regarding all operating costs, expenses and revenues incurred or generated from a specific service or facility, as well as the value of the capital stock related to such services or facilities;
- Lack of explanation for differential tariffs for different commodities using the same handling classification;
- Lack of information detail with respect to services or facilities pricing and cost relationships, making it impossible to determine where and in which direction subsidisation takes place or if it does not;
- Lack of information on how the tariff structure promotes access to ports and efficient and effective management and operation of ports.

Furthermore, the real estate business of TNPA has until recently been excluded from the tariff structure, which therefore does not encompass the entire business of TNPA. As a

result of these issues, the current tariff structure presents several imbalances in the determination of the various tariffs, including:

- Very high tariff levels for cargo dues resulting from the migration from the old wharfage charge, which was calculated on an ad-valorem basis depending on the value of the cargo;
- Very high differentials in the levels of cargo dues for different cargo types and commodities with no clear motivation for the differences;
- Relatively low tariff levels for maritime services, which are based on an activity-based costing exercise conducted during the tariff reform of 2002 and that has since not been updated, resulting in the subsidisation of some services;
- Very low levels of revenue from the real estate business as compared to other landlord port authorities across the world.

The new proposed tariff structure aims at addressing these imbalances by providing a robust methodology, based on a clear set of principles and rules, to determine the optimal levels for the various tariffs. Moreover, the new structure also represents a step forward towards the promotion of efficient and effective management and operation of ports, which will ultimately result in a reduction of the cost of doing business in South Africa thereby supporting the country's economic growth. In addition, the proposed promotion programme for export of beneficiated goods strongly improves the alignment of the tariff structure with government priorities through direct support to the key objectives of industrialisation and job creation.

2 Executive summary

TNPA acknowledges that the current port tariff structure is sub-optimal and presents several issues in terms of transparency, compliance, fairness and overall acceptability by port users. The new proposed tariff structure outlined in this document represents a clear departure from the current approach and is based on the consistent application of sound design principles, a more balanced and equitable distribution of charges to the different port user groups, the need to support government policies through the tariff structure, as well as being more strongly aligned with international norms and standards.

The core design principles applied to develop the proposed tariff structure can be summarised as follows:

- **Cost recovery** – Each tariff should recover the costs of providing the related infrastructure and services.
- **User pays** – Every port user should contribute for the right and the access to port facilities and services they use.
- **Required Revenue** – There is a tariff methodology in place that can be applied at a disaggregated level to each individual tariff to cover operating costs, depreciation, taxation and a fair return on TNPA's assets.
- **Competitiveness** – Consideration has been given to best or common practice and market expectations.

Furthermore, the approach to developing the proposed tariff structure has included extensive stakeholder engagement and research to gain a detailed understanding of stakeholder views and concerns as well as common practice from other port authorities across the world.

The overall Required Revenue includes the real estate business and is driven by a well-motivated asset allocation, resulting in the following preliminary contributions by the different port user groups: terminal operators 33%, cargo owners 46% and shipping lines 21%. The impact of the proposed distribution on the port user groups has been assessed and can be summarised as follows:

- **Shipping lines:** Required Revenue will increase slightly by 4%; increased charges will be high in comparison to benchmarked international ports but still relatively well-aligned.
- **Cargo owners**: Required Revenue will decrease by 25%; the decrease in cargo dues, combined with the proposed reduction scheme for export of beneficiated goods, will strengthen the competitiveness of certain industries in the export sector; the proposed tariff structure further aims at simplifying cargo dues through a single base rate charge for each different cargo handling type.
- **Terminal operators**: Required Revenue will increase by 77%; this will require a transition to a true landlord port authority by TNPA, in line with global best practice, including its power to regulate the THCs charged by terminal operators.

The overall approach to implementation of the new tariff structure will be guided by the objective of ensuring a smooth transition for all port users with no disruptions to port operations. TNPA is aware that the success of the pricing strategy is dependent on port users' understanding and commitment and is committed to further extensive consultation with port users before implementation. TNPA is therefore seeking an "in principle" approval by the Regulator of the new tariff structure in order to initiate implementation activities.

3 Chosen approach to develop the new tariff structure proposal

Development of the pricing strategy followed a bottom up approach which extensively engaged a wide range of key stakeholders. The proposal is the outcome of a three-step process:

1. The first step was "setting the base", which focused on assembling a relevant fact base through reviewing internal documentation, carrying out benchmark research to establish pricing strategies and approaches employed by ports across the world, and engagement with stakeholders and port users. A key output of the first step was a set of pricing design principles to guide development of the proposed new tariff structure.
2. The second step focused on developing various options and tariff structure scenarios. Tariff structure scenarios were debated and validated with stakeholders, and a decision on a preferred scenario reached. A tariff model was then developed to codify tariff rules of the preferred tariff structure scenario.
3. The third step of the project focused on planning for implementation of the new tariff structure. This document forms part of a critical step of the implementation planning: submission of TNPA's proposal for a new tariff structure. Once the proposed tariff structure has been approved, TNPA will start planning the roll-out of the implementation plan in consultation with stakeholders.

3.1 Objectives

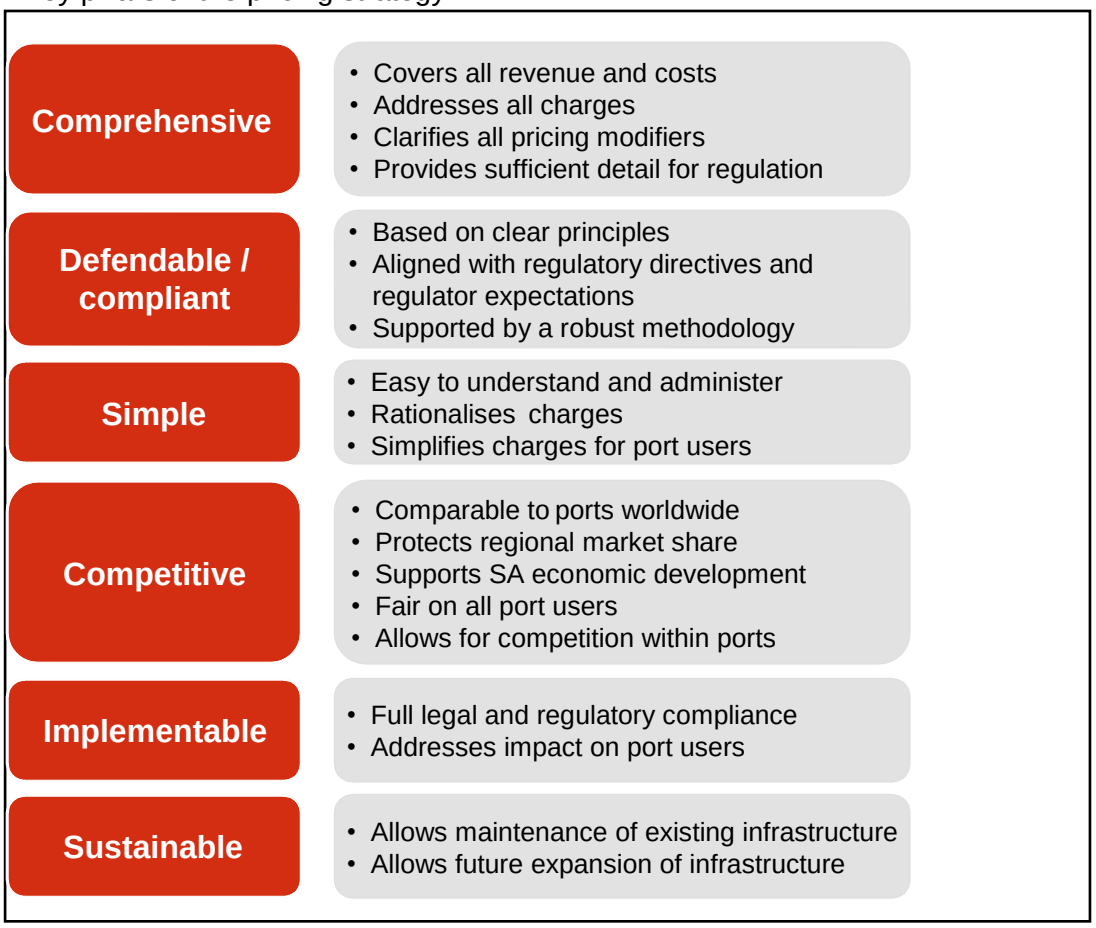
The objective of this exercise was to design an optimal pricing strategy for TNPA that complies with regulatory requirements as defined in the Ports Act (2005), ensures sustainability of the South African ports system and corresponds to the needs of stakeholders. TNPA has been under increasing pressure and scrutiny to revise its pricing strategy. Amongst others, key criticisms that have surfaced over the past years include:

- Lack of a clear set of principles and rules to be applied in determining the individual tariffs for the various services and facilities;
- Lack of clarity and transparency regarding all operating costs, expenses and revenues incurred or generated from a specific service or facility, as well as the value of the capital stock related to such services or facilities;
- Lack of explanation for differential tariffs for different commodities using the same handling classification;
- Lack of information detail with respect to services or facilities pricing and cost relationships, making it impossible to determine where and in which direction subsidisation takes place or if it does not;
- Lack of information on how the tariff structure promotes access to ports and efficient and effective management and operation of ports;
- High transportation costs in South Africa that negatively impact the country's trade competitiveness;
- Increased regulatory pressure for TNPA to fully comply with legislation, including demonstration of transparency and fairness of tariffs and equal treatment of all customers;
- Regulatory pressure on price increase applications by TNPA:
  - In 2011/12, TNPA requested a price increase of 11.91% but received a 4.49% increase;
  - In 2012/13, TNPA requested a price increase of 18.06% but received a 2.76% increase.

- Increased competition from capital investment in regional ports such as Maputo and Walvis Bay.

TNPA decided to respond to these points and the issues highlighted in the Preface by designing a new pricing strategy that fundamentally re-sets its tariff structure. The new pricing strategy is based on six strategic pillars as shown in Figure 1 below.

Figure 1: Key pillars of the pricing strategy



3.2 Scope of this proposal

A comprehensive pricing strategy needs to answer two fundamental questions:

A. How much – in total as well as per tariff – should TNPA be allowed to charge port users in order to meet its responsibilities?
B. Which group of port users is responsible to pay for which charges based on what rationale?

Question (A) is addressed by the tariff methodology. Question (B) relates to the tariff structure.

In alignment with the Regulator, TNPA decided to address these two questions separately, even though they are to a certain degree interrelated. This proposal focuses solely on question (B) and assumes that an agreed tariff methodology is in place that structurally resembles the approach laid out in chapter 1.1. Furthermore, in order to provide a comprehensive proposal for a new tariff structure, this document will also discuss implications of the proposal on port users and TNPA.

3.3 Stakeholder engagement and research

Extensive stakeholder engagement and research was undertaken to gain a detailed understanding of stakeholder views and concerns as well as common practice from other port authorities across the world. More than 25 external stakeholders comprising cargo owners, shipping lines, terminal operators, key government departments and the Ports Regulator were consulted. In addition, employees from all TNPA ports and departments were consulted to solicit their input in designing the pricing strategy.

Desktop research was undertaken and interviews were conducted in order to understand common practice at other ports as well as to gain insights into general port pricing trends. More than 30 port authority tariff books were analysed, and more than one dozen port and tariff experts were interviewed. Research and interviews provided useful insights into tariff structures, tariff design, revenue composition and pricing approaches*. A detailed list of stakeholders consulted and research undertaken can be obtained from TNPA on request.*

4 Design principles applied to determine new tariff structure

Development of the new tariff structure has been guided by four core design principles:

- **Cost recovery**
  Each tariff should recover the costs of providing the related infrastructure and services. These costs consist of investment costs and operating costs, including maintenance costs. The key rationale for this principle is to ensure that TNPA has enough financial resources to maintain an efficient port system as stipulated by the Act. This implies among other things, that costs for certain services will be consolidated on a system level and that the cost recovery principle will not necessarily applied on a port level.

- **User pays**
  Every port user should contribute for the right/access to port facilities and services they use. As an example of the application of this principle, the tariffs charged for specific maritime services will be used to recover operational expenses and the required return on investments from assets allocated to maritime services. However, the level of rent paid by terminal operators will be value-driven, meaning that the rent level will be correlated to the economic return expected by the terminal operator. Terminal operators will therefore be expected to pay more, relative to allocated cost levels, than other port users.

- **Required Revenue**
  This principle underlines the assumption that there is a tariff methodology in place that provides on a disaggregated level a required revenue to cover operating costs, depreciation, taxation and a fair return on TNPA's assets. In applying this principle, individual tariff levels will be set to meet the Required Revenue based on expected volumes of cargo flowing through the ports system. For example, the Required Revenue of individual maritime services will be calculated at a disaggregated level rather than at a total level for all maritime services combined. Expected volumes for each maritime service will then dictate the level at which individual tariffs are set.

- **Competitiveness**
  The implications of the new tariff on the market will be considered to ensure that there is healthy competition within the port but also in relation to potential competitor ports. In applying this principle, consideration of best or common practice and market expectations will validate the feasibility of tariff rationales and tariff levels.

5 Fact base to inform new tariff structure

5.1 Input from stakeholders and port users

The key finding from the feedback obtained from different stakeholders was that port users generally have common concerns regarding TNPA's port pricing. The main areas of contention are around high costs, a lack of transparency with regards to the pricing structure, and low levels of performance at the ports. Figure 2 below highlights the summary feedback from the different stakeholders.

Figure 2: Stakeholder feedback

Stakeholder Group	Key Message
Shipping lines	• Port costs are too high in comparison to other ports around the world • Port services are inefficient, and this translates to higher costs
Cargo owners	• Cargo dues are excessive, and there is lack of transparency as to the basis of charges • Inefficiencies at the ports drive up costs
Terminal operators	• The terms of current lease agreements do not allow for long-term planning and investments in facilities, thereby undermining port efficiency, due to poor security of tenure and lack of clarity on the scope of activities allowed • There are unjustifiable disparities in the lease costs charged to different terminal operators
Government stakeholders	• Tariff levels and structure are not always aligned to the interests of the South African economy
Port regulator	• Tariffs do not promote port efficiency • Tariff structure is not transparent and is insufficiently justified

In developing the pricing strategy, TNPA took full cognizance of the feedback from all stakeholders.

5.2 Importance of assets on TNPA's tariffs

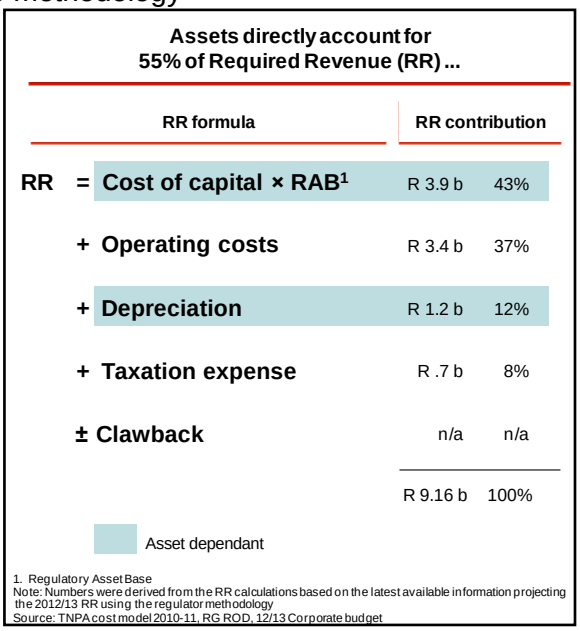
TNPA's revenue requirement (defined hereafter as Required Revenue) is the level of revenue which is necessary to cover TNPA's required return, as measured by a tariff methodology consisting of TNPA's cost of capital on TNPA's regulatory asset base (RAB), annual operating costs, depreciation, and taxation expense.

As shown in Figure 3 below, the value of the assets plays a critical role in calculating the Required Revenue, as assets directly account for about 55% of the Required Revenue

through the required return on the RAB and annual depreciation of the asset base. Taxation expense is also indirectly influenced by the asset base. Increasing or decreasing the asset base and its value will therefore have a direct and significant impact on the Required Revenue. For example, including the terminal operator rental business and related assets will increase the Required Revenue. Similarly, new capital projects will increase the Required Revenue as the new assets are added to the RAB.

Furthermore, the allocation of assets to different tariff types drives the Required Revenue for those tariffs, and therefore the underlying tariff structure as well as tariff levels.

Figure 3: Required revenue methodology



5.3 Comparison with ports outside of South Africa

In order to validate the level of South Africa port costs and productivity, as well as to understand the typical revenue structure of landlord ports, the following benchmarking studies were performed:

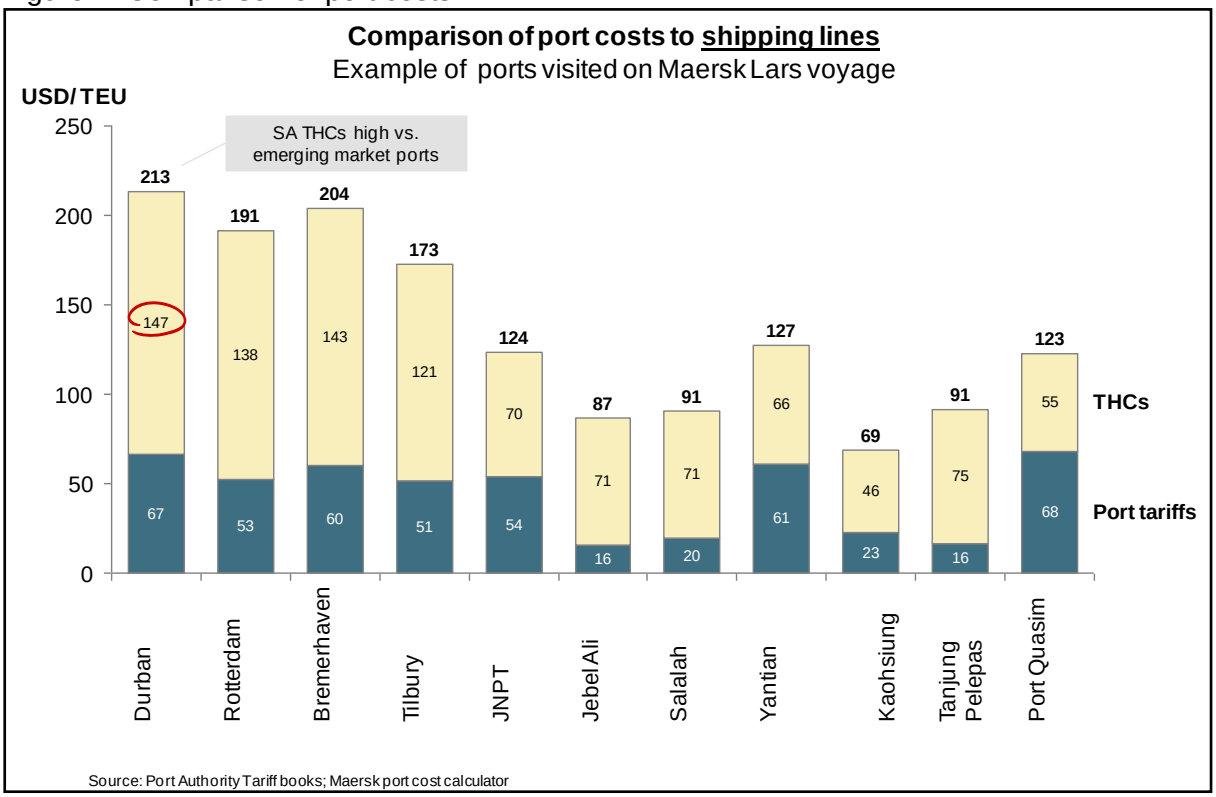
- Comparison of port tariffs and terminal handling charges
- Comparison of port productivity in relation to terminal handling charges
- Comparison of cargo dues charged by ports that levy cargo dues/wharfage
- Comparison of revenue structure of landlord ports

5.3.1 Comparison of port tariffs and terminal handling charges

The benchmarking of port tariffs and terminal handling charges charged to shipping lines was performed using the port calls made by the current voyage of the Maersk Lars, a container ship built in 2004 with a gross tonnage of 50,657 and length of 266m. The Maersk Lars was selected because of her frequent port calls in Durban, her representative size and the fact that her current voyage includes a variety of important and large ports in Europe, the Middle East and Asia. As shown in Figure 4 below, South African port tariffs to shipping

lines are high but not significantly higher when compared to other ports. The comparison of the terminal handling charges (THCs) shows that Durban has very high THCs compared to the benchmarked ports. THCs are in line with European ports, which have higher labour costs than South Africa, but are more than double those in lower labour cost countries in the Middle East and Asia. Charges for the Port of Durban are represented under 3 different exchange rate levels to reduce the impact from currency fluctuations.

