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The Ports Regulator  
The Marine, Suite 1101  
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30 September 2020

Att: Mr Mahesh Fakir  
Cc: Mr Chris Lotter  
Cc: Ms Jowie Mulaudzi

Dear Sir/ Madam

Comments on Transnet National Ports Authority's tariff application for the 2021/22 financial year

#### Introduction

This submission has been compiled on behalf of the South African Association of Ship Operators and Agents (SAASOA) in response to a call by the Ports Regulator to comment on Transnet National Ports Authority's (TNPA) tariff application for the 2021/22 year. SAASOA is a Section 21 company which represents ship operators and vessel agents. Its members are also members of various international shipping and ship's agency organizations.

This submission considers the following factors:

- The failure once again of TNPA to apply the approved methodology for the valuation of the regulatory asset base (RAB). If the approved hybrid methodology to value the RAB were implemented, the required revenue and therefor the average port tariff would decrease.
- The overestimation of the growth in cargo volumes and consequently the contribution to future revenue growth.
- The arbitrary application of the tariff strategy in determining the tariff differential.
- Consistent underspending of CAPEX and OPEX resulting in large clawbacks each year.

Based on our analysis we conclude that the estimated required increase in tariffs of 19,74% is completely inaccurate and that if the methodology were applied correctly it would lead to a significant 20% to 30% reduction in TNPA's required revenue and a commensurate decline in average ports tariffs which would aid the competitiveness of both South African exports and imports at a time when the economy is under severe pressure.

The implication of the TNPA overestimating growth in cargo volumes and consequently its contributed to growth in revenue is that (all else equal) a much larger tariff increase would be required to reach the TNPA's applied for revenue. We are however not advocating for a higher tariff increase, rather we are advocating for accurate forecasts of both required revenue and cargo volumes increases which in our assessment would result in a significant net decrease in the TNPA's average tariff.

Based on our analysis SAASOA advocates that a 0% tariff increase be applied in the 2021/22 financial year. SAASOA further requests that significantly more information is made available to stakeholders in order to assess TNPA's application each year more accurately, as the required information could pose no threat to TNPA. This would include a set of regulatory accounts in which port assets are valued according to the approved tariff methodology.

# 1. Valuation of the regulatory asset base

Malcolm Abbott and Angela-Tan Kantor (2014) note the following in their study *Asset valuation of government business enterprises: a re-evaluation of pricing issues*:

*"In considering the various alternatives for establishing the valuation of assets for price regulation, the primary consideration is to provide appropriate price signals for new investment while at the same time ensuring that consumers are not exploited. Under-pricing of utility services erodes the capital base and the capacity of a business to remain financially viable, while over-pricing results in monopoly rents being extracted.*

*Different asset valuation methods result in significantly different valuation figures for the same assets. Government business enterprises price their goods and services in order to achieve a rate-of-return target on their investments and assets. Accurate asset valuation and capital cost allowances are not only calculated so that appropriate utility prices can be generated, but also to ensure that efficient network usage and efficient investment in the medium and long term can be achieved."*

In its comments on the Ports Regulator's revised Port Tariff Methodology, the TNPA notes that:

*"In the absence of a formal valuation been undertaken by the Regulator to establish replacement values of the Authority's asset base, the Starting Regulatory Asset Base ("SRAB") computed by the Authority at commencement of regulation was informed by the asset values contained in the accounting asset register of the Authority in 2008. This was considered to be best proxy at the time for the SRAB as it was the only asset register prepared in terms of International Financial Reporting Standards (IFRS). These were independently audited and comprised a majority of assets whose values were reflective of DORC."*

The Ports Regulator, in its 2020 financial year Record of Decision (ROD), stated that it will finalise the specific approach of the valuation methodology within the next multi-year tariff methodology which the Ports Regulator will be conducting in the 2020 financial year.

The Regulator in the ROD indicated that in the 2020/21 financial year it will be addressing the following:

- Re-assess the impact of the specific approach adopted in the valuation of the regulated asset base (RAB) in relation to the sustainability concerns expressed by National Ports Authority;
- Finalise the specific approach of the RAB valuation within the next multi-year tariff methodology review which will be conducted during the 2020 financial year.

The TNPA has not applied the approved hybrid RAB valuation methodology for determining the value of the regulatory asset base (RAB). The reason provided for this departure from the methodology is that *"...the implementation of VoA significantly threatens the financial sustainability of the Authority. As such, the Tariff Application has been prepared based on the TOC asset valuation methodology."*

The TNPA, however, failed to provide evidence to support this claim. In response to our request for the TNPA's determination of the RAB according to the approved methodology, the Regulator informed us that the *"...full implementation of the RAB will see the RAB reduce to approximately R48 billion, although a portion of that will then have to apply to a nominal return."*

We calculated by how much the Authority's required revenue would decrease if the approved valuations methodology was used, as opposed to the TOC methodology. We have limited our assessment to the return on capital portion of the RR but acknowledge that the depreciation component of the RR would also be affected by a change in the RAB valuations.

## 1.1. The implication of applying the RAB valuation according to the approved methodology on the TNPA's required revenue

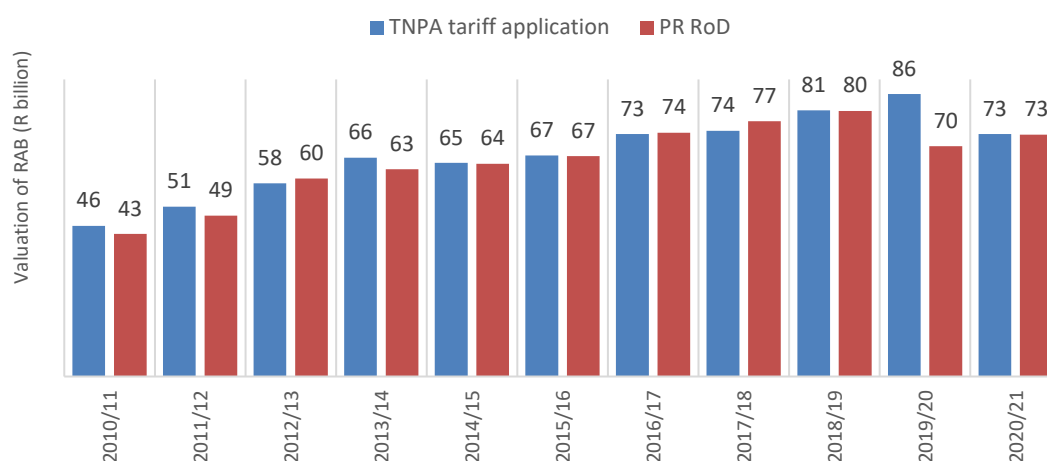
Between 2008/9 and 2018/19, the TNPA determined the value of the RAB using the depreciated optimised replacement cost (DORC) methodology. The Regulator has expressed concern about the DORC methodology used by ZLH (the consultants brought in by TNPA to conduct the RAB valuation) for the valuation of assets including quay walls, jetties, breakwaters, sea walls, dredged channels, basins, and graving docks.