Figure 4: Comparison of port costs

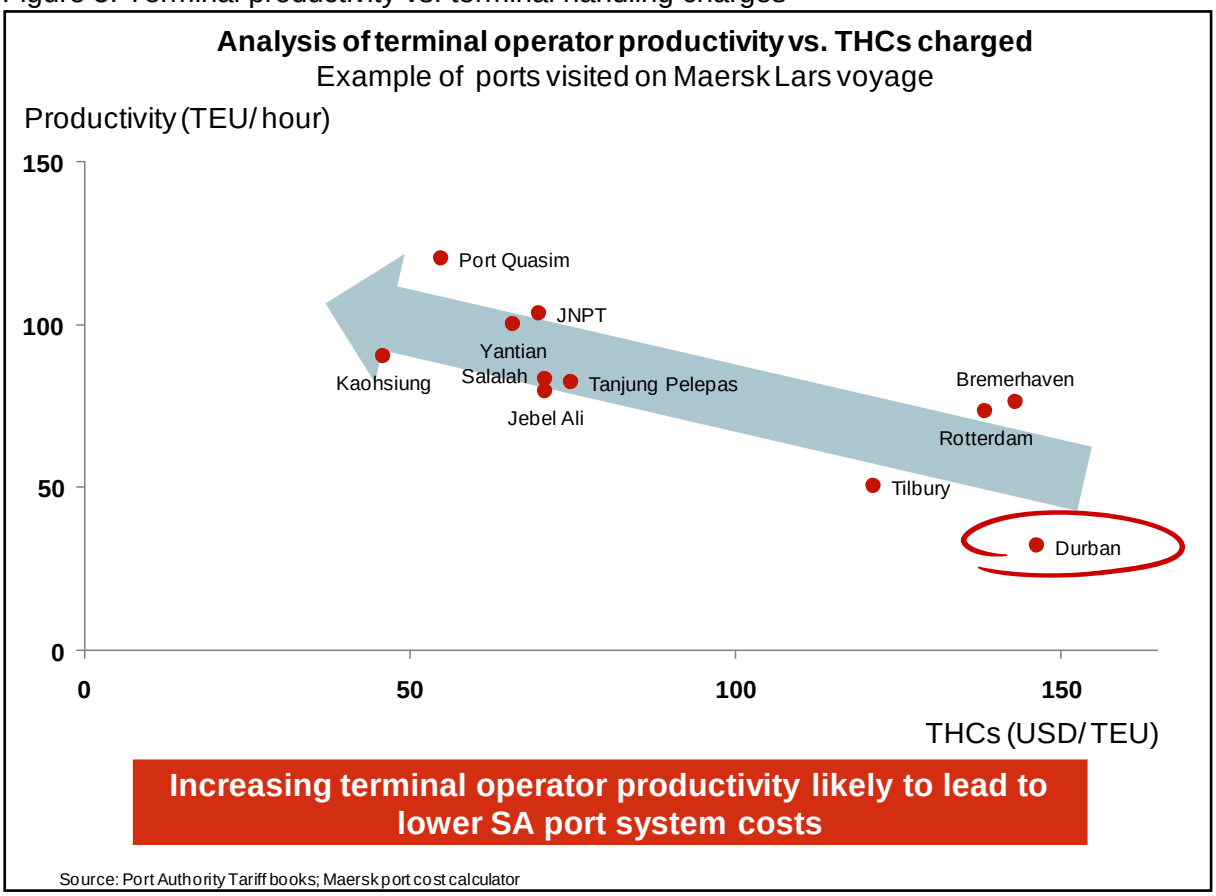


5.3.2 Comparison of port productivity in relation to terminal handling charges

Common complaints from shipping lines are that South African port costs are high, especially when considering provided service levels and cargo handling performance. When THCs are analyzed in relation to container terminal operator productivity measured in TEU per vessel working hour (Figure 5), Durban appears to be expensive while at the same time container handling productivity is low. This highlights one of the key challenges facing TNPA in its ability to manage terminal operator productivity to meet international norms.

The ports with the highest productivity tend to have the lowest THCs amongst the benchmarked ports. Increasing the productivity of terminal operators can therefore potentially lead to lower costs in the South African ports system.

Figure 5: Terminal productivity vs. terminal handling charges



5.3.3 Comparison of cargo dues charged by ports that levy cargo dues/wharfage

Many ports across the world charge cargo dues, although they are commonly referred to as wharfage. Cargo dues/wharfage are typically levied on cargo that passes over the quay walls of the port and is used to recover the cost of building port infrastructure. The level of cargo dues/wharfage tends to depend on the level of government subsidisation of port infrastructure as well as the method used to calculate the recovery of the infrastructure costs.

Benchmarking of cargo dues levied on containers shows that the cargo dues charged by TNPA are significantly higher in comparison to the benchmarked ports, apart from Walvis Bay in Namibia, a port which was previously part of the South African ports system. In addition, TNPA has the biggest variation between the cargo dues imposed on imports versus exports. Differential cargo dues tariffs imposed on imports and exports is not common practice among the benchmarked ports.

Figure 6: Comparison of cargo dues on containers

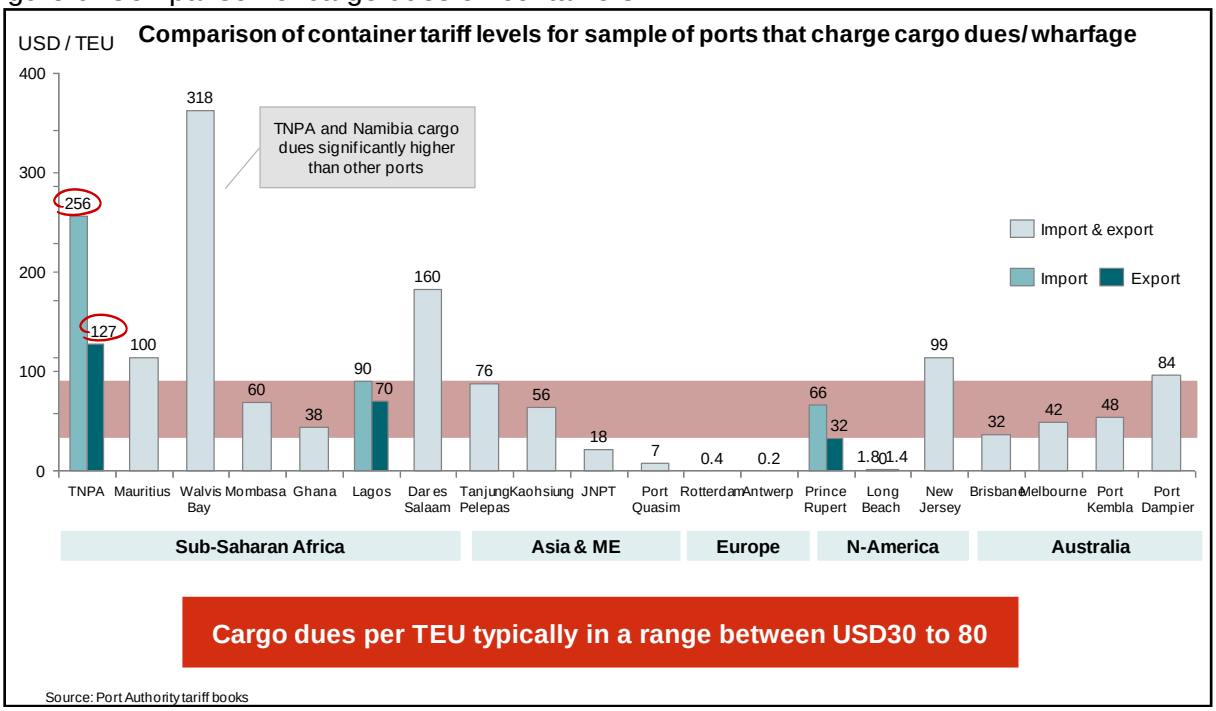
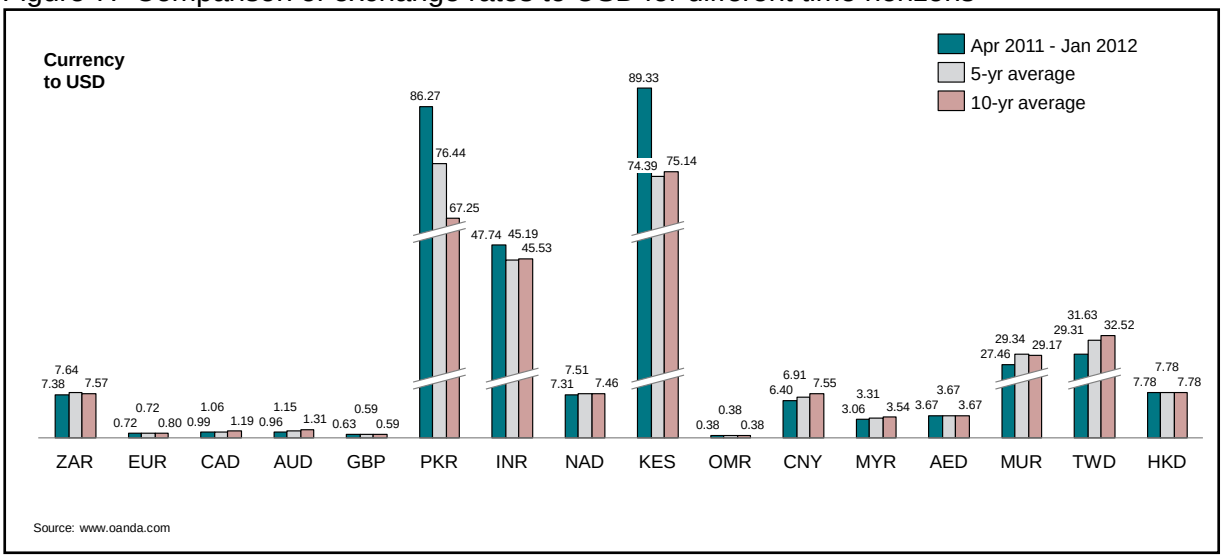


Figure 6 above shows that, on average, cargo dues around the world are levied at a range of between USD 30 and USD 80 per TEU. Cargo dues per TEU in South Africa exceed this range significantly.

We cannot conclude that the unfavourable comparison of port costs for South Africa is explained by the exchange rate ZAR to USD. Figure 7 shows the underlying exchange rates for the benchmarked ports for three different time horizons: short-term (10-month average), medium-term (5-year average) and long-term (10-year average).

Figure 7: Comparison of exchange rates to USD for different time horizons



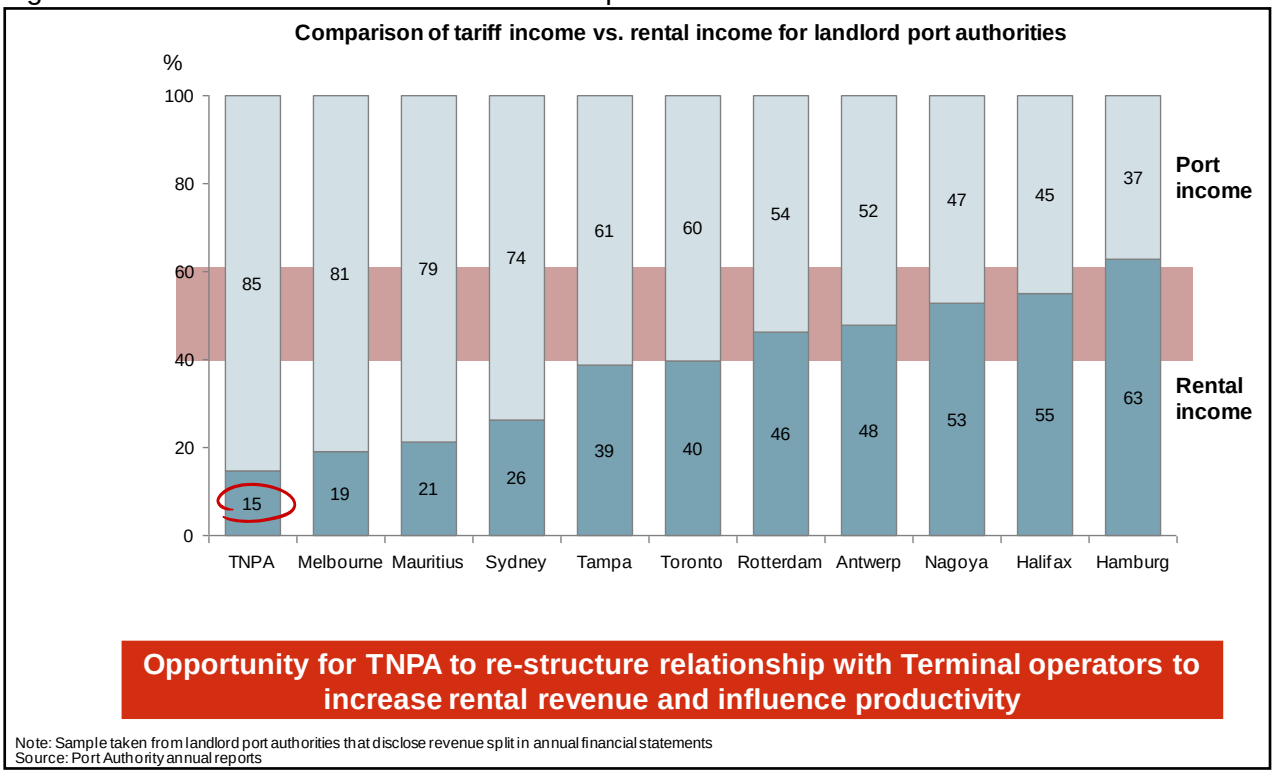
With exception for a few currencies that devalued versus the USD in the recent past, most currencies stayed in a fairly narrow band to the USD, including ZAR, EIR, and AUD. In other words, the port cost comparisons depicted in this chapter will look very similar irrespective whether a short-term, medium-term or long-term average exchange rate is used.

5.3.4 Comparison of landlord port revenue structure

The term landlord port describes a particular set-up in the ownership structure of port assets and the separation of responsibilities for provision of port infrastructure and related services by a port authority vs. cargo handling by a terminal operator who owns the terminal superstructure (e.g., paving, buildings, cranes).

A landlord port typically derives a large portion of its revenue from rental income. The rationale behind this is 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 maximize efficiencies and productivity to enhance profitability and returns. Figure 7 below compares the proportion of port tariff income and rental income to total income for the benchmarked landlord ports. When compared to other landlord ports, TNPA's rent contribution to total income is the lowest at 15%, with most landlord ports gaining 40% to 60% of total revenue from rental income.

Figure 8: Contribution of rental income to total port income



Note: Sample taken from landlord port authorities that disclose revenue split in annual financial statements
Source: Port Authority annual reports

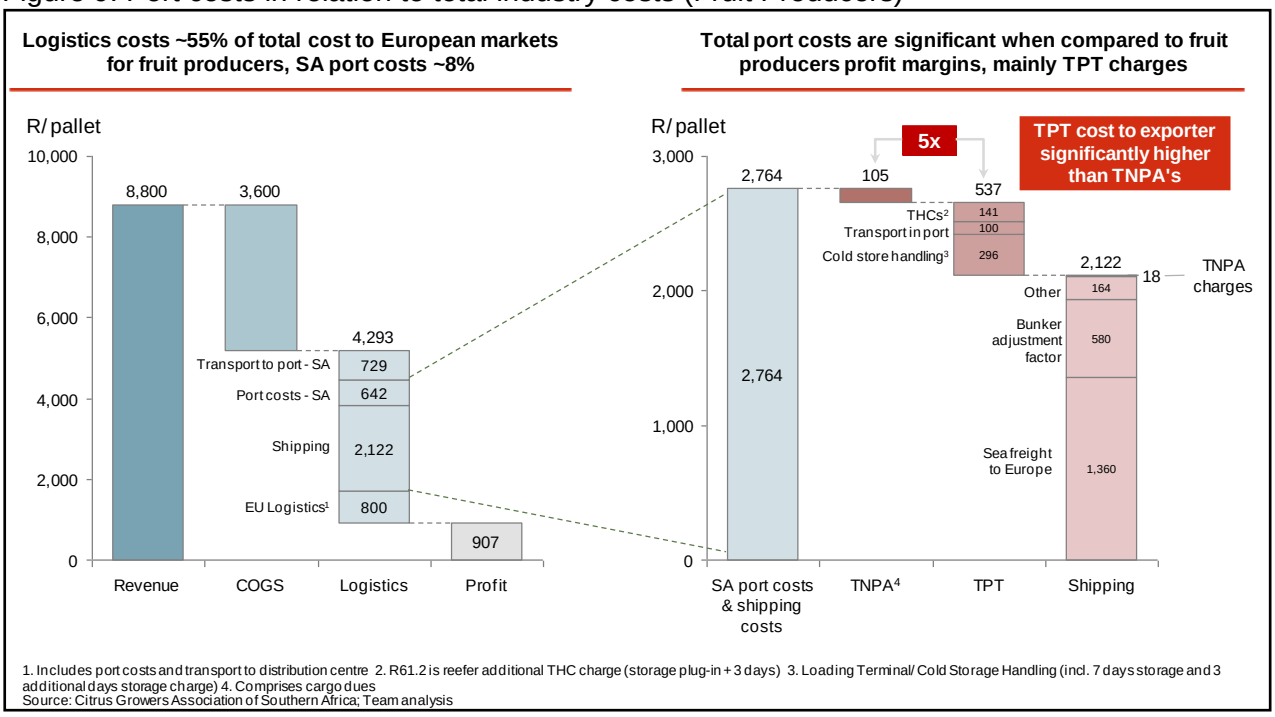
From this perspective, it seems that TNPA is clearly under-leveraging rent as a source of income, and there seems to be an opportunity for TNPA to restructure its relationship with terminal operators to increase rental revenue and influence productivity.

5.4 Port costs in relation to total industry costs

An illustrative assessment of the contribution of port costs to total industry costs was performed using the costs of fruit producers in South Africa that are exporting to European markets. At 55% of total costs to fruit producers, logistics costs can significantly impact fruit producers' profitability. As shown in Figure 8 below, shipping costs make up the bulk of logistics costs. South African port costs, comprising TNPA's tariffs and Transnet Port Terminals (TPT) charges, make up 8% of total costs for fruit producers.

Total port costs are significant when compared to fruit producers' profit margins. However, it is important to note that terminal operator charges make up the bulk of the total port costs, being approximately five times higher than TNPA tariffs. Therefore, TNPA's costs to exporters are not a significant portion of total costs and have minimal impact on competitiveness and profitability.

Figure 9: Port costs in relation to total industry costs (Fruit Producers)



1. Includes port costs and transport to distribution centre 2. R61.2 is reefer additional THC charge (storage plug-in + 3 days) 3. Loading Terminal/ Cold Storage Handling (incl. 7 days storage and 3 additional days storage charge) 4. Comprises cargo dues
Source: Citrus Growers Association of Southern Africa; Team analysis

6 Proposed high level tariff structure

The proposed new tariff structure is driven by the application of the previously discussed core design principles of cost recovery, user pays, Required Revenue and competitiveness in the allocation of TNPA's assets to the three port user groups: shipping lines, cargo owners and terminal operators.