The application of the DORC valuation methodology produced a steep increase in TNPA's RAB in 2008. The Regulator, however, accepted the valuation in the absence of an alternative. In 2013 the Regulator appointed its own consultants to undertake an independent valuation of approximately a quarter of the RAB. This valuation was however not completed due to budgetary constraints.

TNPA does not keep separate regulatory accounts, which makes it difficult to reconcile RAB asset values with those shown in its audited financial statements. Since the 2019/2020 tariff application, the TNPA have used the trended original cost (TOC) methodology (Figure 1). None of the RAB valuations provided by the TNPA have been formally accepted by the Regulator. The Regulator stated in its 2010/11 RoD, section 5.6.2:

*"Although the Regulator had a low level of confidence in the RAB submitted by the NPA, it decided to accept the proposed valuation of the asset base as submitted to the Regulator because of the lack of an alternative value assessment. This therefore applied to the year assessed only, and was not to be construed as the Regulator's acceptance of the value of a starting Regulatory Asset Base. This was due to a range of factors such as the fact that a valuation methodology has not as yet been agreed by all parties, the huge difference between the NPA TAC using Depreciated Optimised Replacement Cost (DORC), and that using Depreciated Historic Cost was sufficient to raise concerns (e.g. just assessing the change from 2004/5 to 2008/9, 2008/9 closing DORC valuation was R44.02 billion, while the HDC was merely R23.49 billion), including those raised by the comments process."*

Figure 1 Historic valuation of RAB



Source: TNPA tariff applications and Ports Regulator record of decision

An alternative valuation of the RAB - in which the Regulator and port users may have a higher degree of confidence - has not been produced. Instead, the Regulator has only applied corrections and adjustments to the RAB valuation provided by the TNPA in its tariff applications. This calls all subsequent valuations of the RAB (Figure 1) and therefore the return on capital into question. Neither the TNPA nor the Regulator provided their valuation of the RAB according to the published methodology.

The Ports Regulator published the official methodology for the valuation of National Ports Authority's Regulatory Asset Base in March 2018. The new *hybrid* methodology states that trended original costs (TOC) should be used for *new* (post 1990) assets. A real WACC should be applied to these assets to determine the return on capital. Assets with capitalisation dates pre 1990 will be treated on a historical cost basis and a normal WACC should be applied to determine the return on capital. The TNPA have not applied the new *hybrid* methodology since its publication, instead continuing to apply the TOC methodology.

In correspondence with the Regulator, we were told that “[t]he full implementation of the RAB will see the RAB reduce to approximately R48 billion, although a portion of that will then have to apply to a nominal return”. Unfortunately, we not provided with the proportional divide of assets capitalised before and after 1990. We therefore do not know what portion of the RAB is subject to the real WACC and nominal WACC when calculating the return on capital. We expect most of the pre-1990 assets would be heavily depreciated at this point in time and therefore make the simplifying assumption that the real WACC can be applied to the entire R48 billion RAB for the purpose of our evaluation.

The application of the approved valuation methodology will significantly reduce the RAB and therefore the return on capital and depreciation (Table 1). The Regulator’s valuation of the RAB using the approved methodology is R48 billion (a 34% reduction from R73 billion in the TNPA’s 2021/22 tariff application). By our estimation return on capital will reduce from R5,50 billion to R3,62 billion and depreciation from R2,28 billion to R1,50 billion. If we assume all other components of the required revenue remain as per the 2021/22 application, the effect on the total required revenue is a 20% reduction (from R13,57 billion to R10,9 billion). Net marine required revenue therefore reduces from R9,71 billion to R7,04 billion.

**Table 1 Impact of applying the hybrid RAB valuation methodology on the 2021/22 required revenue**

RAB valuation methodology	2021/22 tariff application		Difference
	TOC	Hybrid	
Return on capital	5,50	3,62 <sup>A</sup>	1,88 (-34%)
Depreciation	2,28	1,50 <sup>B</sup>	0,78 (-34%)
Operating expenditure	5,5	5,50	-
Tax expense	0,49	0,49	-
WEGO	-0,06	-0,6	-
Clawback	-0,15	-0,15	-
ETIMC			
<b>Total RR</b>	<b>13,57</b>	<b>10,90</b>	<b>2,67 (-20%)</b>
Real estate income	-3,86	-3,86	-
<b>Net Marine RR</b>	<b>9,71</b>	<b>7,04</b>	<b>2,67 (-27%)</b>
RAB	73,02	48,00	25,02
Real post-tax WACC	7.53%	7.53%	-
Depreciation/RAB	3.1%	3.1%	-

<sup>A</sup> The contribution of pre-1990 assets to the RAB has not been provided by the Regulator. We therefore make the simplifying assumption that return on capital can be calculated by applying the real WACC to the entire RAB.

<sup>B</sup> The tariff methodology specifies the use of asset specific depreciation rates as opposed to an average asset life. This data is however not provided. We therefore assume that the ratio of depreciation-to-RAB remains when the hybrid RAB valuation is applied.

**To assess the claim that the application of the approved RAB valuation methodology will jeopardise the financial sustainability of the TNPA, we will compare the impact on the latest available financial information. Since Transnet have not published its financial statements for 2020, we will use the values from 2019 statements and the 2020/21 record of decision (**

Table 2).

In the 2020/21 tariff application, the TNPA valued its RAB at R73,5 billion based on the TOC methodology. The Regulator applied a number of adjustments and corrections to the calculations in the application arriving at a valuation of R73,2 billion. Applying the Regulator’s real vanilla WACC of 7.17% to the RAB results in a return on capital of R5,25 billion (58% of the R9,09 billion net marine required revenue for the 2020/21 year). The Regulator allowed depreciation to the amount of R2,32 billion in the RoD, equating to 3,2% of the RAB. The Regulator allowed depreciation to the amount of R2,32 billion in the RoD, equating to 3,2% of the RAB (26% of the net marine required revenue).

**Table 2 Impact of applying the hybrid RAB valuation methodology on the 2020/21 required revenue**

RAB valuation methodology	2020/21 record of decision		Difference
	TOC	Hybrid	
Valuation of regulatory asset base (RAB) [R billion]	73,2	48,0	-25,2 (-34%)
Return on capital [R billion]	5,25	3,44	- 1,81 (-34%)
Depreciation	2,32	1,52	-0,80 (-34%)
Net marine revenue	9,09	6,48 <sup>A</sup>	-2,61 (-29%)
Real post-tax WACC [%]	7,17	7,17 <sup>B</sup>	-
Depreciation-to-RAB ratio [%]	3,2	3,2 <sup>C</sup>	-

<sup>A</sup> All other components of the required revenue formula are assumed to remain unchanged.

<sup>B</sup> The contribution of pre-1990 assets to the RAB has not been provided by the Regulator. We therefore make the simplifying assumption that return on capital can be calculated by applying the real WACC to the entire RAB.

<sup>C</sup> The tariff methodology specifies the use of asset specific depreciation rates as opposed to an average asset life. This data is however not provided. We therefore assume that the ratio of depreciation-to-RAB remains when the hybrid RAB valuation is applied.

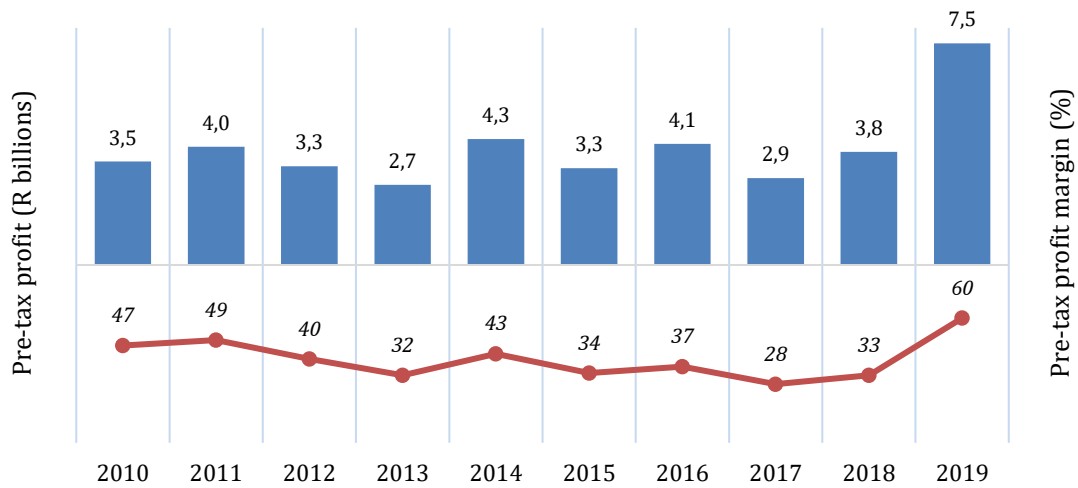
Using a valuation of R48 billion for the RAB and the same WACC of 7.17%, the return on capital amounts to R3,44 billion (R1,81 billion reduction compared to TOC). If we also assume that the ratio of depreciation to the RAB remains the same when the hybrid RAB valuation methodology is applied, the depreciation equals R1,52 billion (R800 million reduction compared to TOC).

The net marine revenue (all else remaining equal) applying the hybrid methodology totals R7,28 billion (R2,61 billion reduction). The application of the hybrid valuation methodology therefore results in a 29% reduction in the net marine revenue, of which 20% is attributable to the reduction in return on capital and 9% attributable to lower depreciation. In the following section we evaluated the impact on a R1,81 billion reduction in the net marine RR and the possible impact on TNPA's financial sustainability.

## 1.2. The impact of adhering to the approved methodology for valuation of the RAB, on the financial performance of the TNPA

Over the ten-year period between 2010 and 2019, TNPA has consistently reported profits (Figure 2). Pre-tax profit margins averaged 40% over this period (high of 60% in 2019 and low of 28% in 2017). In 2019 TNPA recorded profits before tax of R7,5 billion (note that this includes impairments recognised on port operating assets of R2,7 billion). One might argue that even the reduced pre-tax profit margins are an indication that the tariffs are too high.

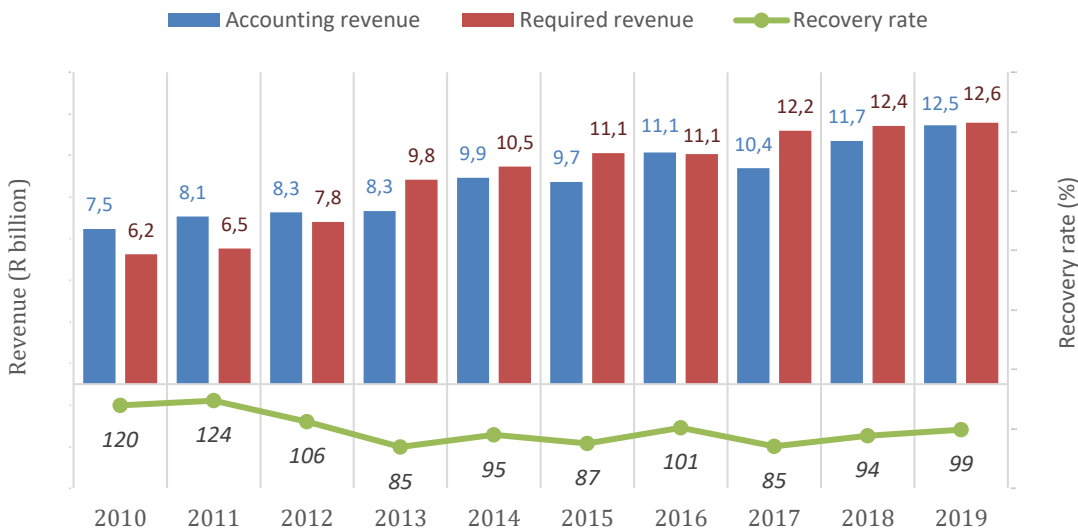
Figure 2 Profit before tax reported by TNPA



Source: Transnet audited annual financial statements

Unfortunately, we were not able to assess the TNPA’s cash flows (as cash flows are not reported on a segmental basis). Based on the TNPA’s income statements, we find it difficult to conclude that an R2,61 billion reduction in the net marine RR would jeopardise the Authority’s financial sustainability. If we compare the TNPA’s revenue (as reported in Transnet’s audited financial statements) and the required revenue approved by the Ports Regulator, we see the two figures tend to be similar (Figure 3). Over the past ten years, the average recovery rate is 100% (i.e. the TNPA recovered, on average, all revenue approved by the Regulator).