Asset allocation is based on the facilities utilised by the different port user groups and by the market implications of allocating assets to particular port users (for example, ensuring the competitiveness of South African ports by not allocating all wet infrastructure assets to shipping lines and thus making tariffs to shipping lines prohibitively expensive).

Once assets have been allocated, the total Required Revenue for each port user group can be calculated. Required Revenue can then be determined at a disaggregated level to ensure cost recovery of specific services provided by TNPA. For example, the Required Revenue for the different maritime services (light dues, port dues, towage, pilotage, VTS, etc.) provided by TNPA can be calculated based on the allocation of asset and operating costs to the individual maritime services.

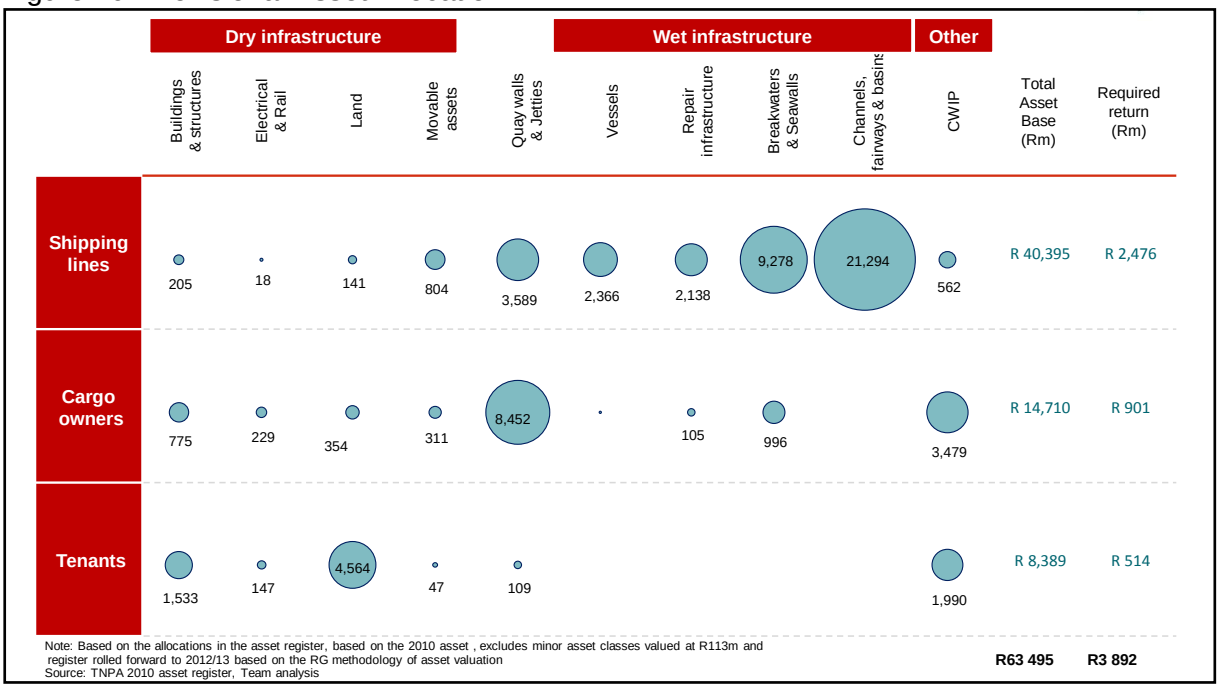
The Required Revenue calculated at the disaggregated level can then be used to determine the tariff levels, typically by dividing total Required Revenue by expected volumes for each service.

6.1.1 Proposed asset allocation to port user groups

In preparation for the redesign of the tariff structure, TNPA has performed a provisional asset allocation exercise (Figure 9), which is however sub-optimal in allocating assets to specific port users. Based on the provisional allocation, shipping lines would be allocated the bulk of wet and some dry infrastructure (more than 58% of total assets), consisting of channels, fairways, basins, breakwaters and sea walls. If the cost recovery and user pays principles were applied based on this asset allocation, shipping lines would have to pay more than 50% of Required Revenue versus 18% currently, which would seriously jeopardise the competitiveness of the South African ports system.

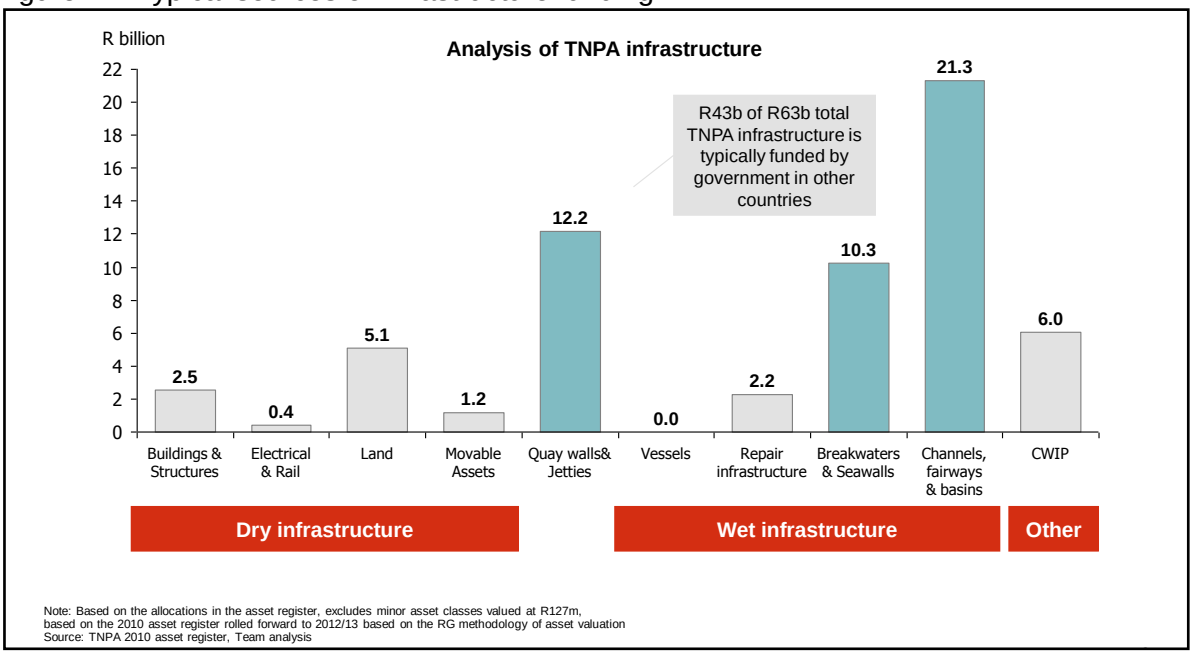
Similarly, based on the provisional asset allocation, quay walls and jetties would be allocated to cargo owners, while terminal operators would have the lowest asset allocation at 12% of the total asset base, as only some land and buildings would be allocated to them. A clear issue is the allocation of quay walls to cargo owners when terminal operators derive the most value from them and hence should pay for them based on the user pays principle.

Figure 10: Provisional Asset Allocation



It needs to be noted that TNPA is in a relatively unique position whereby the Authority is fully responsible for funding all port infrastructure. Globally, the majority of ports have a large proportion of assets funded by government. As Figure 10 below shows, capital intensive assets such as breakwaters, channels, turning basins and quay walls are typically in full or at least partially government funded in other countries. If TNPA's funding model was similar to other ports benchmarked, then 67% of all TNPA's assets would be government funded.

Figure 11: Typical sources of infrastructure funding



The proposed asset allocation seeks to address the issues mentioned above through a more equitable allocation of assets to port users. The driving principles applied to the proposed asset allocation are the user pays and competitiveness principles. Under the user pays principle, assets should be allocated so as to ensure that port users pay for the assets that they use. However, consideration should be taken in the asset allocation also to ensure that the competitiveness of South African ports is not compromised.

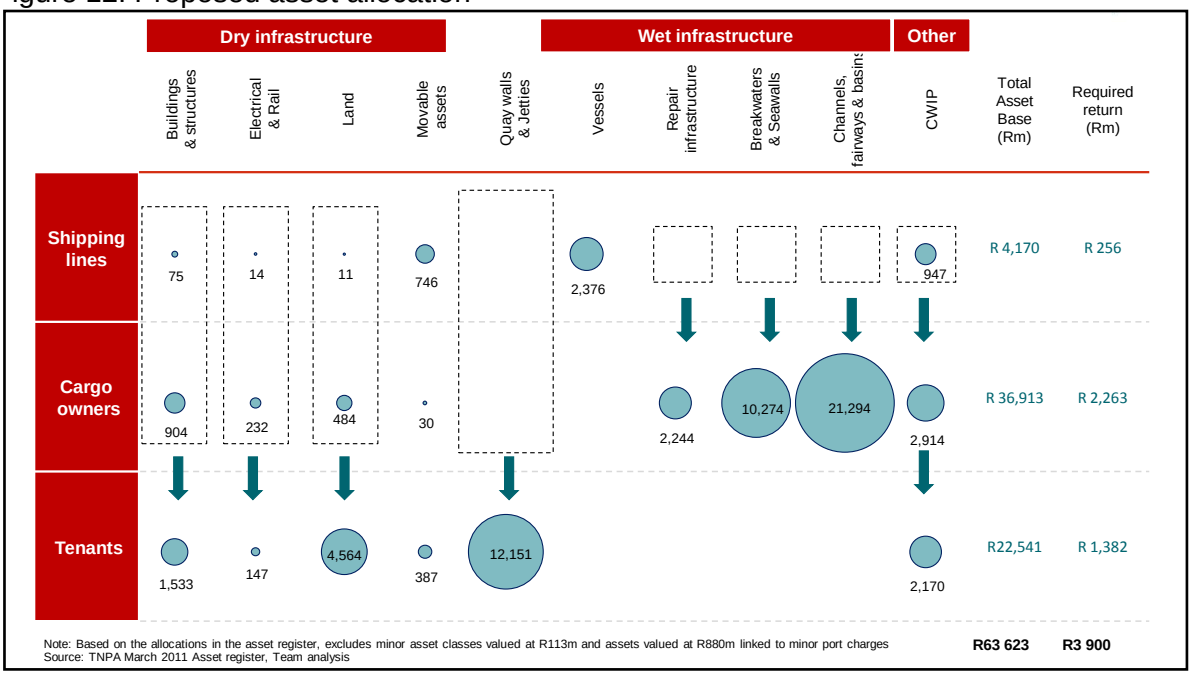
Given that the majority of international ports have a high proportion of wet infrastructure funded by government, not all wet infrastructure should be allocated to shipping lines as this will make the tariffs charged to shipping lines prohibitively expensive compared to other ports internationally. Infrastructure that is typically funded by government is therefore allocated to cargo owners in lieu of there being taxpayers' funds available. In a nutshell, infrastructure that would typically be paid by taxpayers through government funds should be paid by taxpayers through cargo dues. This includes also the common dry infrastructure, which is primarily used by terminal operators to move cargo.

Assets required to provide maritime services (e.g. tugs) and the operating costs related to maritime services are allocated to shipping lines given that shipping lines are the main users of these services. In addition, costs for the upkeep and maintenance of wet infrastructure (e.g., maintenance of breakwaters, maintenance dredging) are charged to shipping lines.

Terminal operators derive the greatest economic benefit of all port users from the access to quay walls, given that the revenue streams that they are able to generate through terminal handling charges is dependent on the quality of the quay wall to which they have access. Quay walls are therefore allocated to terminal operators.

The final proposed asset allocation is presented in Figure 12 below.

Figure 12: Proposed asset allocation



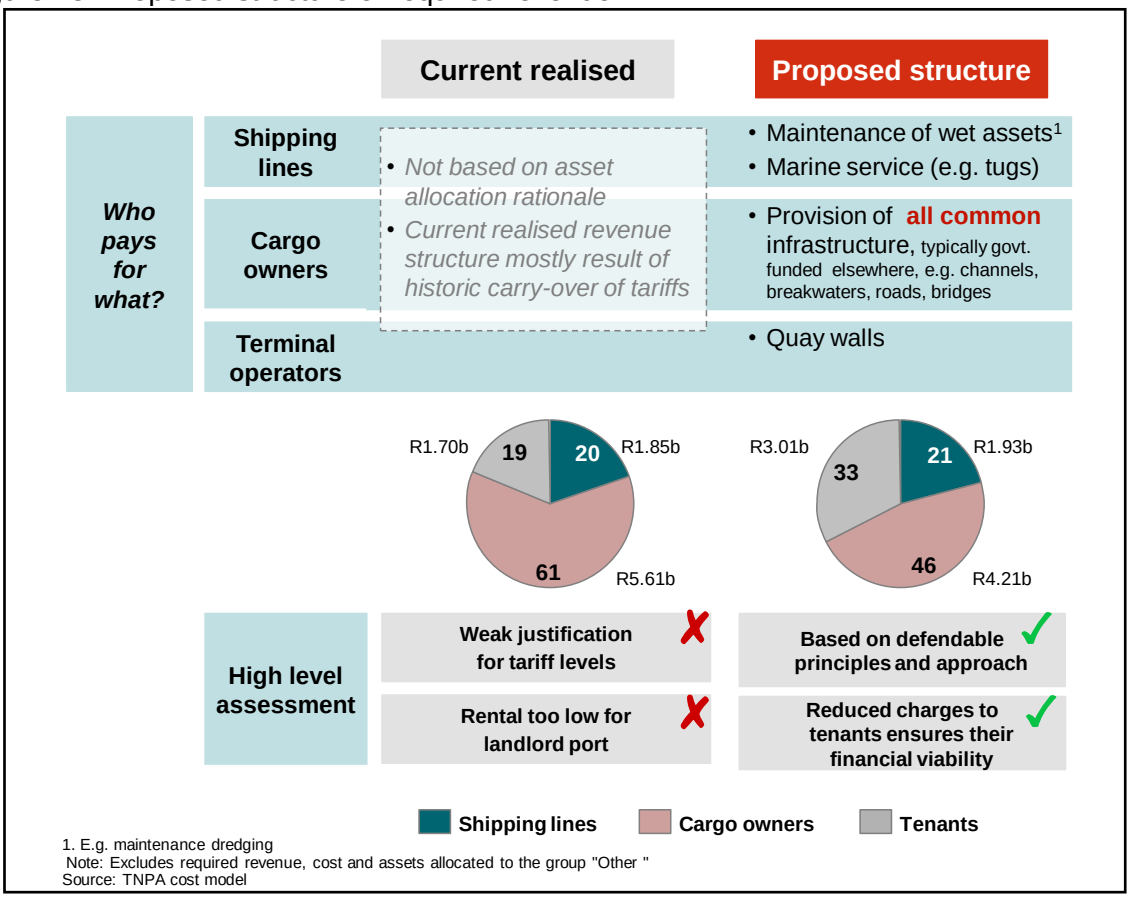
6.1.2 Proposed Required Revenue by port user group

Under the current tariff structure, cargo owners are bearing the burden of port charges (61%) through cargo dues, while shipping lines and terminal operators share the remaining 39%. The current split of the Required Revenue by port user group cannot be soundly defended, as it is not based on a clear allocation of assets. Other issues with the current split include:

- Very high tariff levels for cargo dues resulting from the migration from the old wharfage charge, which was calculated on an ad-valorem basis depending on the value of the cargo;
- Very high differentials in the levels of cargo dues for different cargo types and commodities with no clear motivation for the differences;
- Relatively low tariff levels for maritime services, which are based on an activity-based costing exercise conducted during the tariff reform of 2002 and that has since not been updated, resulting in the subsidisation of some services;
- Very low levels of revenue from the real estate business as compared to other landlord port authorities across the world.

The proposed Required Revenue (Figure 13), which is driven by the proposed asset allocation discussed above, results in the following contributions to Required Revenue: terminal operators 33%, cargo owners 46% and shipping lines 21%.

Figure 13: Proposed structure of required revenue



The proposed tariff structure means that terminal operators will pay higher rentals that are more in line with international norms; cargo owners will pay lower cargo dues, also more in line with international norms; and shipping lines will pay slightly higher tariffs. Based on the application of the design principles, the proposed tariff structure presents the most balanced and defendable distribution of Required Revenue across port user groups.

7 Proposed details on new tariff structure and tariff design

7.1 Critical issues addressed by the proposed tariff structure

The proposed tariff structure includes TNPA's real estate business in the calculation of the Required Revenue and integrates the input from port users, external and internal stakeholders, and international common practices. Furthermore, the proposed tariff structure aims at being transparent by using a set of principles and dynamic rules to set tariffs and specifically aims at avoiding tariff differentiation, discrimination and cross-subsidisation, except where in the case of public interest.

The proposed tariff structure also aims at answering the following key questions:

1. ***How can maritime services be structured to recover costs to ensure sustainability?***
   TNPA is currently under-recovering the costs of providing maritime services to shipping lines, and there is a level of cross-subsidisation that exists across the different maritime services tariffs.

2. ***How can TNPA best ensure the fairness of cargo dues and how should modifiers to base rates be decided?***
   The current cargo due tariff structure was inherited from the ad-valorem regime and has resulted in a structure with no clear and defendable rationale for the different level of cargo dues charged for each commodity. In addition, there needs to be a codified process in place to ensure that any differentiation of cargo dues tariffs to base rates is in the public interest.

3. ***How should TNPA structure rental agreements to ensure optimal port productivity?***
   The Directives require TNPA to manage the efficient and effective operation of ports, key to which is managing terminal operator productivity. TNPA's lease management needs to more effectively promote and manage the productivity of terminal operations.

7.2 Implications and impact of new tariff structure

7.2.1 Implications for port users

The proposed tariff structure will impact the charges paid by each of the port user groups through the changes to the Required Revenue portion to be paid by each port user group. Anticipated implications for shipping lines, cargo owners and terminal operators are as follows:

- Required Revenue from shipping lines will increase slightly by a preliminary 4%. Increased charges will be high in comparison to benchmarked international ports but still relatively well-aligned. Shipping lines are, however, likely to pass on the increased costs to cargo owners through increased shipping charges.

- Required Revenue from cargo owners will decrease by a preliminary 25%. The proposed tariff structure further aims at simplifying cargo dues through a single base rate charge for

each different cargo handling type. The decrease in cargo dues should strengthen the competitiveness of certain industries in the export sector. However, as costs may be passed on to cargo owners by shipping lines and terminal operators, cargo owners may still end up bearing the majority of port related costs.

- Required Revenue from terminal operators will increase by 77%. This will require a transition to a true landlord port authority by TNPA, including its power to regulate the THCs charged by terminal operators. Without any regulation of terminal handling charges, the increased rent costs will likely be passed through to shipping lines and subsequently to cargo owners. In addition, higher terminal charges could pose a real threat to transhipment in South Africa.

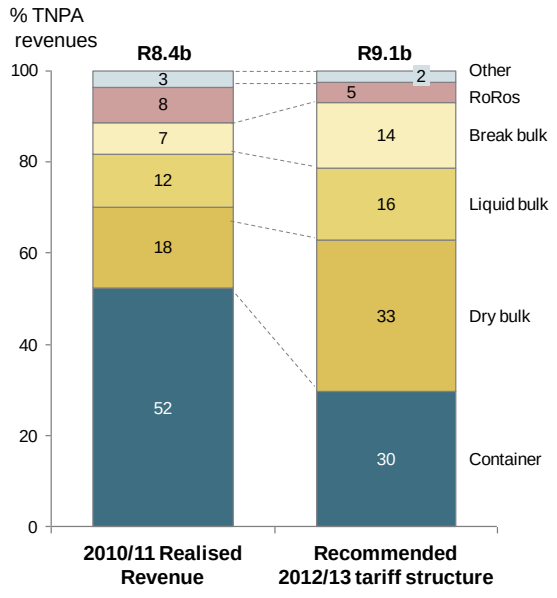
TNPA will implement a stakeholder engagement plan to manage the concerns and reactions of stakeholders. However, the proposed tariff structure will ensure that TNPA complies with regulatory requirements with a tariff pricing methodology that is transparent, non-discriminatory and defendable. In addition, TNPA will have embarked on a transition process to become a true landlord port, in line with global best practice.