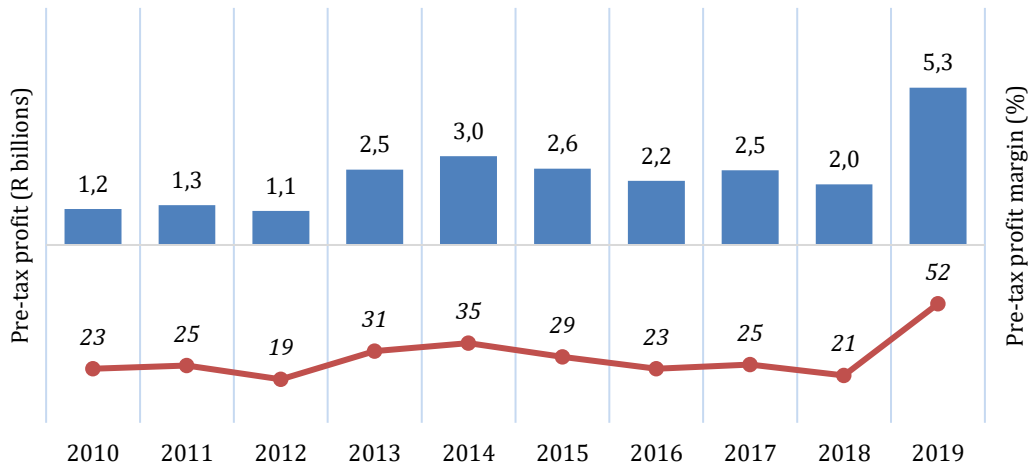
Figure 3 TNPA revenue compared to required revenue



Source: Own analysis based on Transnet audited annual financial statement and Ports Regulator’s records of decision

Let’s assume that this relationship between accounting revenue and required revenue holds if the required revenue is reduced to account for a lower return on capital (as a result of the revaluation of the RAB). How would this impact the profitability of the TNPA?

Figure 4 Pre-tax profit adjusted for reduced return on capital



Source: Own analysis based on Transnet audited annual financial statements and estimated impact of reduced net marine revenue on accounting revenue

In any given year over the past decade, the TNPA would have been able to absorb such an adjustment in the required revenue and remain profitable. Adjusting the accounting revenue to reduction in net marine revenue, we see that the TNPA's pre-tax profit margin remains positive, averaging 28% over the past ten years.

### 1.3. Recommendations on the RAB

The Regulator's methodology for the valuation of TNPA's RAB was published in 2018. The TNPA has not applied this methodology in any of the subsequent tariff applications. The reason provided for deviating from the approved methodology was that the application thereof would jeopardise *financial* sustainability of the TNPA.

The application of the approved hybrid valuation methodology will significantly reduce the RAB and therefore the return on capital and depreciation. The Regulator's valuation of the RAB using the hybrid methodology is R48 billion (a 34% reduction from R73 billion in the TNPA's 2021/22 tariff application). By our estimation return on capital will reduce from R5,50 billion to R3,62 billion and depreciation from R2,28 billion to R1,50 billion. If we assume all other components of the required revenue remain as per the 2021/22 application, the effect on the total required revenue is a 20% reduction (from R13,57 billion to R10,9 billion). Net marine required revenue therefore reduces from R9,71 billion to R7,04 billion.

We evaluated the impact of applying the approved hybrid RAB valuation methodology on the TNPA's profitability. Adjusting TNPA's accounting revenue for the proportional decrease in required regulatory revenue, we concluded that the Authority's *financial sustainability* would not have been compromised if the approved hybrid RAB valuation methodology was applied. Although the TNPA's profitability reduces, it would be able to absorb the reduction and remain profitable.



## 2. Forecast volumes and the impact on tariff determination

### 2.1. TNPA's estimates of volume-related revenue growth

In Table 3 of its the 2021/22 tariff application , the TNPA estimates the tariff increase it will need to reach its estimated required revenue R9 708m for 2021/22 by estimating the additional revenue it will receive from growth in the demand for port and related services if the tariff remained unchanged. TNPA has assumed that growth in cargo volumes will increase annually by 7.54% y/y resulting in a proportional annual increase in revenues from 2020/21 until 2023/24. This means that in the absence of further tariff increases, the TNPA expects revenue to increase by a total of 24% between 2020/21 and 2023/24 driven by a commensurate increase in cargo volumes.

TNPA notes that the assumed volume-related revenue growth of 7.54% y/y is based on a weighted average of forecast volume-related increases across different cargo categories for 2020/21, presented in Table 3. The authority assumed for example that dry bulk volumes will increase by an average of 16% y/y and that container volumes will increase by 5.6% y/y over the period. While we also expect a relatively strong increase in cargo volumes in 2021/22 as both domestic and global trade recover in the wake of the economic recession precipitated by the COVID19, it is very unlikely that this will continue into 2022/23 and 2023/24 as the TNPA assumes.

The South African economy was already in recession before the COVID19 pandemic hit. GDP is expected to contract by at least 8% y/y in 2020. A significant increase in the government debt burden over the past decade has also left little fiscal room to implement structural reform and measures that would be required to support a robust economic recovery

It is also not clear why the TNPA has departed from its own detailed, and significantly lower projection of growth in cargo volumes 2022/23 and 2023/24. In the detailed cargo volumes forecasts it presents in its 2021/22 tariff application the TNPA projects that volumes will increase by what appears to be a weighted average of ~3.5% y/y in 2022/2023 and by ~3% in the following year.

We have presented a more detailed analysis of recent historical growth in both bulk cargo and container traffic volumes (which account for the bulk of cargo volumes handled in South African ports) in Section 2.2. We conclude that given the prevailing economic outlook, the TNPA has significantly overestimated average annual growth in cargo volumes over the next 3 years. While the assumption of a sharp recovery in volumes (7.54% y/y growth) appears to be appropriate for the year 2021/22, it is unrealistic to assume that volumes will continue to expand at this rate in 2022/23 and 2023/24 in the context of what is expected to be relatively subdued economic growth.

**Table 3 TNPA assumes 7.54% annual average growth in cargo volumes**

MARINE REVENUE	2021/22	2022/23	2023/24
	Fixed Tariff Year	Indicative Tariff Years	
	R'm		
Prior Year Revenue	7 540	9 708	10 410
Estimated Volume Growth	7.54%	7.54%	7.54%
Revenue after volume growth	8 108	10 440	11 195
Required Revenue	9 708	10 410	10 315
<b>Tariff Increase</b>	<b>19.74%</b>	<b>-0.29%</b>	<b>-7.86%</b>

Source: Table 2 in the TNPA 2021/22 tariff application

Table 4 TNPA forecast of the weighted average volume-related revenue increase for 2021/22

REVENUE	FY 2020/21		FY 2021/22	
	Revenue LE	Weighted Average Revenue Volume Increase	Revenue: Volume Increase	Revenue: Before Tariff Increase
	R'm	%	R'm	R'm
Containers	3 225	5.6%	181	3 406
Break Bulk	90	7.5%	7	96
Dry Bulk	1 175	16.1%	190	1 365
Liquid Bulk	654	8.1%	53	707
Automotive	289	14.9%	43	332
<b>TOTAL CARGO DUES</b>	<b>5 433</b>	<b>8.71%</b>	<b>473</b>	<b>5 906</b>
Marine & other revenue	2 107	4.5%	95	2 202
<b>TOTAL TARIFF BOOK REVENUE</b>	<b>7 540</b>	<b>7.54%</b>	<b>568</b>	<b>8 108</b>
Real estate revenue	3 568	8.20%	293	3 861
<b>TOTAL REVENUE</b>	<b>11 108</b>	<b>7.75%</b>	<b>861</b>	<b>11 969</b>

Source: Table 10 in the TNPA 2021/22 tariff application

## 2.2. A more detailed analysis of TNPA's cargo volume projections

The TNPA projections of average increase in cargo volumes were presumably based on the more detailed projections of growth in cargo volumes which it provides in its application, these are summarised in Table 5. Since most of the %cargo handled is either bulk (liquid and dry) or container cargo, we have focused checking the validity of forecasts for these two sub-categories.

Table 5 Summary of TNPA volume growth projections by category of cargo 2020/21 to 2023/24

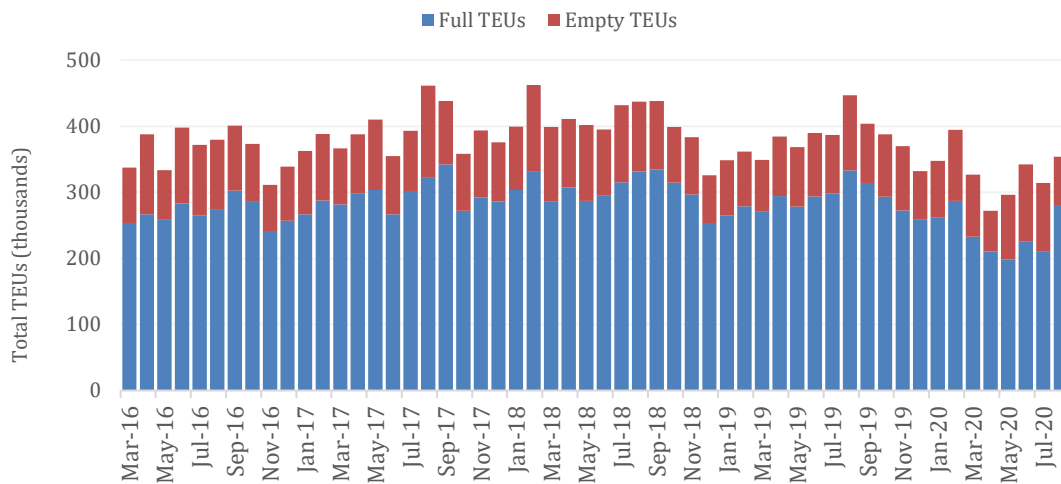
	Latest estimate		TNPA forecast y/y %		
	2020/21	2020/21	2021/22	2022/23	2023/24
Container (TEUs)	4 010 497	-12%	7%	4%	4%
Vehicles (Units)	588 332	-24%	21%	5%	8%
Break Bulk (Metric Tons)	3 231 692	-32%	7%	3%	3%
Dry Bulk (Metric Tons)	165 497 570	-9%	16%	2%	1%
Liquid Bulk (kl)	36 807 803	-12%	9%	3%	3%

Source: Summary of Table 10: Authority's volume projection in TNPA 2021/22 tariff application

As the TNPA notes, the overall volume of port activity is driven largely by domestic economic activity and merchandise trade with the rest of the world. TNPA note that while container volumes are forecast to contract by 12%/y/y this year, they expect a significant recovery (7% y/y increase) in container volumes in 2021/22 based on an expected albeit uncertain recovery in the South African economy and those of its major trading partners from 2021. They expect volumes to continue to grow an average rate of 4% y/y thereafter.

Over the past four years TNPA has handled an average of 377 000 containers a month across South African ports of which an average of 95 000 (25%) were empties and roughly 282 000 (75%) were full. As the TNPA notes, the overall volume of port activity is driven largely by domestic economic activity and merchandise trade with the rest of the world. TNPA note that they expect a significant 7% y/y increase in container volumes in 2021/22 based on an expected albeit uncertain recovery in the South African economy and those of its major trading partners from 2021 and 4% y/y growth in volumes thereafter.

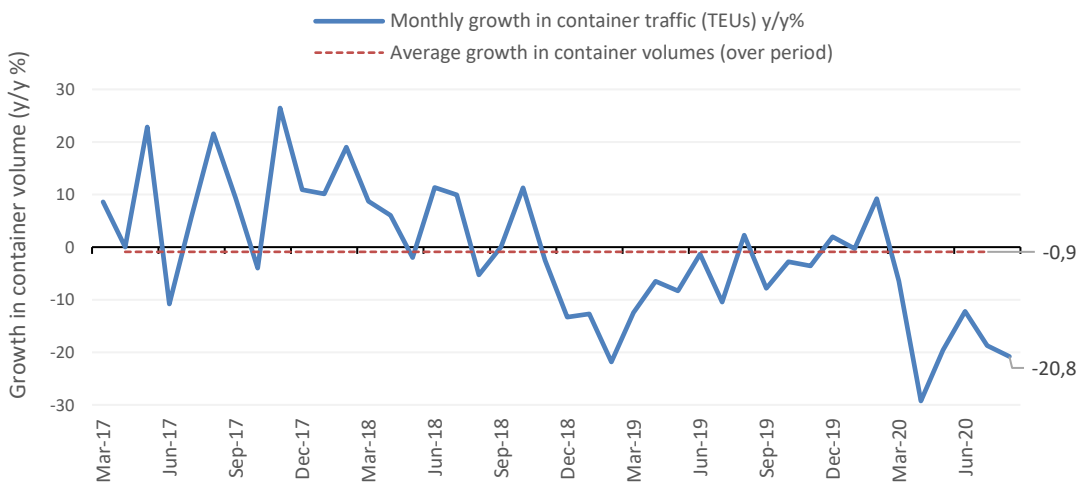
Figure 5 Total monthly container volumes handled in SA Ports 2016 to 2020 (TEUs)



Source: Nova Economics based on analysis of TNPA’s monthly data on container volumes

Our analysis however of the historical growth in total container volumes since 2016 shows that since mid-2018, there has been very limited growth in overall container volumes. Over the 2018/19 and 2019/20 TNPA financial years, overall container volumes handled fell by an average of -2.7% y/y. Since a hard lock-down was imposed in March 2020 to contain the COVID pandemic, container volumes have fallen by between -12% and -29% y/y and remained down by 20% y/y in August. While the TNPA forecasts for container volumes in 2020/21 and 2021/22 appear to be realistic, given the decline in volumes over the past 4 years, the 4% y/y increase thereafter may be too optimistic.