7.2.2 Impact on overall port costs by cargo handling type

The implementation of the proposed tariff structure will impact the different cargo handling types to differing degrees (Figure 14). The recommended tariff levels will result in the total TNPA charges (e.g. cargo dues + marine services + rental and excl. THCs) for containers and RoRo decreasing significantly in absolute and relative terms, rebalanced from significant increases for liquid bulk and, especially, break bulk and dry bulk. This rebalancing act is the result of strictly applying the design principles and represents a significant step towards promoting more productive use of ports infrastructure, where ships that can achieve faster turnaround times and larger cargo movement are rewarded for their efficiency.

Figure 14: Impact of proposed tariff structure on total TNPA charges [Before Beneficiation]

Comparison of revenue by cargo handling type



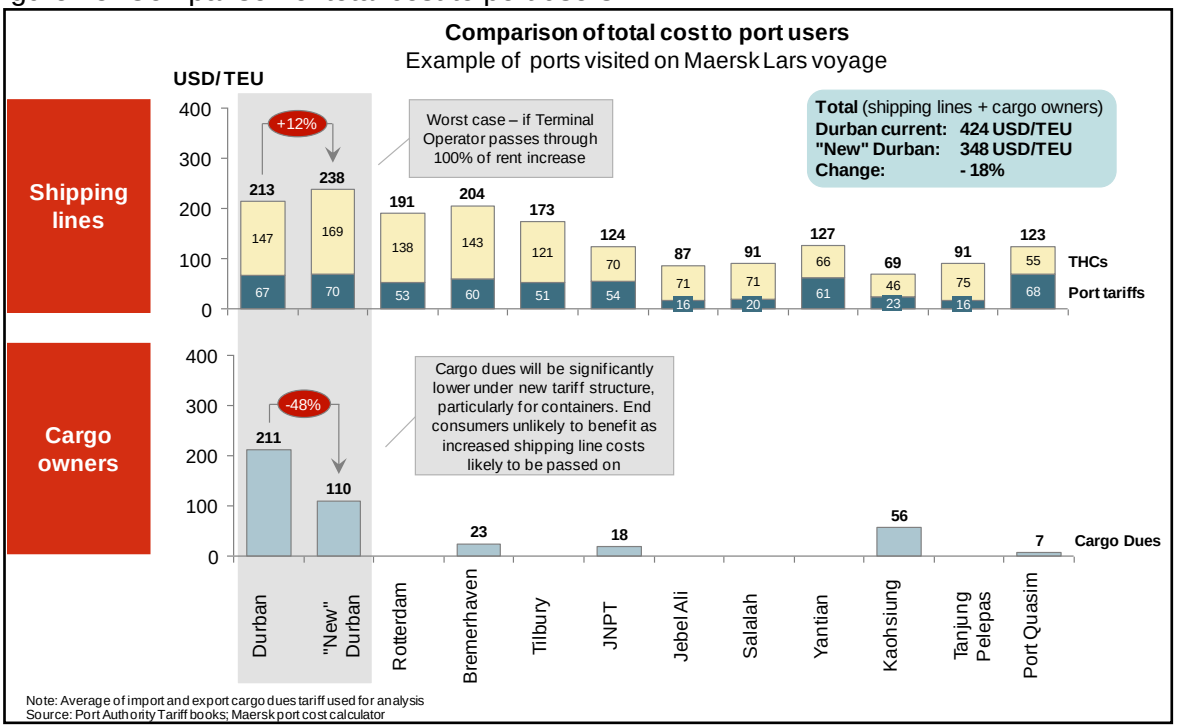
Comparison of revenue per unit by cargo handling type

Cargo handling type	Old tariffs (R/unit)	New tariffs (R/unit)	% change
RoRos (units)	1 202.8	691.4	-43%
Break Bulk (tons)	68.1	112.5	+65%
Liquid Bulk (tons)	24.1	36.0	+49%
Dry Bulk (tons)	11.1	18.7	+68%
Containers (TEU)	1 109.1	560.6	-49%

Source: TNPA cost model; TNPA 2012/13 corporate budge; Team analysis

Figure 15 illustrates that the net effect to port users for container cargo is expected to be a preliminary 18% reduction in total port costs per TEU. This figure is calculated as follows: container cargo dues will decrease by 48%; shipping line port tariffs will remain at similar levels for container ships; and, assuming that terminal operators will pass through the full rent increase through increased terminal handling charges (THCs), the overall cost to shipping lines will increase by a preliminary 12%.

Figure 15: Comparison of total cost to port users



7.3 Proposed maritime services tariffs

7.3.1 Maritime services tariff structure

The key question that the proposed maritime services tariff structure must address is how to recover costs to ensure sustainability at a disaggregated level (i.e., for each individual maritime service).

7.3.1.1 Current issues

Maritime services as a whole are currently not recovering operating costs, depreciation/ capital and other allocated costs. This impacts the ability of maritime services to be self-sufficient for purposes of capital additions (such as new tugs) without cross-subsidisation from other services and port users. In addition, cross-subsidisation currently exists between individual maritime services as a result of some services over-recovering costs, whilst others are under-recovering costs.

7.3.1.2 Recommendation

The proposed maritime services tariff structure works on the basis that the Required Revenue should be calculated individually for each service, applying the cost recovery and user pays principles. Each maritime service has a different cost base that is dependent on the operating and depreciation/ capital costs specific to providing that service. In addition, the assets are specifically allocated to each service (for example, tug vessels will be allocated to tug services and tariffs) to calculate the required returns for each service. Different tariffs will then be calculated for each service to meet Required Revenue and ensure cost recovery at the disaggregated level.

In calculating Required Revenue as detailed above and setting tariffs to meet Required Revenue for each individual maritime service, shipping lines will pay the correct amounts for the specific services that they use, thereby satisfying the user pays principle. Furthermore, the basis for the charges can be clearly explained.

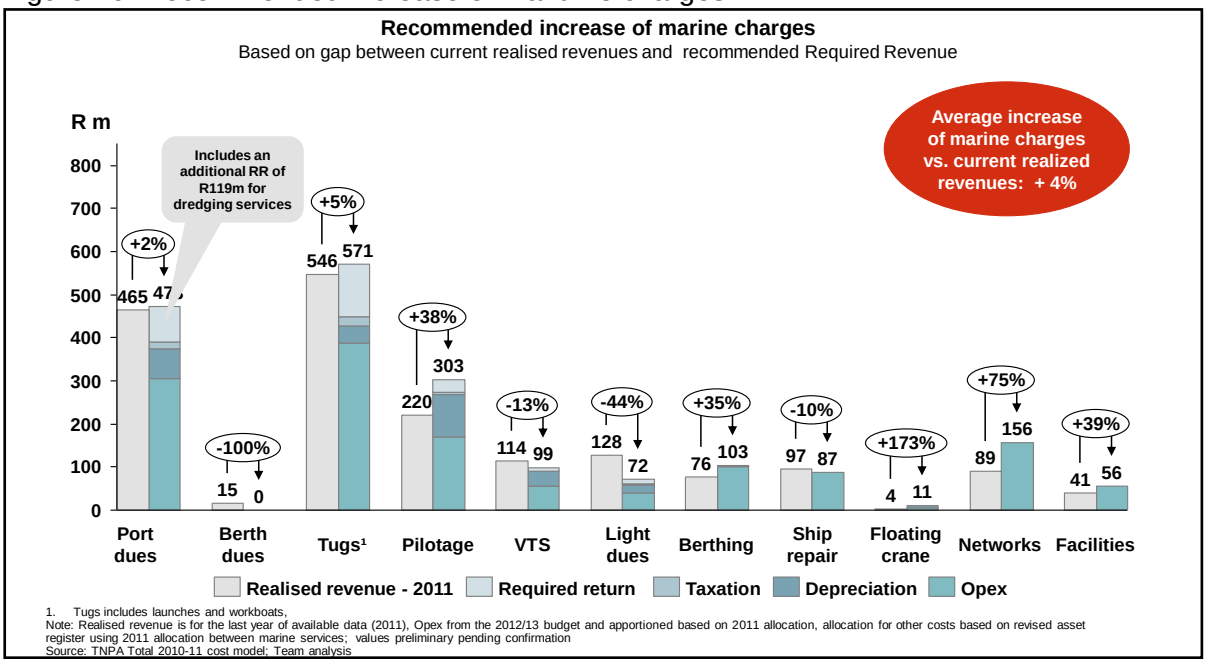
The proposed new tariff structure suggests the discontinuation of berth dues – mainly due to three reasons. First, the initial purpose of berth dues when they were introduced was to impose a financial penalty to make sure vessels continuously work cargo while berthed. However, the tariff levels seem too low to support this objective effectively. Second, typically berth dues are charged for the provision of quay wall. Since in the proposed tariff structure quay walls are allocated to tenants, there is no longer a basis to charge berth dues to shipping lines altogether. Last, with revenues of R15m in 2010/11, berth dues are an minor revenue contributor. Taking all this into account and in the spirit of simplifying the tariff book, this charge is not longer foreseen.

7.3.1.3 Impact of recommendation

The recommended Required Revenue for maritime services results in an overall increase of approximately 4% versus current realised revenues (Figure 15).

Current realised revenues for Port Dues, Tugs, Pilotage and Ship Repairs are very close to the recommended Required Revenues, only changing +/-5% to current levels. Berth dues will be consolidated into port dues and therefore will not be charged anymore. Required Revenue relating to Vessel Traffic Services (VTS) charges and Light Dues will decline significantly, whilst Berthing Services and other maritime services (such as hiring of floating cranes) increase significantly.

Figure 16: Recommended increase of maritime charges



7.3.2 Proposed maritime services tariff design

This section will lay out how exactly TNPA proposes to charge for the various maritime services. While analysing tariff books of other ports and engaging with port users, it became evident that there are opportunities for TNPA to improve how exactly tariffs are determined with respect to simplicity, fairness and effectiveness.

7.3.2.1 Proposed port dues tariff design

Figure 17: Proposed port dues tariff design

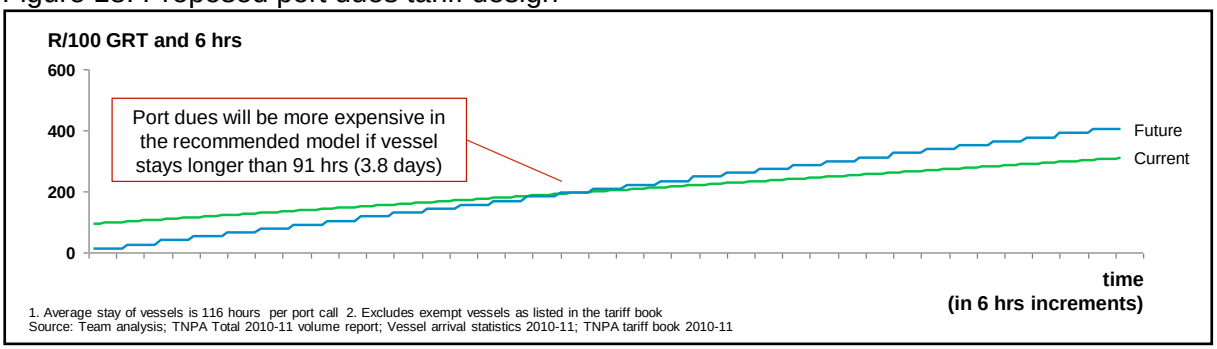
Tariff design element	Current tariff design	Recommended tariff design	Rationale for change
Tariff consolidation	• Berth dues and port dues are separate	• Consolidate port dues and berth dues into a single tariff	• Simplification • Berth dues revenue insignificant as charged on exception basis
Charge basis	• GRT in 24 hour periods (pro rata) for time spent in port	• GRT in 6 hour periods (not pro rata) for time spent in port	• Incentive to improve vessel turnaround time
Charge calculation	• Basic fee plus linear increment per GRT	• Linear increment per GRT	• Simplification

The proposed tariff structure consolidates berth dues into the current ports dues tariff. Berth dues are currently charged on an exception basis, when vessels are not engaged in cargo handling activity, and are an insignificant revenue source for TNPA as shown in Figure 16. The consolidation of the tariffs will therefore simplify the tariff structure to the benefit of TNPA customers.

The recommended method of charging port dues results in a R13.50 per 100 GRT per 6 hour increment and was calculated using both a top down follows:

- The 2012/13 base rate tariff is R100.22 per 100 GRT plus an hourly rate of R30.05 per 100 GRT (pro rata of 24 hour period)
- This results in an effective rate of R12.70 6 hour increment (assuming an average port stay of 116 hours)
- Increased by 2% to R12.95 (according to the overall increase in Required Revenue from port dues) and then rounded to R13 per 100 GRT and 6 hour increment

Figure 18: Proposed port dues tariff design



Port dues will be more expensive under the proposed tariff as compared to the current one only if vessels stay longer than 91 hours (3.8 days) as shown in Figure 18.
However, the proposed port dues tariff will benefit vessels with faster turnaround time. For example, car carriers with an average vessel stay of 39 hours will benefit substantially.

7.3.2.2 Proposed berthing and running of vessel lines tariff design

Figure 19: Proposed berthing and running of vessel lines tariff design

Tariff design element	Current tariff design	Recommended tariff design	Rationale for change
Tariff consolidation	• Berthing and running of vessel line tariffs are separate tariffs	• Consolidate berthing and running of vessel line into a single tariff	• Simplification • Running of vessel lines is an infrequent charge
Charge basis	• Berthing: GRT per port • Running of vessel lines: flat fee per service	• GRT per port	• Ensure fair charge differentiation based on vessel size
Charge calculation	• Berthing: basic fee plus linear increment per GRT per port • Running of vessel lines: flat fee per port	• Basic fee plus linear increment per GRT per port	• Ensures fair charge differentiation based on vessel size

The running of vessel lines is a fairly infrequent activity during the berthing process, therefore the proposed berthing tariff design is to consolidate berthing and the running of vessel lines as a single tariff for simplification of the tariff book. The consolidated tariff will apply the same tariff design as the current berthing tariff.

7.3.2.3 Proposed tugs and pilotage tariff design

Figure 20: Proposed tugs tariff design

Tariff design element	Current tariff design	Recommended tariff design	Rationale for change
Charge basis	• GRT	• Flat fee per tug, irrespective of size of tug	• Simplification
Determination of number of tugs required	• Tariff book table	• Harbour master	• Discretion needed based on weather service requirements of specific vessel types
Charge calculation	• Basic fee per GRT by port • Plus sliding scale per GRT by port	• Flat fee per tug, irrespective of size of tug	• Ensures vessels are not unfairly charged for tugs that may be larger than required

Future tug charges will be driven by the actual number of tugs used and Harbour Master discretion with regards to the number of tugs needed to provide the service. The proposed tariff design for tugs will address key issues raised by customers:

- The current tariff design does not account for resources actually used, while in the future the tug charge will be driven by the exact number of tugs used per service which is more fair and easy to explain
- The surcharges in the current tariff design are perceived as unfair, hence the future tariff structure will specifically charge for any additional tug used instead of a flat 50% surcharge on total tug levy
- Fixed GRT rate is unfair for vessels that have better manoeuvrability (e.g. car carrier vessels), hence the number of tugs used will not be based on GRT but will be at the Harbour Master's discretion based on operational and safety considerations

Figure 21: Proposed Pilotage tariff design

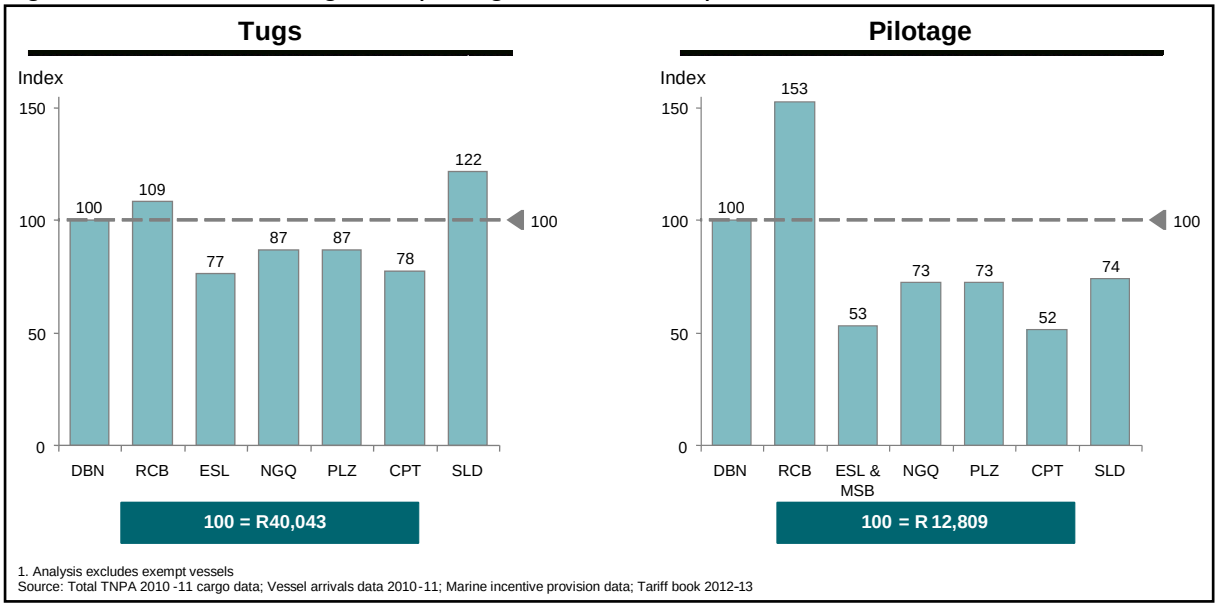
Tariff design element	Current tariff design	Recommended tariff design	Rationale for change
Charge basis	• GRT per port	• GRT per port	• n/a
Determination if pilotage necessary	• Compulsory	• Compulsory	• n/a
Charge calculation	• Basic fee plus linear fee per GRT • Tariff differentiated by port	• Linear fee per GRT • Tariff differentiated by port	• Simplification

The charge calculation for the proposed tariff design for pilotage will be a linear tariff that is dependent on a vessel's gross registered tonnage (GRT) rather than the current tariff that incorporates a base rate in addition to a linear rate per a vessel's GRT. This will simplify the tariff to the benefit of port users.

The current tariff levels for tugs and pilotage vary across ports (Figure 22), and the relative difference across ports will be carried over to future tariff levels, subject to verification that they represent the fair adjustment of actual resources used for each port. For example, the amount of time to provide tug services differ across ports due to geographical differences of ports (e.g., typical distance from pick-up point for pilot to berths) or other reasons (e.g., type of vessels predominantly calling on certain ports).

TNPA intends to conduct a time and movement study over a meaningful period of time in all ports prior to this proposal taking effect to base the differentiation of pilotage and tugs fee across ports on current data.

Figure 22: Variation of tugs and pilotage tariffs across ports

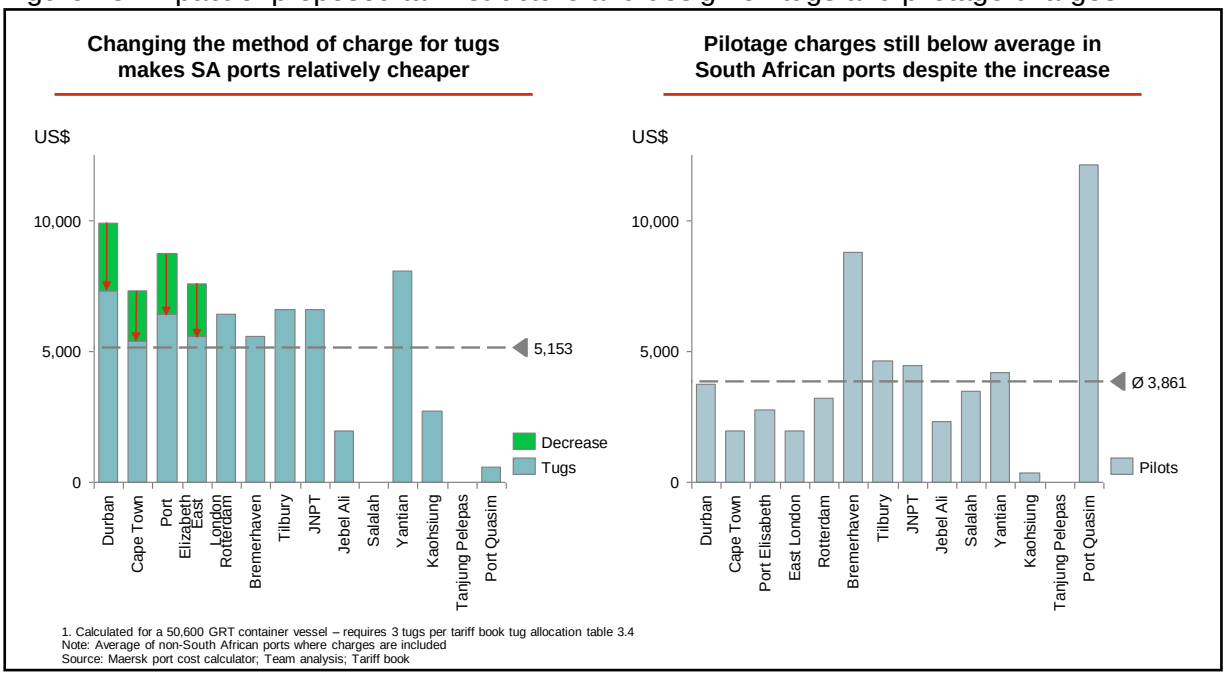


1. Analysis excludes exempt vessels
Source: Total TNPA 2010-11 cargo data; Vessel arrivals data 2010-11; Marine incentive provision data; Tariff book 2012-13

Applying the principle of cost recovery in the case of tugs and pilotage requires consideration of the fact that TNPA is responsible for all major South African sea ports as a system. In this context, the objective for TNPA is to recover costs for tugs and pilotage on a system level and not necessarily for each individual port. To achieve this, all required revenues for tugs (respectively pilotage) from all ports will be pooled for all ports on a system level to determine a system-wide average rate per hour for one hour of tug-operation (respectively pilotage). This underlying system-wide rate will be applied for all ports with consideration to the above-mentioned differences across ports.
In other words, the applied costing factor per tug per operating hour will be the same across ports, however, since tugs will be charged per service and time needed to provide the service differs across ports, the actual tariff will vary by port.

Changing the method of charging for tugs will result in South African ports being relatively cheaper and in line with the average tug charges for benchmarked international ports. TNPA pilotage charges are relatively low compared to benchmarked international ports but will remain lower than the average charges across the benchmarked ports (Figure 23).

Figure 23: Impact of proposed tariff structure and design on tugs and pilotage charges



7.3.2.4 Proposed vessel traffic services (VTS) tariff design

Figure 24: Proposed VTS tariff design

Tariff design element	Current tariff design	Recommended tariff design	Rationale for change
Charge frequency	• Every port call where VTS service is available	• Every port call where VTS service is available	• n/a
Charge basis	• GRT per port	• GRT per port	• n/a
Charge calculation	• Linear and differentiated by port	• Linear and differentiated by port	• n/a

The current tariff design for VTS is fair and in line with international norms and will therefore remain the same.

7.3.2.5 Proposed light dues tariff design

Figure 25: Proposed light dues tariff design

Tariff design element	Current tariff design	Recommended tariff design	Rationale for change
Charge frequency	• First port of call on voyage	• First port of call on voyage	• n/a
Charge basis	• GRT per port	• GRT per port	• n/a
Charge calculation	• Linear and differentiated by port	• Linear and differentiated by port	• n/a

TNPA proposes to continue charging for light dues as in the current tariff book, since the current basis of charging light dues seems fair and in line with international norms.

7.3.2.6 Proposed ship repair tariff design

Figure 26: Proposed ship repair tariff design

Tariff design element	Current tariff design	Recommended tariff design	Rationale for change
Charge differentiation	• By port and by type of dock	• By type and size of dock	• Charges equal for same type and size of dock irrespective of port located in
Charge basis	• ***Preparation:*** GRT • ***Dock occupation:*** GRT and time	• ***Preparation:*** GRT • ***Dock occupation:*** vessel length	• Vessel length more appropriate measure of usage of dry dock
Charge calculation	• Basic fee for first 24 hours and sliding scale by tonnes fee per 12 hour increment or part thereof	• Basic fee for first 24 hours plus linear fee per 100 GRT per 12 hour increment or part thereof • Basic fee to be calculated as a minimum length rented irrespective of vessel length	• Linear fee fairer basis of charge than sliding scale • Shorter vessels will tie up usage of full dock and therefore minimum revenue should be earned irrespective of vessel length
Charge allocation	• High proportion to dock occupation fees, lower proportion to preparation fee	• Higher proportion to dock occupation fees, but a greater proportion to preparation fees than current	• A greater proportion of charge should be allocated to preparation of docks and docking/ undocking given time and manpower required
Surcharges	• Penalty if booking not taken up or cancelled within 21 days prior to booked date	• In addition to current penalty a penalty if vessel stays past reserved time	• TNPA can be penalised if not able to accommodate a vessel as scheduled; therefore vessels in dock causing delays should be penalised

7.3.2.7 Discounts on marine charges

TNPA proposes to discontinue discounts to shipping lines in its current form.

However, the authority is open to the idea of tariff reductions for particular vessels meeting defined criteria. For example, in order to improve employment opportunities for South African seamen, vessels with a minimum number of South African seamen of all levels and in all roles on board could be eligible for a reduction of the total marine charges associated with a given port call. Details are subject to further considerations.

7.4 Proposed cargo dues tariff

The key issue that the proposed cargo dues tariff seeks to address is related to ensuring that cargo dues are fairly distributed across cargo handling types. In addition, there needs to be a clear rationale in place to ensure that any differentiation of cargo dues tariffs to base rates is in the public interest.

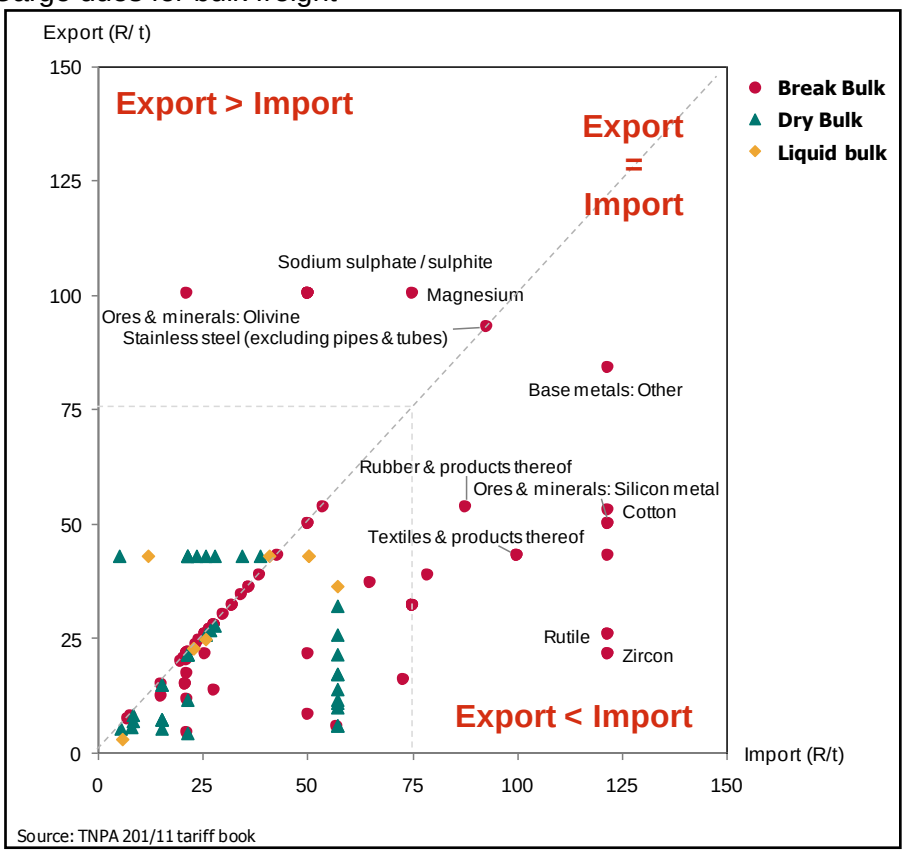
7.4.1 Cargo dues tariff structure

7.4.1.1 Current issues

The current cargo due tariff structure is a result of legacy issues from the ad-valorem methodology where cargo dues were calculated per commodity type based on the value of the commodity. This has resulted in over 100 tariffs for cargo dues for specific commodities.

In addition, there is currently no rationale to justify the different levels of tariffs as well as the reasons for differentiation of tariffs for commodities within the same cargo handling classification. There are currently different tariff rates for similar commodities and different export rates for the same commodities categorised under dry and break bulk. Figure 27 below highlights the large number of commodities differentiated within bulk freight with large variances in cargo dues per ton.

Figure 27: Cargo dues for bulk freight



As shown above, there are different tariff rates for similar commodities and different export rates for the same commodities classified as break bulk and dry bulk. In addition, some commodities like timber are significantly more expensive to import. Without a clear rationale for these differences the cargo due tariff structure highlights the inconsistencies that need to be addressed.

7.4.1.2 Recommendation

The proposed cargo dues tariff structure will be based on the following principles and rules:

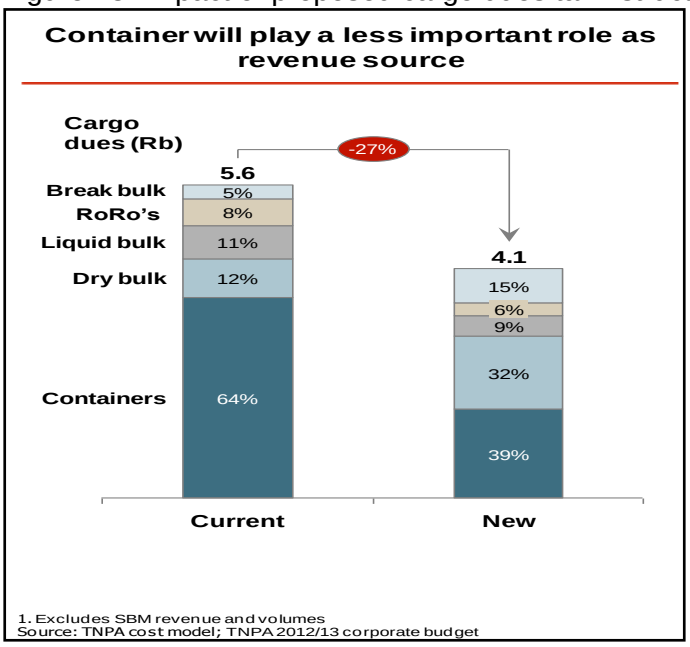
1. There must be a clear rationale to justify overall cargo dues. In the proposed tariff structure, cargo dues pay for the provision of common wet and dry infrastructure and must recover the required revenues from this infrastructure, as motivated in Section 0 of the document.
2. There should be one base rate per each different cargo handling type (i.e. containers, dry bulk, break bulk, liquid bulk, RoRo), which should be determined based on the user pays principle. Users of the common wet and dry infrastructure are vessels; therefore usage by different vessel types for each cargo handling type seems the most appropriate way to determine the charges for each cargo handling type. Therefore, the proposal is to determine the share of total cargo dues to be paid by each cargo handling type through the count of vessel arrivals. For example, 44% of all relevant port calls are made by container vessels. Accordingly, 44% of the total cargo dues should be recovered by containers. The exact tariff per unit will be calculated as: projected number of port calls in percent of total port calls × required revenue for common wet and dry infrastructure ÷ projected volume of that cargo type.
3. Deviations from the base rate for cargo dues are proposed in line with government priorities with regards to the existing economic agenda of promoting exports and beneficiation.
4. Any loss of revenue due to reductions from the base rate for specific cargo should be compensated by resetting the cargo dues rates for other cargos in the same cargo handling type. For example, a reduced base rate for break bulk exports will be compensated by higher rates for break-bulk imports.

7.4.1.3 Impact of recommendation

As previously discussed, the Required Revenue from cargo dues will decrease overall by 25% with the proposed asset allocation of common wet and dry infrastructure and recovery of associated returns.

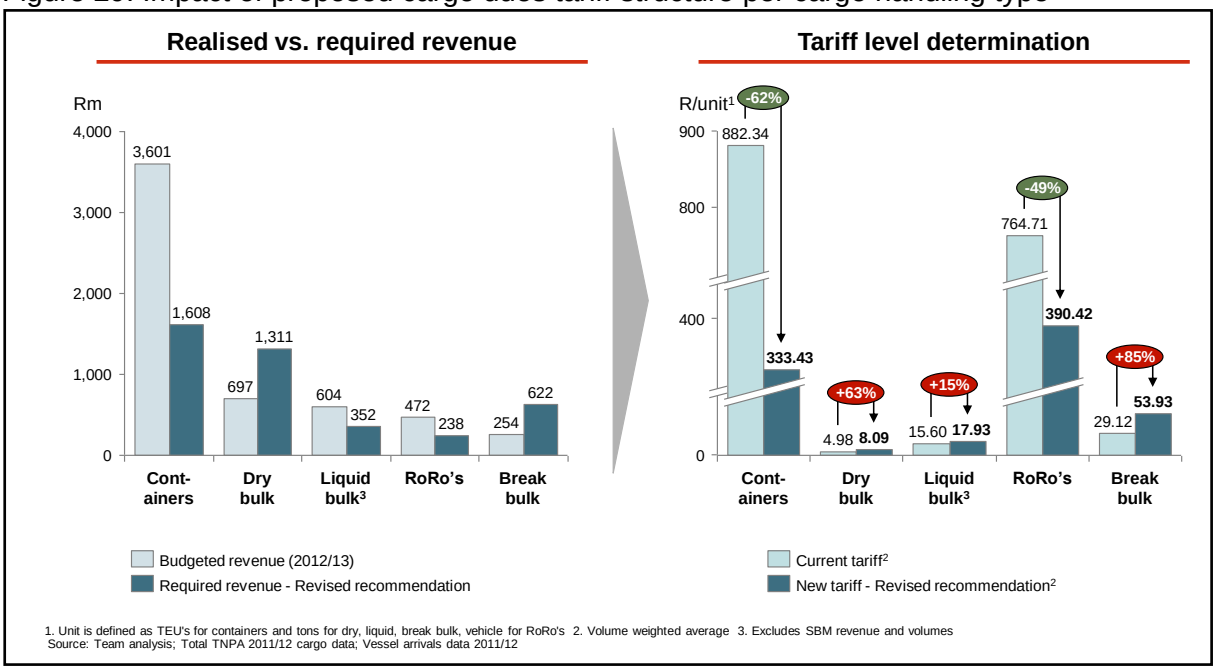
Applying the vessel port call rationale for each cargo handling type will rebalance the burden of each cargo handling type considerably. For example, the contribution of container dues will decrease from currently 64% to 39% of the total cargo dues, leading to an overall decline per unit of 55%. The proposed contribution of each cargo handling type can be seen in the following figure.

Figure 28: Impact of proposed cargo dues tariff structure



Required Revenue for containers, liquid bulk and RoRo's is expected to decrease substantially. As a result, future base rates for cargo dues for containers and RoRo's will decrease by a preliminary 62% and a preliminary 49% respectively, while break bulk and dry bulk will increase considerably, with liquid bulk remaining relatively flat.

Figure 29: Impact of proposed cargo dues tariff structure per cargo handling type



7.4.2 Cargo dues tariff design

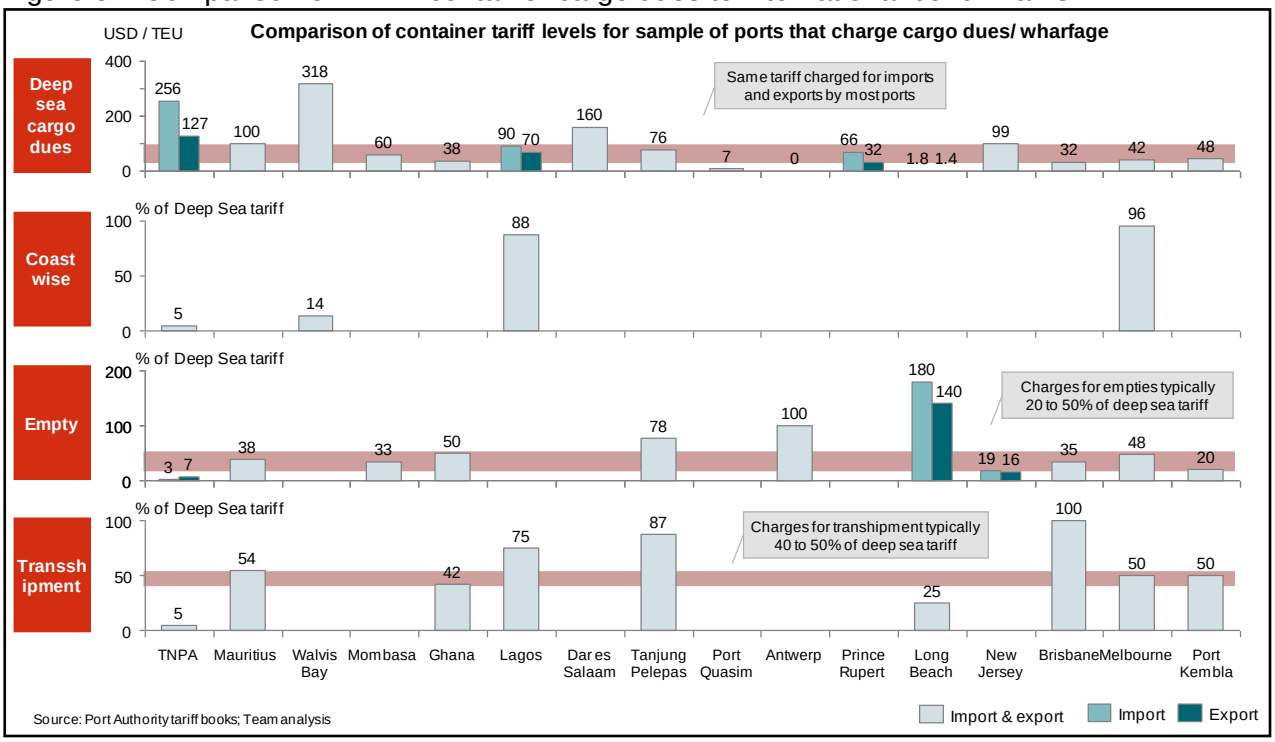
The proposed tariff design principles address previous issues concerning transparency, logical rationale and non-discrimination. The design principles are aligned to regulatory requirements and transparent in their application. In addition, the principles take into account the role that TNPA, as a State Owned Company (SOC) is expected to play in supporting the government's economic agenda. In respect to this, cargo dues tariffs will maintain the current differentiation between export and import tariffs (export = 50% of import), as well as introducing a Beneficiation Promotion Programme (BPP) to support the development of the industrial sector with a specific focus on value adding activities. Figure 30 below outlines the design principles for cargo dues.