Figure 6 Growth in total container volumes in SA ports (year-on-year % change)



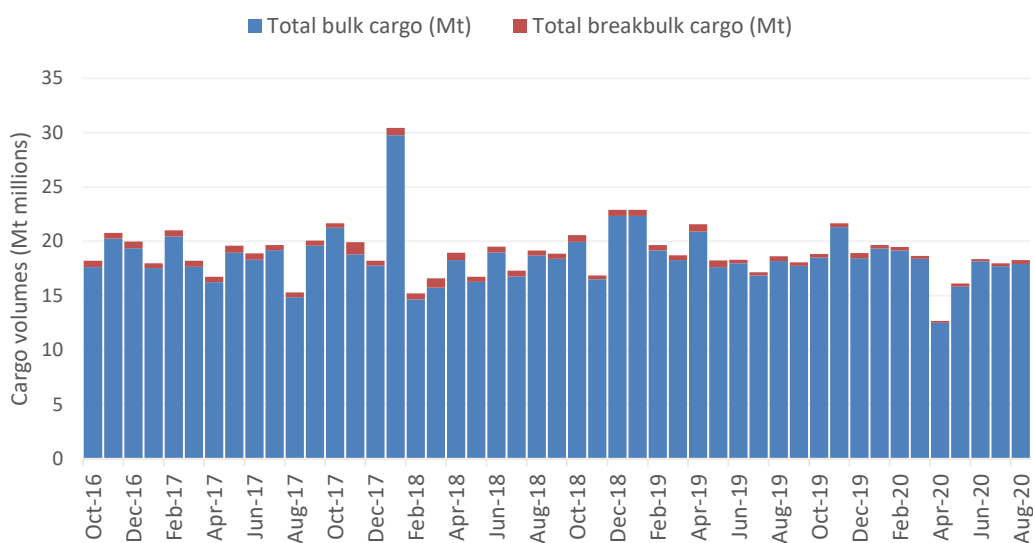
Source: Nova Economics based on analysis of TNPA’s monthly data on container volumes

With respect to bulk cargo, the TNPA notes in its application that it compiles its forecasts using a bottom-up approach – by liaising with key account managers and by aggregating expected demand for shipping of key export commodities including iron ore and coal. In its application the TNPA noted that volumes of key bulk cargo export commodities such as coal, iron ore and manganese had dropped sharply in 2020 due to disruptions to the global supply chain and demand caused by the COVID19 pandemic as a result they forecast a 10% drop in volumes in 2020/21 and 16% increase the following year and very moderate increases thereafter.

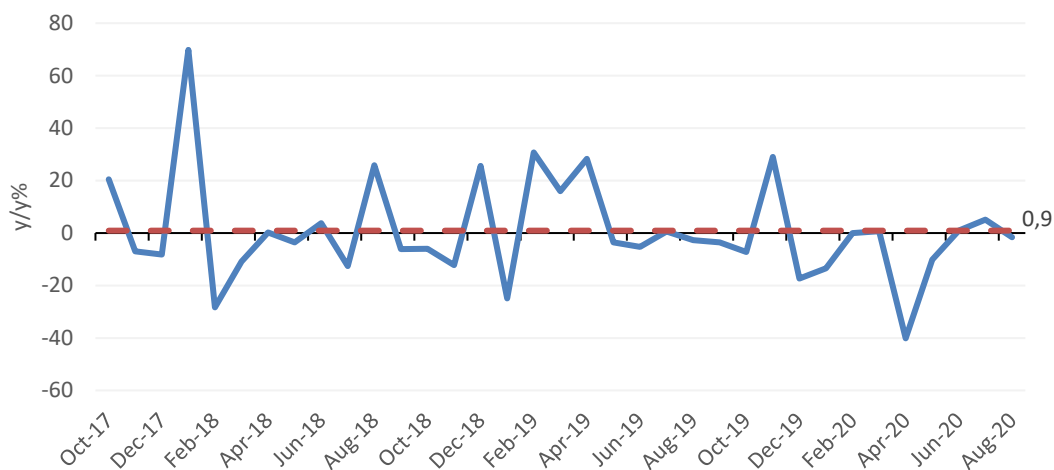
TNPA has handled an average of 18.5 million metric tons of bulk and breakbulk cargo a month across South African ports (Figure 7). Our analysis shows that volumes of bulk cargo fell by about 40% in April 2020 but by August 2020 they had largely

recovered to pre-pandemic levels. Based on an extrapolation of the recent trend we would expect to see about a -6% y/y drop in bulk cargo volumes in 2020/21 and a ~10% y/y increase in 2021/22. Our analysis also reveals that there has been very limited growth in bulk cargo volumes over the past 4 years, while volumes do fluctuate overall, they have increase by an average of ~1% y/y. We would expect to see growth of ~1% y/y in 2022/23 and the following year.

**Figure 7 Total bulk and breakbulk cargo volumes handled at SA Ports 2016 to 2020**

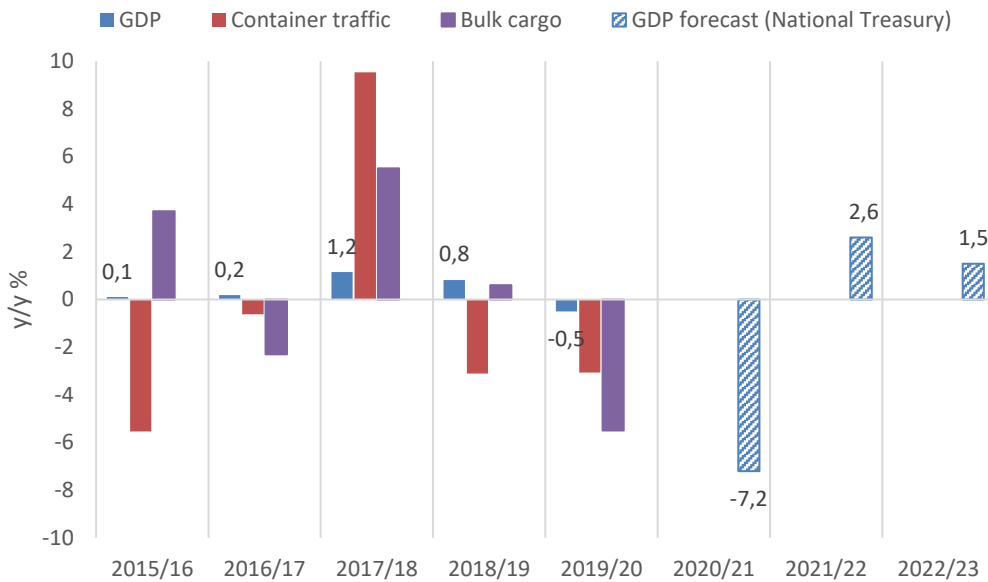


**Figure 8 Growth in total bulk cargo volumes handled in SA ports (y/y%)**



Given that domestic economic activity is one of the major drivers of cargo volumes and particularly container volumes, we have compared annual growth in the main cargo categories to historical GDP growth. There is a clear positive correlation between the volume of container cargo handled and the economic activity. Given fiscal and structural constraints on the economy, the National Treasury is only forecasting a modest increase in GDP growth from 2022/23 and we would therefore expect to see only modest growth in container volumes over the medium term.