Figure 30: Tariff design principles for cargo dues

Tariff design element	Current tariff design	Recommended tariff design	Rationale for change
Charge basis	• Per unit	• Per unit	• n/a
Cargo type differentiation for base rates	• Detailed commodity types	• Cargo handling type	• Simplified structure with transparent base rate for similar cargo handling types
Container trade flow differentiation	• Export 50% of import	• Export 50% of import	• Encourage manufacturing exports in line with state policies
Transshipment containers	• Very low rate vs. deep sea import tariff	• Very low rate vs. deep sea import tariff	• Keep transhipment cargo dues low to ensure transshipment is encouraged
Coastwise containers	• Very low rate vs. deep sea import tariff	• Very low rate vs. deep sea import tariff	• Keep low to encourage intra-SA transport by ship – if too high may lose cargo to road and rail
Empty containers	• Very low rate vs. deep sea import tariff	• Tariffs remain at current level for imported empties; exported empties tariff double that of imported	• Export empties are a problem, therefore discourage through higher tariffs

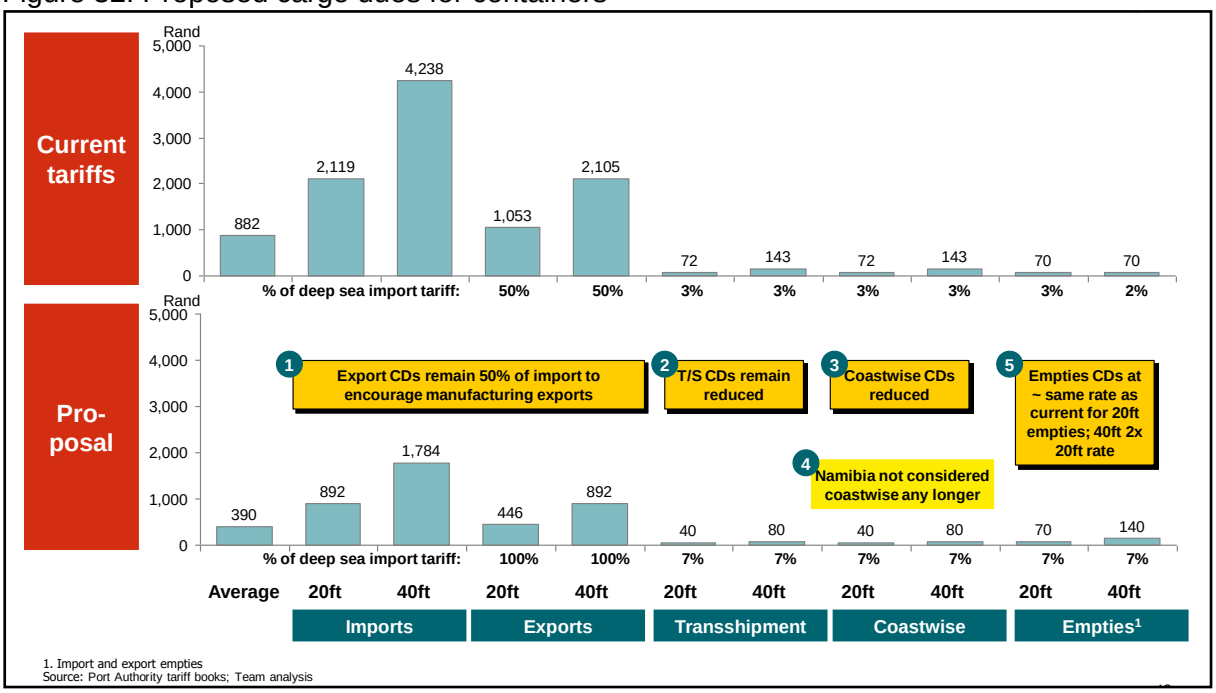
The proposed tariff design for transhipment containers, coastwise containers and empty containers has been developed to address current structural issues while still remaining in line with international practice as shown in Figure 31.

Figure 31: Comparison of TNPA container cargo dues to international benchmarks



Application of the outlined principles on cargo dues for containers leads to the following tariffs in the proposed new tariff structure (Figure 32).

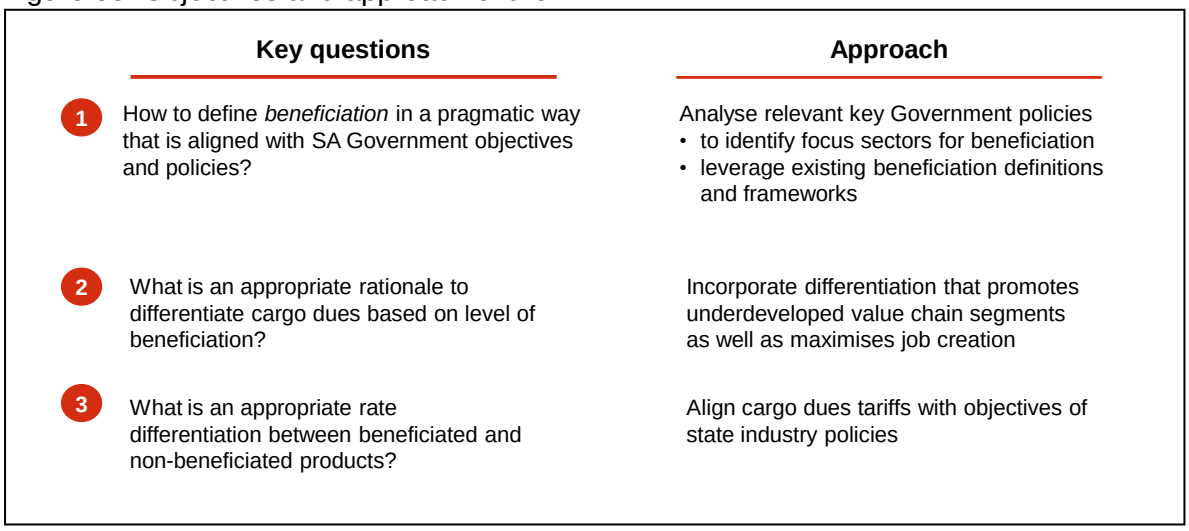
Figure 32: Proposed cargo dues for containers



7.4.3 Beneficiation Promotion Programme (BPP)

Both government and business have recognised the role of appropriate infrastructure as a driver of economic growth in South Africa, and called for the cost of doing business to be reduced in order to, among other things, enhance the competitiveness of the country's goods and services. In this regard, government has identified the crucial role that SOCs play in achieving strategic objectives of job creation, reducing cost of doing business, poverty alleviation and positioning SA as the investment destination of choice in Africa. TNPA has therefore decided to introduce a Beneficiation Promotion Programme (BPP) to incorporate the government's industrial policy into the determination of cargo dues tariffs. The figure below illustrates the objectives and approach of the BPP.

Figure 33: Objectives and approach of the BPP



7.4.3.1 DTI framework for beneficiation

Value-added processing, or beneficiation, involves the transformation of the raw material using local factors (labour and capital) to a more finished product that has a higher value than the sale of the raw material. In order to ensure full alignment with government departments and overall government policy, the TNPA has decided to adopt the DTI framework for stages of beneficiation as outlined in the Metals Sector Strategy. The DTI framework is based on the definition of 4 different stages of beneficiation for the metal sector, where Stage 1 represents the primary action of mining and producing an ore or concentrate, Stage 2 involves converting a concentrate into a bulk tonnage intermediate product (such as a metal or alloy), Stage 3 involves transforming an intermediate good into a refined, semi-fabricated product suitable for purchase by both small and sophisticated industries, and Stage 4 where the converted metal is further transformed into a finished product for sale and subsequent inclusion in a variety of different applications. The various stages present different characteristics with regards to the value of the products produced at each stage, which increases exponentially moving from Stage 1 to Stage 4, as well as to the capital and labour intensity of each stage, where Stage 1 and 2 typically require high capital investment per employee but low levels of employment, as opposed to Stage 4 where employment opportunities is significantly greater and firms include both small- and medium-sized firms as well as large manufacturers. As an example, the figure below shows the key parameters along the carbon steel beneficiation chain.

Figure 34: Benefits of beneficiation – value added and employment in carbon steel

Stage of beneficiation	Nature of Product	Selling price per ton of steel (US$)	Employment per 1000 ton of steel	Investment per job (R m)
1	Iron ore	30	0.12	n/a
2	Iron	120	0.6	R2m
3	Hot rolled steel	300	1.1	R6m
3	Cot rolled steel	500	1.6	R8.5m
3	Pipe and tube	650	7	R1.5m
4	Structural steel	1,000	75	R0.1m
4	White goods	5,000	100	R0.4m
4	Mining equipment	13,000	150	R0.1m

2 to 10 x

10 to 20 x

- Higher potential for creation and retention of jobs at higher stages of beneficiation
- Improved potential for import replacement
- Greater economic growth from higher revenue generated from highly beneficiated products

Stage 4 manufacturing creates 10 to 20 x greater employment than stage 3; Stage 3 between 2 and 10 times greater employment than Stage 2

The concept of beneficiation stages can easily be transferred from the metal sector to all other industrial sectors, thereby representing a robust framework on which to base decisions regarding reduced levels of cargo dues for specific commodities. The figure below presents a description of the framework and provides examples of its application to different industry sectors.

Figure 35: Description and application of DTI beneficiation framework

	Stage 1	Stage 2	Stage 3	Stage 4
Metals sector description	Ore or concentrate	Processed or refined ore	Primary manufacture	Final manufacture
Industrial activity	• Mining • Production of ore & concentrate	• Smelters & refineries • Convert into bulk tonnage intermediate products	• Blast furnaces & foundries • Convert into refined semi-fabricated product	• Manufacturing factories • Finished product
Economic benefits	• Medium level of employment • No value add	• Low employment levels • Significant value add	• Higher employment levels • Substantial increase in value add	• Significant increase in employment levels • Significant value add
Generic description	Raw material	Processed/ refined raw material	Primary manufacture	Final manufacture
Examples				
Textile	Cotton fibre	Yarn	Woven fabric	Clothing item
Iron & Steel	Iron ore	Pig or cast iron	Wrought iron	Steel product
Food	Wheat	Basic wheat flour	Processed flour	Bread
Furniture	Timber logs	Cut timber pieces	Seasoned wood	End state furniture
Leather	Animal skin or hide	Tanned leather	Lubricated & dyed leather	Finished leather good

Source: Department of Trade and Investment: Metals Sector Strategy

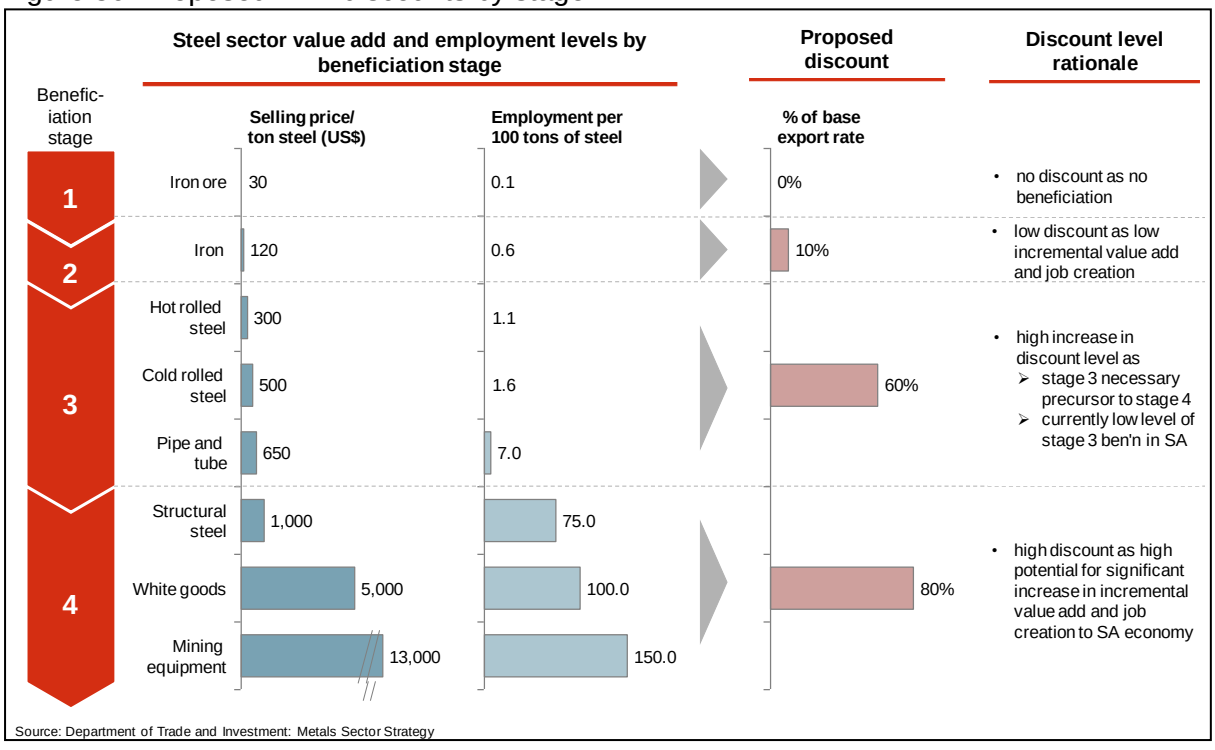
7.4.3.2 Structure of BPP

The TNPA proposes a reduction on export cargo dues of beneficiated cargo, with varying levels of reduction/discount according to the beneficiation stage of the exported goods. The proposed level of reduction for the various stages has been defined taking into account the following considerations:

- Stage 1 products are not beneficiated, and therefore should not enjoy any reduction (0% reduction)
- Stage 2 products involve limited value adding processing and limited job creation opportunities, and therefore should enjoy only a limited reduction (10% reduction)
- Stage 3 products involve much higher value adding processing and much higher job creation opportunities; in addition, Stage 3 beneficiation is currently very limited in South Africa, which represents a key constraint to the development of Stage 4 industries; Stage 3 products should therefore enjoy a substantial reduction (60% reduction)
- Stage 4 products involve the maximum possible value adding processing and job creation opportunities, and should therefore enjoy a very high reduction (80% reduction)

The figure below shows the relationship between the key parameters and the proposed levels of discount.

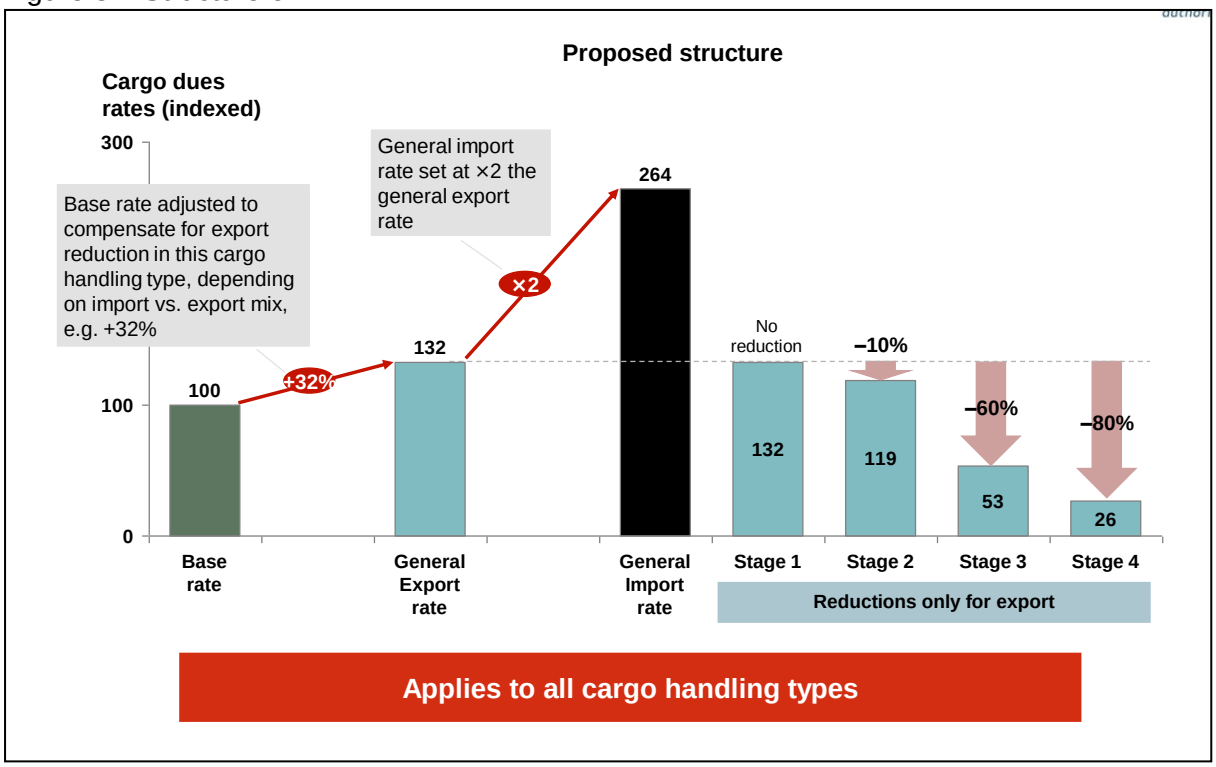
Figure 36: Proposed BPP discounts by stage



In order to ensure the feasibility of the BPP from a financial perspective, it is critical to design a model that allows the recovery of the revenue loss from the rate reductions. The proposed recovery model seeks to offset the revenue loss by increasing the cargo dues rate for other commodity/products in the same cargo handling type. In a nutshell, in order to offer a

reduction to beneficiated products, non-beneficiated products will need to be charged a general rate that is higher than the base rate for the relevant cargo handling type as determined in paragraph 7.4.1.3. The base rate for each cargo handling type will therefore be adjusted upwards depending on the import vs export mix and the estimated volume of export goods at each beneficiation stage within the same cargo handling type. The adjusted rate will become the general export rate which will be applied to Stage 1 products, and the rate reductions for the other stages will be calculated as a reduction from the general export rate. The general export rate will also be used to determine the rate for imports, which will be set at double the value (2x). The proposed structure for differentiation of cargo dues from the base rate based on beneficiation stage is presented in the figure below.

Figure 37: Structure of BPP



7.4.3.3 Impact of BPP

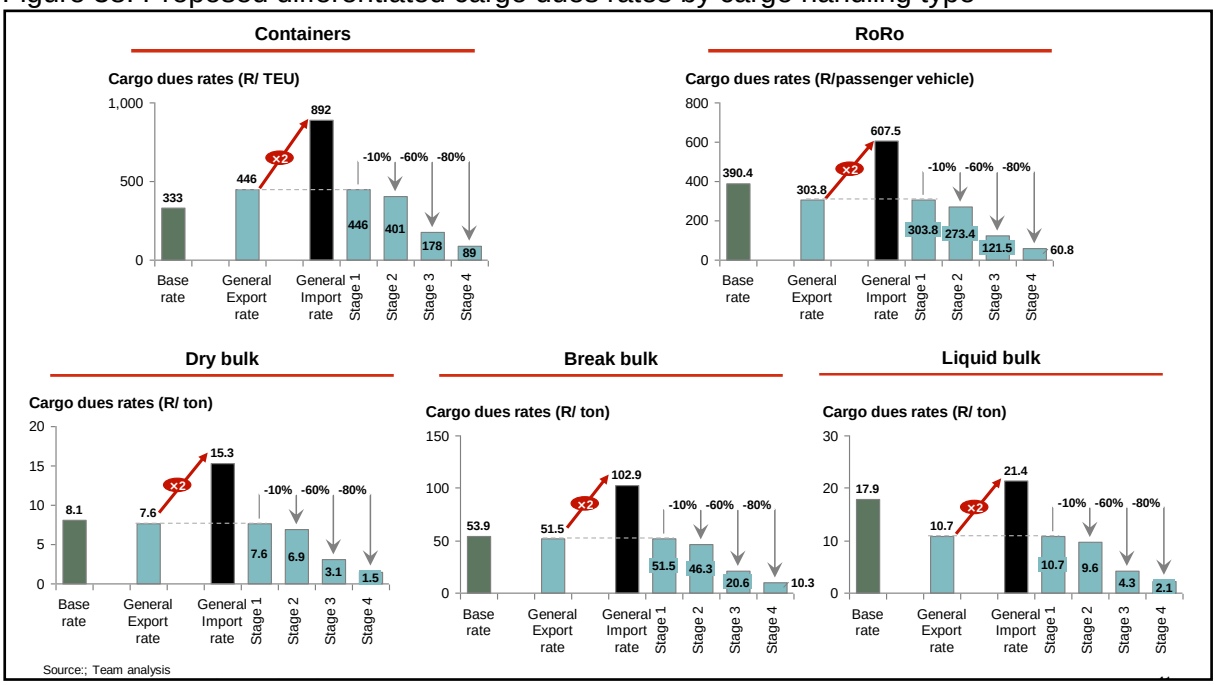
The different cargo handling types include significantly different proportions of export products for each beneficiation stage and will therefore be impacted differently by the BPP. At a high level, the following observations can be made:

- Dry bulk consists almost entirely of Stage 1 products (e.g. coal, iron ore), resulting in an estimated average BPP rate reduction of 0.3%
- Break bulk consists of a broad mix of products, mainly in Stage 1 and Stage 2, resulting in an estimated average BPP rate reduction of 7%
- Liquid bulk consists almost entirely of Stage 2 products (e.g. petroleum, chemicals), resulting in an estimated average BPP rate reduction of 10%
- RoRo consists almost entirely of Stage 4 products (e.g. motor vehicles), resulting in an estimated average BPP rate reduction of 80%

- Containers consists of a broad mix of products ranging from Stage 1 to Stage 4 beneficiation, with Stage 4 products representing more than 2/3 of the mix, resulting in an estimated average BPP rate reduction of 59%

The resulting proposed rates for each cargo handling type are presented in the figure below.

Figure 38: Proposed differentiated cargo dues rates by cargo handling type



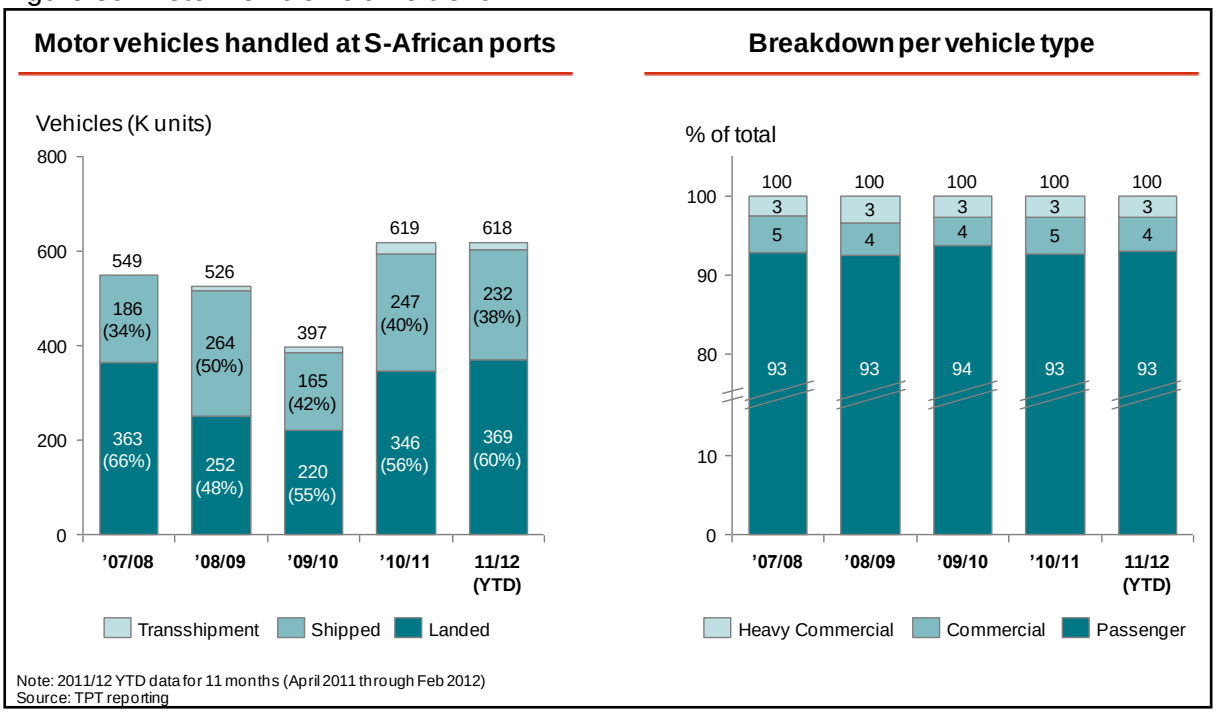
7.4.4 Motor vehicles classification

The proposed new tariff structure also addresses more comprehensively the way cargo dues are levied for motor vehicles. Currently, there is a tariff per ton for motor vehicles, differentiated for import and exports. For example, in the tariff book 2011/12 the rate for imports is R 200.41 per ton and for exports is R 100.21 per ton. The actual rate per vehicle is approximated through the length per vehicle and the assumption that one meter of vehicle length equals 2 tons.
TNPA proposes to simplify cargo dues for motor vehicles significantly by classifying all motor vehicles into three categories: Passenger vehicles, Commercial vehicles and Heavy commercial vehicles. The categories will be defined in alignment with Transnet Port Terminal's definition:

- Passenger vehicles (PV): weight < 3.5 tons and all dimensions must not exceed: length < 4.8 meters, width < 2.5 meters, height < 2.87 meters
- Commercial vehicles (CV): weight between 3.5 and 8.5 tons and all dimensions must not exceed, length between 4.8 and 12 meters, maximum width of 2.5 meters, maximum height of 2.87 meters
- Heavy commercial vehicles (HCV): weight above 8.5 tons or if any of the following dimensions is exceeded: length >12 meters, weight > 2.5 meters, height > 2.87 meters

The split across vehicle types handled at South African ports has been very stable in relative terms over the past years. Passenger cars represented between 93 and 94%, Commercial vehicles between 4 and 5% and Heavy commercial vehicles 3% of the total number of vehicles handled. The volume of motor vehicles in absolute terms has been fairly volatile over the past years and reflects the broader economic environment. With that in mind, there have been considerable shifts over the past years with respect to the ratio of shipped vs. landed vehicles. See the figure below for details.

Figure 39: Motor vehicle volume trend



Note: 2011/12 YTD data for 11 months (April 2011 through Feb 2012)
Source: TPT reporting

Each motor vehicle category will have one cargo dues rate per unit. The tariff for each vehicle category will be determined based on average volume-weighted length of respective vehicles. Therefore, the tariffs for PVs will be lower than those for CVs, which in turn will be lower than those for HCVs.

This proposal to restructure cargo dues for motor vehicles complements the overall changes to base rates for cargo dues for different cargo handling types as well as the proposed BPP which, combined, result in a substantial reduction of tariffs. Given this, TNPA will discontinue the volume discount currently granted to the automotive industry under the proposed tariff structure.

7.5 Proposed terminal operator lease management agreement

7.5.1 Proposed lease management agreement structure

The key issue that the proposed lease management structure must address is how to ensure that TNPA best manages terminal operator productivity and transitions to a true landlord port authority. The lease management regime structure must ensure that terminal operator rent

levels are aligned to the economic value of the property leased, as well as leverage terminal operator productivity.

7.5.2 Current Issues

The major issues currently faced by TNPA are that terminal operator rent levels are not value based, there are inconsistencies between the rent levels paid across terminal operators and there are insufficient mechanisms in place to effectively optimise terminal productivity.

Currently, rent levels are assessed and negotiated with a market-based rent methodology. This determines rent levels by reference to similar properties within the port limits. This methodology aims at ensuring some level of rent parity, but its inherent limitation is that it does not take into account the true economic value of property leased to terminal operators.

7.5.3 Recommendation

To ensure that the optimal rental value is received from terminal operators, TNPA should transition to a value-based rental methodology in setting rent levels. Value-based rentals are determined by the value that terminal operators are able to derive from access to the quay wall based on expected throughput. Rent levels are determined by modelling the fair rental value based on future expected revenues at projected throughput levels, and the terminal operator's cost structure. In addition to aligning TNPA's lease management with international landlord port norms, the key benefits of this methodology are:

- Rentals are maximised for each terminal while maintaining terminal operator viability
- Differentiation can be made between ports and terminals with different volumes and values of throughput
- It drives efficiency improvement for terminal operators by encouraging them to maximise quay wall throughput

A comparison of the differences and pros and cons of value-based and market-based rentals are detailed below in Figure 40 below.

Figure 40: Comparison of value based rent versus market based rent

	Value based rent	Market based rent
Explanation	Rent level determined by **value** that Terminal Operator (TO) is **able to derive from access to quay wall** based on optimal throughput	Rent level determined by **reference to similar properties** in the port limits
Application	Analyse TO financials and model fair value rental based on future expected revenue (at optimal levels) and TO cost structure	Analyse rent levels of similar properties and negotiate increases to retain parity
Pros/cons	✓ Maximise rental for each terminal while maintaining TO viability ✓ Differentiate between ports and terminals with different volumes and values of throughput ✓ Drives efficiency improvement for TOs by encouraging them to maximise quay wall throughput ✓ Aligns with global Landlord Port norms ✓ Removes non viable businesses from the port system ✗ Difficult to model without access to TO financials ✗ Difficult to implement	✓ Easy to understand reference for rent negotiation ✓ Easy to implement ✗ Does not account for differences in potential revenue/throughput from land utilisation ✗ Reference based on historical TNPA practices rather than open market ✗ No links to terminal productivity/ throughput ✗ Not aligned with Landlord Port norms ✗ Rent levels do not take TO viability into account

Figure 41: Ownership and operating structures in the international port industry

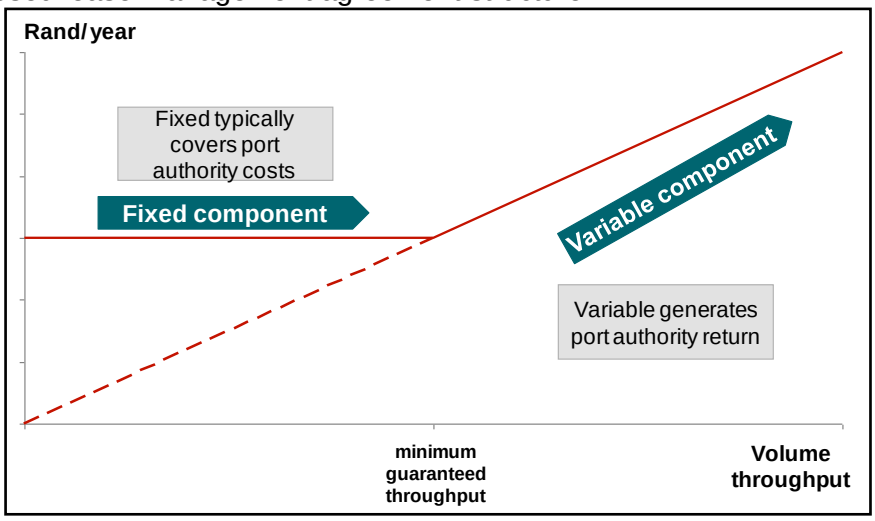
	Mode of ownership	Land area	Terminal Infrastructure (i.e. quay wall)	Terminal Superstructure (e.g., cranes, yard equipment, paving)	Quayside Operations	Landside Operations	Examples
TNPA 20 years ago	100% state owned & operated	State owned	Owned & constructed by port authority	State owned	Port authority	Port authority	Haifa (Israel)
	"Suitcase" stevedores	State owned	Owned & constructed by port authority	State owned	Private stevedores (common berths)	Port authority	Shuwaikh (Kuwait)
TNPA now	Leased terminal	State owned	Owned & constructed by port authority	Rented from port authority or owned by TO	Terminal operator	Terminal operator	Oakland Container Terminal (USA), ECT (Rotterdam)
Where TNPA should be	Concession agreement	State owned	Owned & constructed by port authority	Owned by Terminal operator	Terminal operator	Terminal operator	Port 2000, Le Havre (France), Santos (Brazil)
	BOT concession (Build Operate Transfer)	State owned	Construction privately funded	Owned by Terminal operator	Terminal operator	Terminal operator	Laem Chabang Int. Terminal (Thailand), JNPT (India)
	100% privately owned	Privately owned	Privately owned	Privately owned	Terminal operator	Terminal operator	Teesport (UK), Liverpool (UK)

Source: Based on Drewry Global Container Terminal Operators Annual Review and Forecast 2011

Over time, TNPA has transitioned from a 100% state-owned and -operated ports system to a ports system where the TNPA is independent of the terminal operators and leases land (terminals) to them. The proposed lease management regime is a further step forward, where leases are negotiated to optimise terminal rentals in line with value-based principles.

In addition, the terms of the lease should be such that they influence the optimisation of terminal operator productivity. Furthermore, the development of any future new terminals can then be leased via soliciting competitive bids and appointing an independent operator for each terminal.

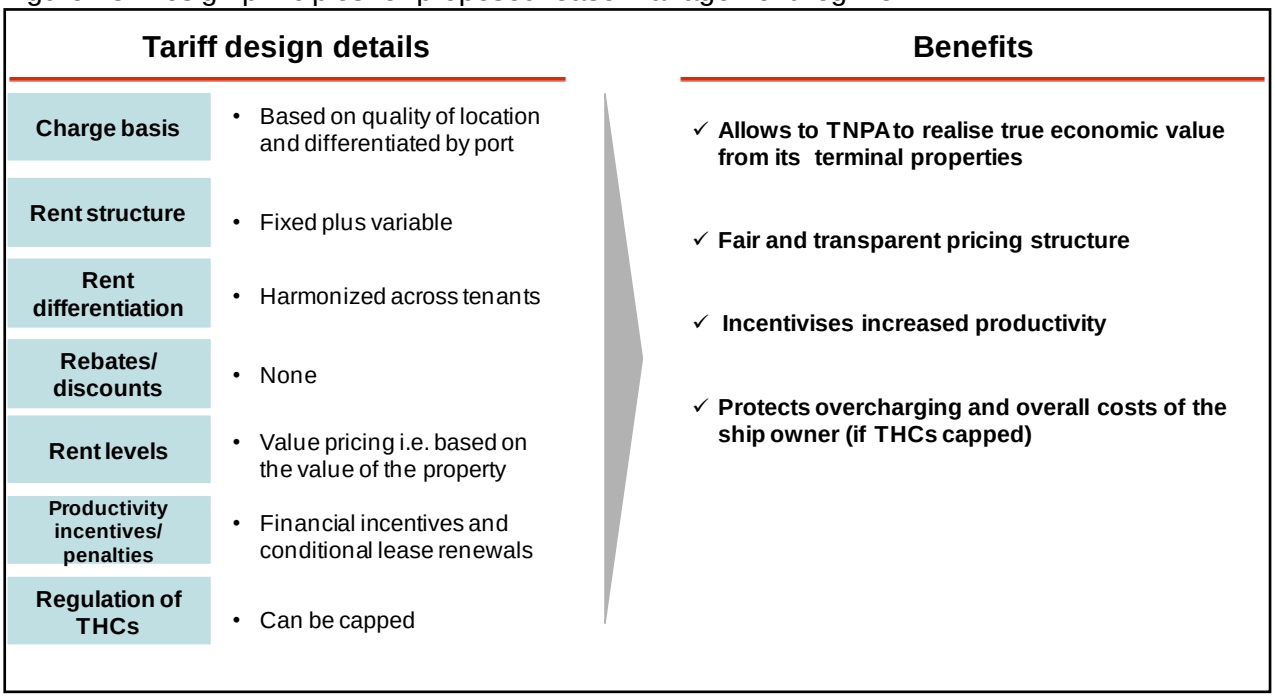
Figure 42: Proposed lease management agreement structure



The following criteria should be used in determining the proposed lease management structures and incorporated into the tariff design detail:

- A fixed lease charge plus a variable royalty charge (e.g., per TEU/ ton)
  - Fixed charge typically covers port authority costs
  - Variable royalty charge typically provides port authority return
- Minimum throughput guaranteed by terminal operator; other productivity clauses possible
- Level of investment required by terminal operator will dictate duration and rent level
- A maximum terminal handling charge that the terminal operator is allowed to charge can also be included in the contract

Figure 43: Design principles for proposed lease management regime



8 Summary of proposed port charges

Figure 44 summarises the proposed port charges by type and by port user group and provides a snapshot of the new proposed tariff structure.

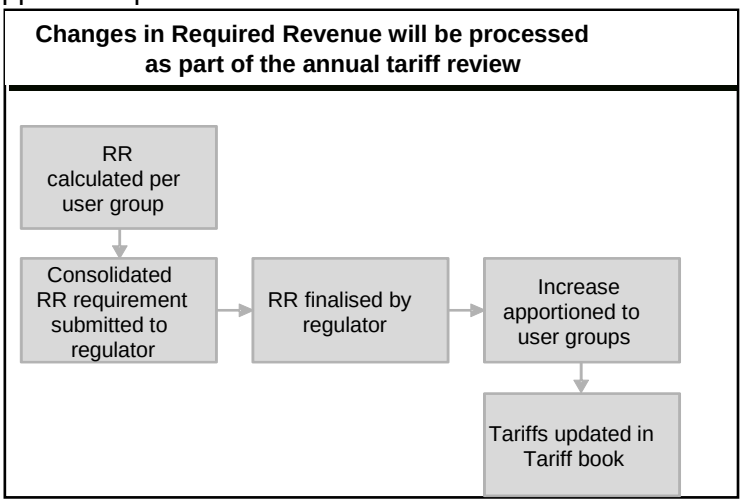
Figure 44: Summary of port charges

Tariff type	User / payer	Tariff	Description of service / facility provided	Basis for charge
Maritime services	Shipping line	Port dues	• Maintenance of wet infrastructure and maintenance dredging inside the port	• Raised per vessel GRT based on time spent in port at 6 hours intervals
		Towage	• Tug assistance to vessels entering/leaving the port	• Raised per service based on the number of tugs used and the port of service
		Pilotage	• Pilotage assistance to vessels entering/leaving the port	• Raised as a base fee per service, plus a variable fee per vessel GRT
		VTS	• Provision of electronic vessel traffic information for safety and port control	• Raised per vessel GRT at all ports with an electronic VTS system
		Light dues	• Provision of navigation aids to vessels along the South African coast	• Raised per vessel GRT at the first port of call
		Berthing	• Berthing services to tie/untie vessels at the berth and running of vessel lines	• Raised as a base fee per service, plus a variable fee per vessel GRT
		Floating crane	• Floating crane services rendered to the vessels	• Raised per service per hour
		Ship repair	• Preparation, docking and undocking of vessels at repair facilities and dock fees	• Raised per service by size and type of dock • Preparation raised by vessel GRT • Docking fees raised per vessel LOA
Cargo dues	Cargo owner	Cargo dues	• Provision of common wet and dry infrastructure within the port	• Raised per unit of cargo, differentiated by cargo handling type and through BPP
Rental	Terminal operator	Fixed rental fee	• Lease of port land to terminal operators, port service and port facility providers, and the provision and maintenance of common dry infrastructure within the port	• Lease agreements including a base fee and royalties based on throughputs to be negotiated case-by-case based on value derived by terminal operator
		Volume based royalties		

9 Align on annual tariff application process

With acceptance of this proposed new tariff structure, TNPA's tariff application will be based on the principles and approaches defined in this pricing strategy. Calculation of Required Revenue will be disaggregated per user group and the consolidated revenue requirement will then be submitted in the application process. Approved tariff increases will be apportioned to the individual user groups as opposed to the uniform tariff increase that was previously applied to all tariffs. The figure below depicts the envisaged tariff submission process.

Figure 45: Tariff application process



Contribution of port user groups to Required Revenue will be based on both the user pay and cost recovery principles. This will lead to tariff increases or decreases for each port user group proportional to the disaggregated required revenue. Annual increases in tariffs will continue to be determined through the required revenue tariff methodology until such a time the methodology is revised.