Figure 9 Annual GDP growth vs. growth in port cargo volumes



### 2.3. Conclusions on the volume forecasts

Based on a detailed analysis of recent historical growth in both bulk cargo and container traffic volumes (which account for the bulk of cargo volumes handled in South African ports) we conclude the TNPA has significantly overestimated average annual growth in cargo volumes over the next 3 years.

While the assumption of a sharp recovery in volumes (7.54% y/y growth) appears to be appropriate for the year 2021/22, it is unrealistic to assume that volumes will continue to expand at this rate in 2022/23 and 2023/24 in the context of what is expected to be relatively subdued economic growth.

It is also not clear why the TNPA has departed from its own detailed, and significantly lower projection of growth in cargo volumes 2022/23 and 2023/24. In the detailed cargo volumes forecasts it presents in its 2021/22 tariff application the TNPA projects that volumes will increase by what appears to be a weighted average of ~3.5% y/y in 2022/2023 and by ~3% in the following year. While even these projections may be too optimistic given a forecast of a relatively subdued economic recovery for South Africa, we would be a lot more comfortable with assumed average growth in volumes of 2 to 3% for the 202/23 and 2023/24 financial years.

The implication of the TNPA overestimating growth in cargo volumes and consequently its contributed to growth in revenue is that (all else equal) a much larger tariff increase would be required to reach the TNPA's applied for revenue. We are however not advocating for a higher tariff increase, rather we are advocating for accurate forecasts of both required revenue and cargo volumes increases which in our assessment would result in a significant net decrease in the TNPA's average tariff.

### 3. Application of the tariff strategy

While we appreciate that the Tariff Strategy identified the revenue percentage split required over time, the percentage increase chosen by TNPA still seems arbitrary, with no rationale provided other than the fact that some increase is required and shipping lines can afford the increase due to the weak Rand. This section questions the robustness of the implementation of the tariff strategy by TNPA and argues that in the current economic climate, shipping lines cannot, in fact, afford any increase in tariffs.

#### 3.1. Determining the tariff differential

Given the information that is currently provided by TNPA, it is impossible to adequately interrogate the extent to which costs apportioned to shipping lines in the Tariff Strategy are being covered, and the behaviour of these costs over time. The Tariff Strategy states:

*"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 pay 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 on a system wide approach 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 pay principle. Furthermore, the basis for the charges can be clearly explained (Ports Regulator of South Africa, 2020, pp30)".*

The Tariff Strategy makes clear that individual services (e.g. tugs, pilotage, VTS, lights, berthing and running of lines, and assets costs and overheads related to breakwater, channels, quay walls, berths, vessel repair) will each have a required revenue (in Rands) and that increases will follow a straight(ish) line to recover these costs over at least 10 years. It is strange then that a flat rate increase is imposed across all services. It does not seem unreasonable that the required revenue in Rands should be made available for each of these services and that the shortfall should be provided in Rands annually. This is especially important as costs change annually and asset values are changing as the VoA methodology is applied.

Furthermore, this would allow the actual cost incurred per service to be reconciled each year. For example, in spite of new helicopters being introduced, shipping lines are still experiencing down time and pilots being transported to the vessel by pilot boat at a high cost. Port users are paying for costs associated with a superior service, despite receiving an inferior one. The detailed information being requested in this submission will allow for a nuanced approach to individual service issues such as these, providing more confidence in the entire port's ecosystem.

#### 3.2. Affordability

In the report on public consultation the respondent states that *"The shipping industry would be able to accommodate the 7,12% by benefiting from the rand- dollar exchange rate (Ports Regulator of South Africa, 2020b, p2)"*. It is important to note that the affordability of the increase is irrelevant to the application of the tariff methodology, however, since this argument is being used, SAASOA submits that vessel owners cannot currently accommodate an increase of 7.12%, given the global economic recession.<sup>1</sup> Furthermore, the following cost pressures are currently impacting the profitability of shipping lines:

- 90% of global cargo is carried by ships that have had to contend with the changeover from HFO to Low sulphur fuel at increased cost per ton and the fitting of scrubbers to meet IMO requirements,
- Congestion and berthing delays of 10 to 12 days,
- The COVID lock down resulting in ports working minimum gangs and berths.

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<sup>1</sup> See Jiang, J (2020) [‘Survey suggests shipping is heading towards record lay-up territory’](#)

The cost impact of these elements far outweighs any positive impact of a weak Rand. Shipping lines suffer even more from reduced cargo volumes than the ports, yet the port is being guaranteed their required revenue off the back of shipping lines who are laying up vessels and, unlike South Africa's SOEs, have no safety net. We submit that the affordability argument should not be considered at all in the Regulator's assessment of TNPA's proposed tariffs. This is especially true while marine tariffs are still above the global average, according to the Regulator's Port Pricing Comparator Study.

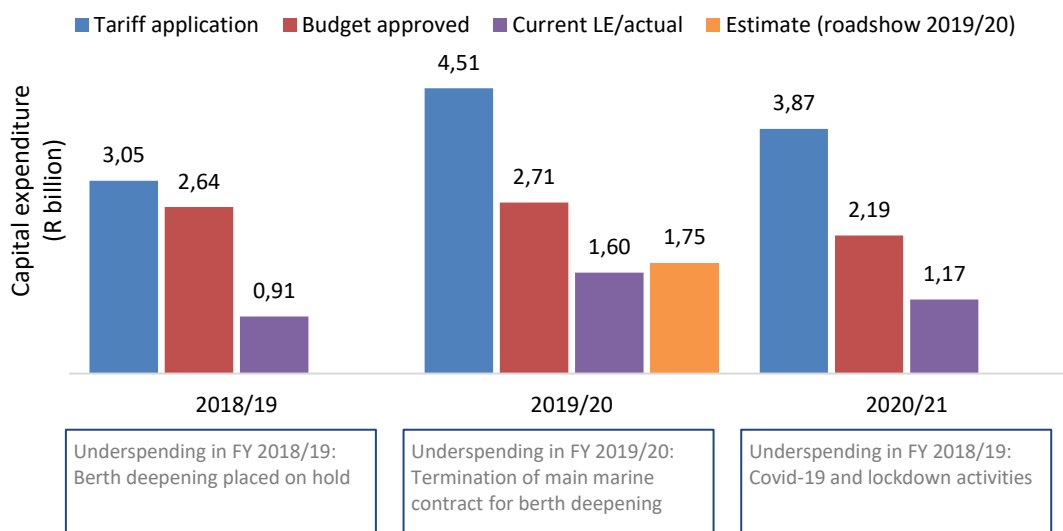
### **3.3. Conclusions on the application of the tariff strategy**

The way in which the TNPA are applying the tariff strategy through the tariff differential is arbitrary, does not align with the user-pays principle as described in the Tariff Strategy, and is non-transparent. Furthermore, the affordability argument used to justify the tariff increase for shipping lines is not part of the tariff methodology, is not fairly applied across all port users, nor is it thoroughly evidenced and considered. In order for port users to accept differentiated tariff increases, further information should be supplied by TNPA to justify such. We further submit that if a blanket relative increase across all services is going to be forced on shipping lines, then this should be done while also considering the impact of the reduced RAB i.e. there should be a significant decrease in tariffs that should be proportionally less for shipping lines than other port users, but certainly should not translate into an increase in port tariffs.