10 Considerations on implementation

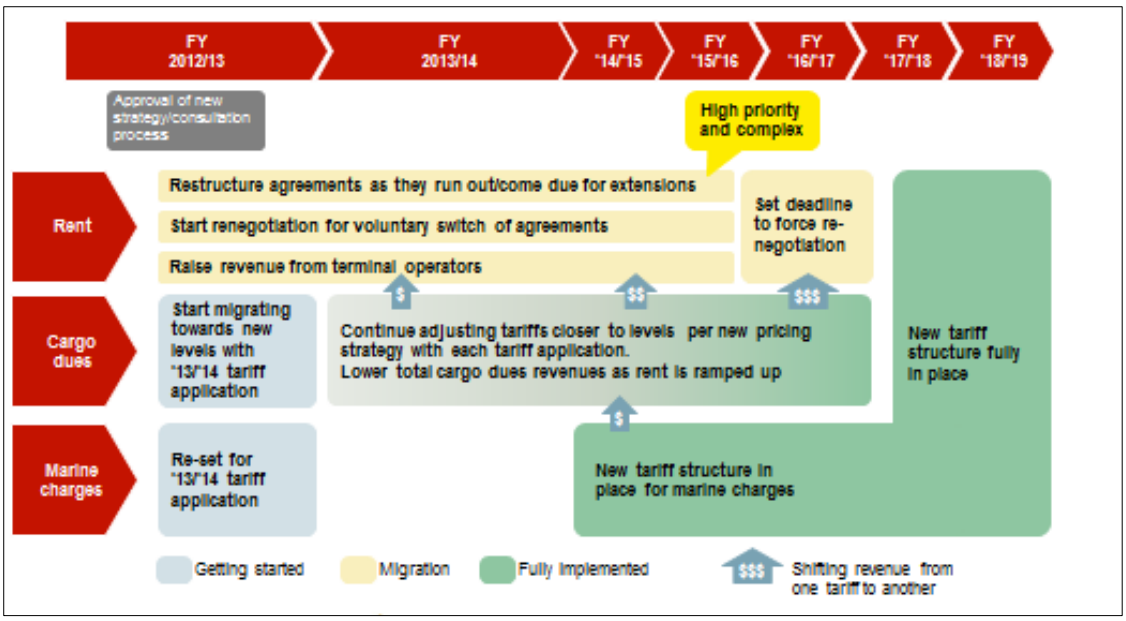
The overall approach to implementation of the pricing strategy will be guided by the objective of ensuring a smooth transition for all port users with no disruptions to port operations. Though details have to be discussed and aligned with the Regulator, TNPA envisions that the new tariff structure will be implemented through a phased approach over a period of 3-5 years. This is necessitated by the fact that the various components of the tariff structure present varying degrees of challenges and constraints for implementation. It is therefore prudent to adopt a phased approach. A major area of potential challenges is the transition to a lease management regime for terminal operators and will require extensive preparation and the development and execution of a robust process which will be time consuming.

The success of the pricing strategy is dependent on port users' buy-in and commitment. There will be extensive consultation with port users before implementing the pricing strategy. This will be done through a formal consultation process with established entities such as the National Port Consultative Committee and Port Consultative Committees. Stakeholder consultations present an opportunity for all port users to understand the implications of the new structure on their businesses and provide comments and feedback. This also presents a platform for other interested stakeholders to highlight potential issues and provide comments and feedback on the pricing strategy. Phased implementation of the new tariff structure will run in parallel with other tariff related processes such as the annual tariff application to the regulator.

10.1 Implementation plan

The proposed high level implementation plan follows a 3-phase approach: Phase 1: Getting started; Phase 2: Migrate; and Phase 3: Fully implemented. The figure below presents the approach and indicates the expected timelines for the various Phases.

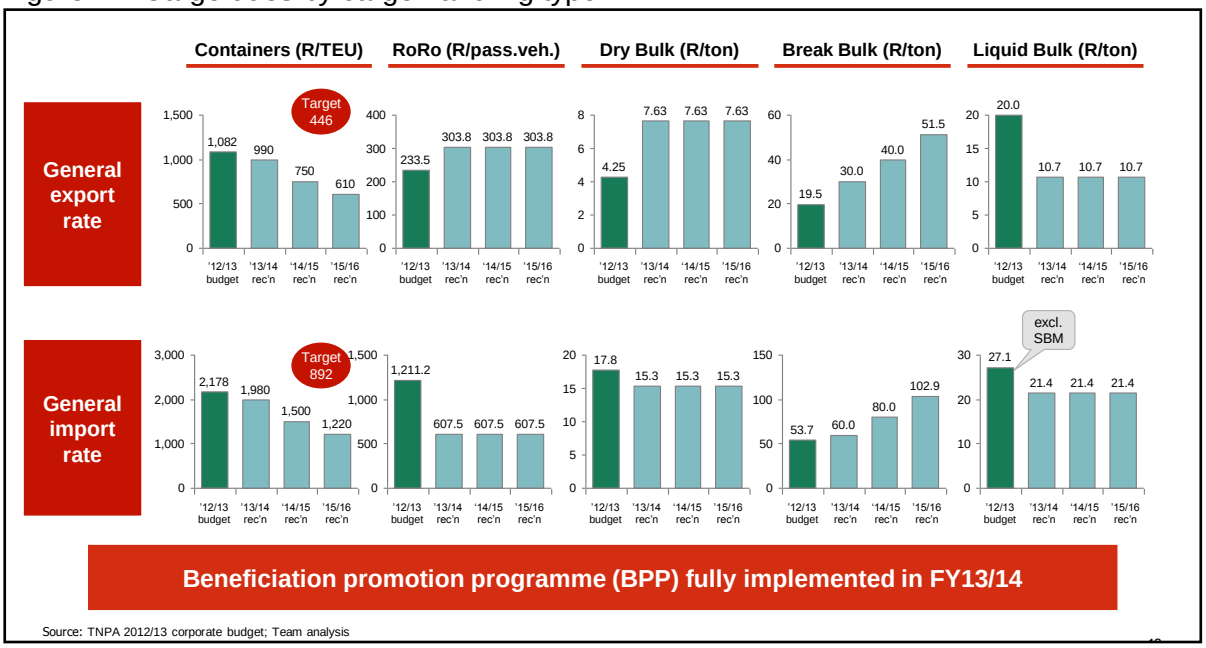
Figure 46: Phased implementation approach



TNPA intends to implement the new tariffs for marine services and most cargo handling types (including the BPP) to be phased in from 2014/15 tariff application onwards. Container

cargo dues rates will migrate towards the target levels over time, with increased charges gradually transferred to rentals. This phased implementation approach ensures the sustainability of terminal operators' businesses giving them time to adapt to the new regime, while at the same time starting to contribute immediately to industrial policy support. The figure below presents the proposed preliminary cargo dues tariffs for next year and the transition until 2015/16.

Figure 47: Cargo dues by cargo handling type



The gradual reduction of cargo dues for containers will be in part funded by a ramp-up of some high volume commodities such as the export of coal and iron ore and the import of petroleum.

At the same time however, revenues from rental have to increase by at least 15% year over year, to reduce the overall revenues from cargo dues. Figure 49 shows what the transition from the current to the proposed tariff structure looks like over the next four years assuming constant required revenues. It is important to note, that even with the assumed 15% increase of rent year over year, there will still be a gap of R340m in 2015/16 versus the targeted state in rental revenues.

Figure 48: Ramp-up of cargo dues for high-volume commodities

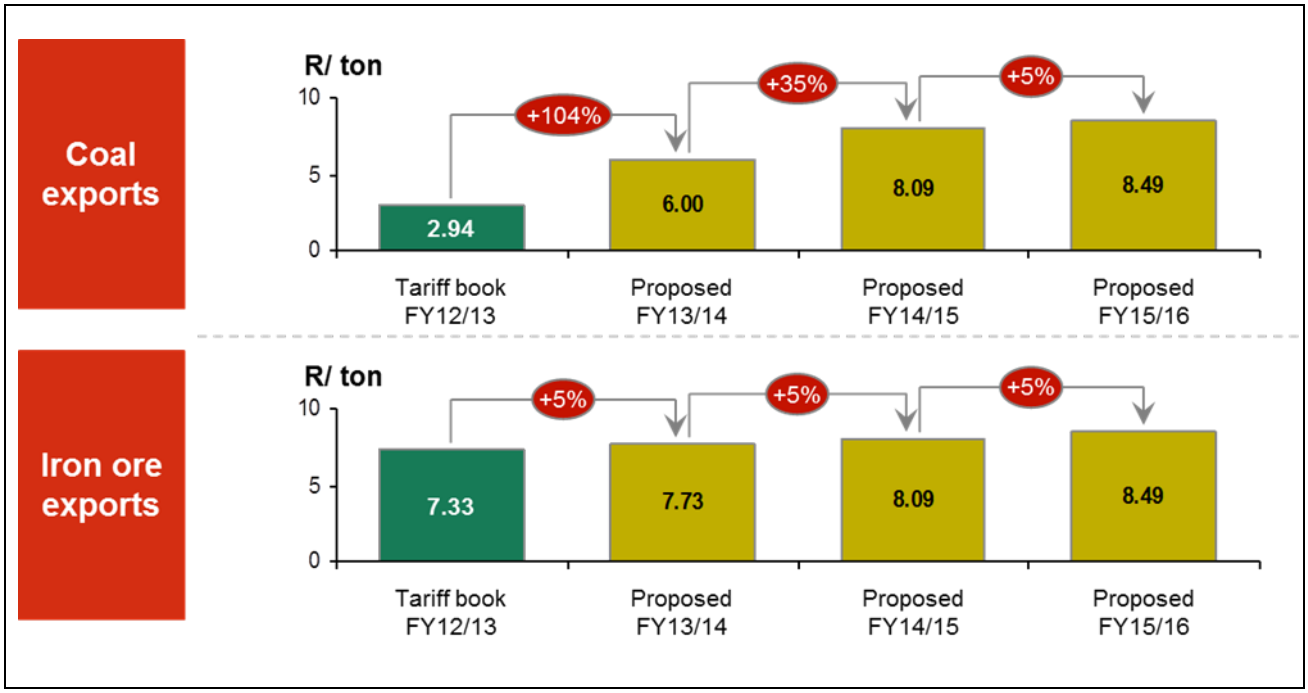
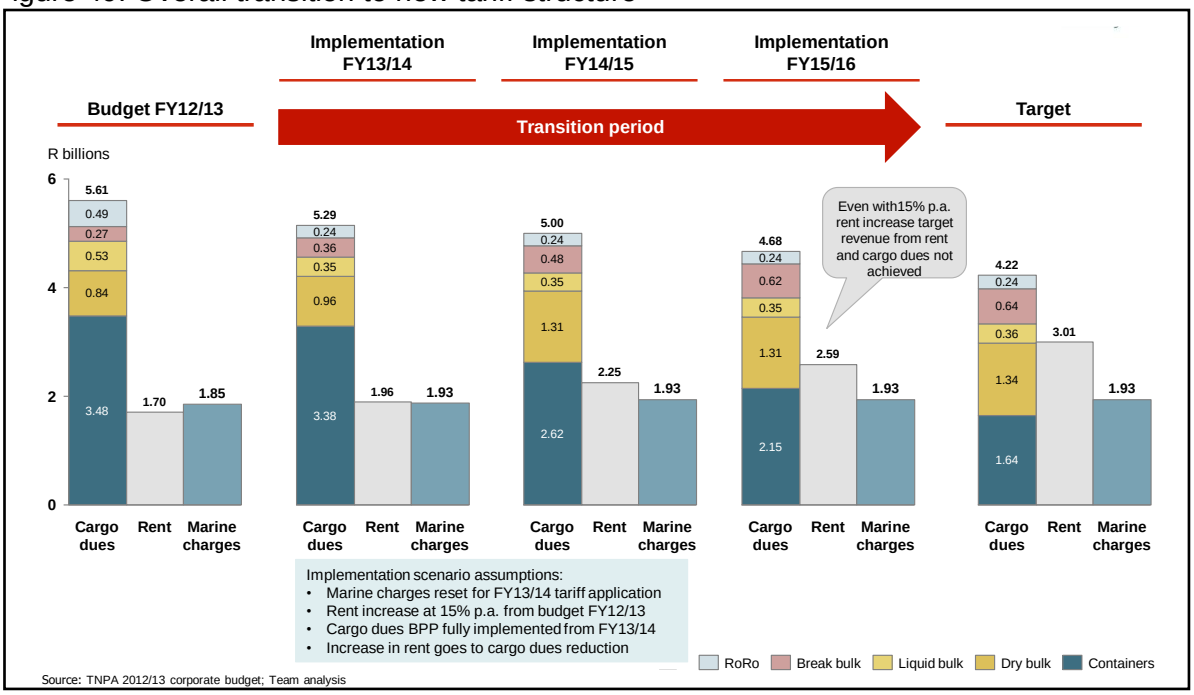


Figure 49: Overall transition to new tariff structure



11 Conclusion

TNPA acknowledges that the current port tariff structure is sub-optimal and presents several issues in terms of transparency, compliance, fairness and overall acceptability by port users. The new proposed tariff structure outlined in this document represents a clear departure from the current practice and is based on the consistent application of sound design principles, a more balanced distribution of charges to the different port user groups, as well as being more strongly aligned with international norms and standards. In addition, the proposed promotion programme for export of beneficiated goods strongly improves the alignment of the tariff structure with government priorities through direct support to the key objectives of industrialisation and job creation. TNPA is therefore seeking an “in principle” approval by the Regulator of the new tariff structure in order to initiate implementation activities including extensive engagement with stakeholders.

TNPA is also aware that the current tariff methodology must be reviewed to ensure that overall port charges are set at the right level to allow the organisation to perform its functions efficiently as stated by the Act without overburdening port users. TNPA has therefore started a separate engagement process with the Regulator to address this issue with the overall objective of ensuring the competitiveness of the South African ports systems and support economic growth as mandated by its role as a state owned company.

12 Definitions

"Act" means the National Ports Act No. 12 of 2005

"Agent" refers to all representatives having commercial dealings with a vessel or its cargo, unless the context indicates that it refers to a particular kind of agent, and includes a vessel's agent and a cargo agent.

"Area of jurisdiction" means the area within which Transnet has jurisdiction at the respective ports as appearing in the Port Regulations.

"Authority" means Transnet National Ports Authority, a division of Transnet.

"Cargo" means any cargo, goods, wares, merchandise, and articles of every kind whatsoever, including animals, birds, fish, plants and containers, carried, or intended to be carried, by sea.

"Claims for adjustment or refund of port fees" All claims related to fees raised by the Authority in terms of the Authority's Tariff Book will, for prescription purposes, be dealt with strictly in terms of the Prescription Act, Act 68 of 1969.

"Coaster" refers to vessels carrying cargo exclusively between the ports in the Richards Bay/Walvis Bay range on a regular schedule. To qualify as a bona fide coaster, an application must be lodged and approved by the Authority.

"Coastwise cargo" means cargo moving by sea between South African ports, including Walvis Bay and Luderitz, provided that both the country of origin and destination is South African or Namibia.

"Container operator" means any person providing international transportation of containerised goods, and approved by the Commissioner for the South African Revenue Service under section 96A of the Customs and Excise Act 91 or 1964, as amended, for operating containers in the Republic.

"Entering port" means a vessel entering the port's limits.

"Fees" means all fees, charges and dues contemplated in Section 73 of the Act. (The fees in the Tariff Book are for the basic services only and other fees may be levied in the event of a departure from or addition to basic services.) Fees will be raised at the time the service is performed excluding, where tariffs are adjusted annually where the actual time of vessel arrival will be used for cargo dues purposes.

"Fishing vessel" means a vessel that is used for the purpose of catching fish or other living resources of the sea for financial gain or reward.

"Harbour Master" means the employee of the Authority appointed for each port as contemplated in Section 74(3) of the Act.

"Importer/Exporter" – the responsible party at the time of ship to shore / shore to ship transfer of cargo.
Importer = the buyer or nominated representative
Exporter = the seller or nominated representative

"ISO container" means a freight container with the specifications prescribed by the International Organisation for Standardisation.

"Length" refers to the length overall (LOA) and means –
(i) in the case of a registered vessel, the length shown in the certificate of registry; and
(ii) in the case of a vessel licensed in terms of Section 68 of the Merchant Shipping Act, 1951 (Act No. 57 of 1951), the length shown in the license.

"Marine services" include pilotage, tugs, berthing services, running of vessel lines and hire of marine equipment/ service

"Maritime services" include all marine services as well as port dues, light dues, vessel traffic services and ship repairs (drydocks, floating docks, syncrolifts and slipways)

"Master" means any person, other than a pilot, having charge or command of a vessel or pleasure vessel.

"Owner" means any person to whom a vessel or pleasure vessel or a share in a vessel or pleasure vessel belongs or any other organisation or person, such as the manager or charterer, who has assumed the responsibility for the operation of the vessel or pleasure vessel from the owner of the vessel or pleasure vessel.

"Passenger" means any person carried in a vessel, except:
(i) a person employed or engaged in any capacity on board a vessel on the business of the vessel;
(ii) a person on board the vessel either in pursuance of the obligation laid upon the master to carry shipwrecked, distressed or other persons or by reason of any circumstance that neither the master nor the owner nor the charterer (if any) could have prevented; and
(iii) a child under one year of age

"Passenger vessel" means a vessel that carries more than 12 passengers.

"Pleasure vessel" means a vessel, however propelled, that is used, or intended to be used, solely for sports and recreation and that does not carry more than 12 passengers.

"Port Regulations" means the Regulation that the Minister of Transport promulgated in the Government Gazette, 23 November 2007.

"Port Rules" are the rules that the Authority may, with the approval of the Minister of Transport, adopt in terms of Section 80(2) of the Act.

"Republic" means the Republic of South Africa

"Revenue Office" means the Authority's Revenue Office.

"SAMSA" means the South African Maritime Safety Authority, established as a juristic person by virtue of Section 2(1) of the South African Maritime Safety Authority Act No. 5 of 1998.

"Shift" means the movement of a vessel from one place in the port to another, and "shifting" bears a corresponding meaning.

"Small vessel" means a commercial small vessel that:
(i) is registered in the Republic
(ii) lies in, is used in or operates from a port; and
(iii) includes a tug, fishing vessel, launch, barge, lighter, rowing boat, ski boat, sailing boat, yacht or similar vessel, or a hulk of any of the vessels enumerated, but excludes a pleasure vessel

"Tanker" means a vessel designed to carry liquid cargo in bulk, including a combination carrier being used for this purpose.

"Tariff Book" means the Tariff Book contemplated in Section 72 of the Act.

"Transnet" means Transnet (LTD) registration No. 1990/00900/06.

"Unit of tonnage" means 1 metric ton (1 000kg), subject to a minimum of 1 ton, except for the following:

Vehicles (empty) driven or towed from/to the port and (including boats, yachts, etc.) including these on trailers:

1 meter of length = 2 tons
Bulk liquids = 1 kilolitre

The metric tonnage for tariffing purposes of cargo dues shall include all packaging i.e. mass of cargo, cases, pallets, bags etc.

"Vessel" means any water-navigable vessel or structure and includes a passenger vessel, ship, seaplane, small vessel and a non-displacement vessel, but excludes a pleasure vessel, to which Part B of Chapter 2 applies.

"Vessel agent" means the agent or owner of the vessel.

"Vessel in need of assistance" means a vessel in a situation, apart from one requiring rescue of persons on board, that could give rise to the loss of the vessel or an environmental or navigational hazard.

"Vessel's tonnage" (excluding Section 6) means the tonnage for port tariff purposes is the gross tonnage of a vessel as per the
tonnage certificate issued in terms of the Tonnage Convention 1969. (NOT converted to cubic metres)

"VTS" means the vessel traffic service of a port administered by the Authority in respect of a VTS zone.