## 4. Budget expenditure inaccuracies

In previous years, TNPA have consistently shown that they are not able to spend both the capital and operational budget allowed to them. This fact is evidenced by the figures below.

**Figure 10 TNPA's capital expenditure: Tariff application, budgeted, actual**



Source: TNPA tariff application 2021/22 to 2023/24 roadshow presentation (2020)

This underspend has resulted in a significant clawback each year, as per the figure below.

**Figure 11 TNPA's operational expenditure: Budgeted, actual**

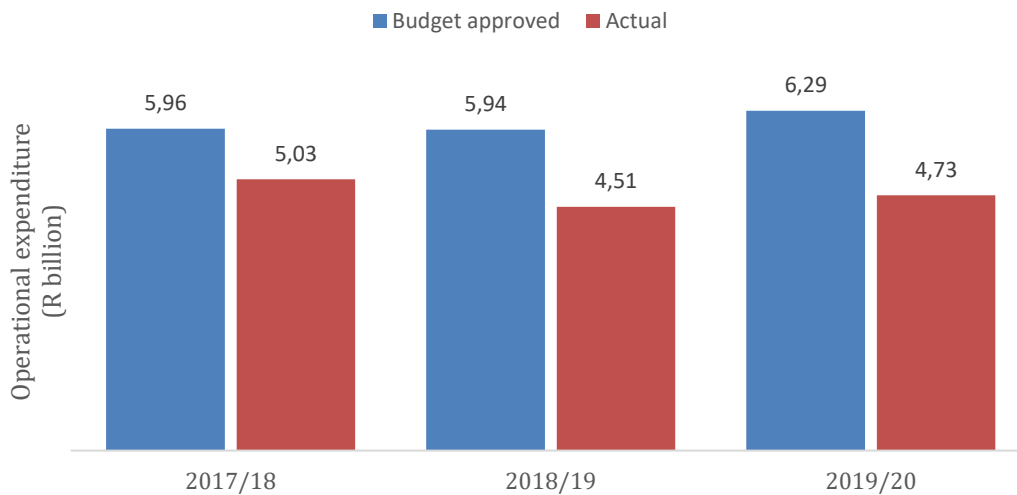
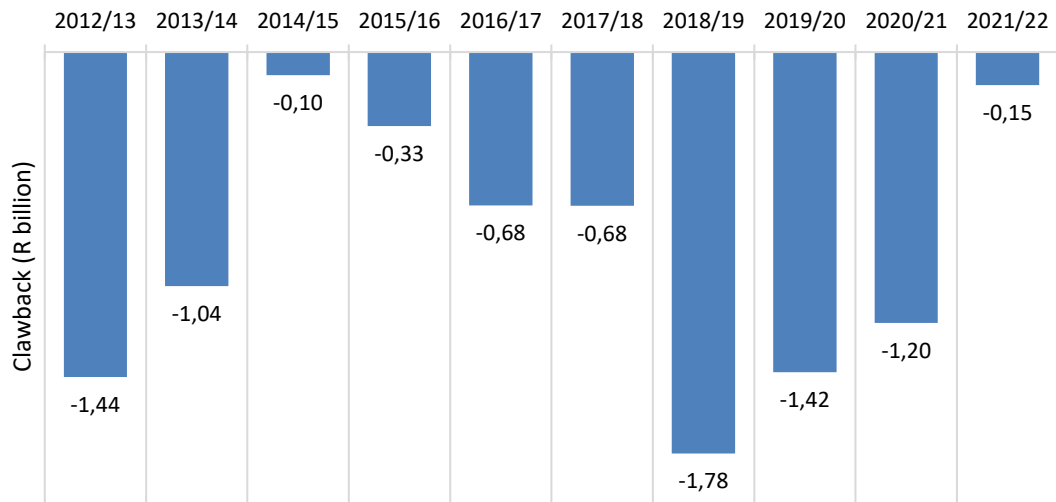




Figure 12 Clawback



The result is that port users in year x are subsidising port users in subsequent years. Furthermore, this makes it difficult to critically assess TNPA's budgeted expenditure for 2021/22, which is especially important in the current economic climate, where cost containment by TNPA is critical to reducing supply chain costs and easing the burden of the recession on businesses. The clawback is not intended to be a crutch for poor budgeting and implementation, nor should port users be used as a line of credit / means to control cash flow. An earnest attempt should be made by the TNPA to accurately budget and the clawback should be kept to a minimum, unless in extenuating circumstances (such as under-recovery due to a global pandemic).

## 5. Conclusion

The Regulator should not deviate from the approved methodology for the valuation of the RAB. If the methodology is applied, TNPA's required revenue will fall substantially and this will translate into significantly lower average port charges. The existing methodology provides for the decrease in tariffs to be phased in over time in a transparent manner.

TNPA and the Ports Regulator have not adhered to the approved hybrid RAB valuation methodology for the regulatory asset base in the past and as a result the value (and required revenue) is greatly overstated.

The current process of determining the RAB is not transparent and undermines the public participation process. Earlier this year, the High Court of Gauteng set aside NERSA's tariff decision on Eskom's applied revenue for 2018/19 on the grounds that the regulator "unfairly, irrationally and unreasonably" departed from methodology by which the tariff was determined. The court found that NERSA had deviated from the methodology in important respects, without informing Eskom beforehand and allowing it an opportunity to be heard. Eskom's case vs the energy regulator sets an important precedent in that it illustrates that regulators cannot deviate from the prescribed and approved methodology.

The current TNPA application does not provide sufficient information for public stakeholders to critique the required revenue estimates. The TNPA should provide stakeholders with a set of regulatory accounts since the method by which RAB is valued differs from that used in the AFS.

The application of the approved hybrid RAB valuation methodology results in a 34% reduction in the RAB (according to the Regulator). By our estimates, using the best available information, the TNPA's net marine required revenues in the 2021/22 tariff year should decrease by 27%. To avoid a dramatic change in tariffs, that adjustment should be phased in over time. Therefore, an increase of 19.74% is not accurate nor reasonable and takes port users no closer to reaching fair and cost reflective port pricing. While SAASOA is of the opinion that if the correct RAB was used, the tariff would in fact decrease, we are willing to accept a 0% increase to soften any impact on the port.

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**Prepared by Nova Economics and Lumec.**

Kind regards



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