Record of Decision

Tariff Application by the National Ports Authority for the Tariff Year 2010/2011

---

1. **The National Ports Authority ("the NPA") has applied for the approval of the Ports Regulator of South Africa for the tariffs for services and facilities offered by the Authority. Although dated 5 September 2009 the Tariff Application was received by the Ports Regulator on 4 September 2009.**

2. **The Ports Regulator has considered the Tariff Application and has declined to approve the proposed 10.62% tariff increase sought by the NPA for the tariff year 2010/2011.**

3. **In considering the NPA's tariff application, the Ports Regulator concluded that a 4.42% tariff increase was a reasonable increase and therefore appropriate for the 2010/2011 tariff year.**

4. **The Ports Regulator's reasons for declining to approve the proposed 10.62% tariff increase sought by the NPA for the tariff year 2010/2011 are set out in Appendix 1 below.**

APPENDIX 1

1. The Tariff Application

1.1. **The NPA requested a 10.62% tariff increase on the basis that it had calculated:-**

1.1.1. a 19.13% tariff increase in terms of its revenue requirement for the 2010/2011 financial year;

1.1.2. a 2.19% tariff increase for the 2011/2012 financial year; and

1.1.3. a 4.0% tariff increase for the 2012/2013 financial year.

1.2. It then modeled a 10.62% requirement for the 3 tariff years.

1.3. The NPA has only requested approval for the first year of the three years (tariff year 2010/2011). The NPA states that it will need to apply in each year for an increase based on the same methodology, but also taking into account latest estimates with respect to volumes, inflation and expenditure, both capital and operating.

2. The Regulator's Mandate

2.1. In considering the NPA's proposed tariffs the Regulator was guided by the National Ports Act and the Directives, and considered the submissions contained in the application, written and oral comments received in the consultation process and its own information and research.

2.2. In this regard it should be noted that the Ports Regulator has promulgated Directives in terms of section 30(3) of the National Ports Act (Government Notice 825, Gazette No. 32480, 6 August 2009). After considering submissions made by the NPA the Directives were amended in a Directives Amendment Notice, promulgated in Government Notice 37, Gazette No. 32898 on 29 January 2010.

3. The Methodology used by NPA

3.1. The NPA elected to use a "revenue requirement methodology" as the basis for its tariff application.

3.2. It had requested that a 3 year view be taken and that its application be assessed on the basis of a 10.62% per year with approval only being granted by the Regulator for year 1(2010/2011).

3.3. No information was given on the expected costs or other information such as projected changes in elements of the cost of capital that would have allowed a thorough 3 year analysis to be performed. The application therefore is the first part of 3 separate applications for 10.62% per annum, although the application methodology is based on a 19.13% tariff application for financial year 2010/2011. The application was assessed on its approach and parameters and the resultant reasonable increase then determined. The tariff assessment is for the year 2010/2011 only, and does not extend to the two following years that shall be assessed on the merits of the applications when they are submitted.

4. Compliance with the Directives, Regulations and National Ports Act

4.1. The application is largely compliant with the Act, Regulations and Directives with a few notable exceptions. The NPA has submitted a tariff application approval request based on a revenue requirement methodology. Although not articulated expressly by the regulatory framework, it is not specifically excluded. The Regulator therefore decided to accept the methodology that had been used, as applied by the Regulator. The Regulatory framework does not set a methodology, nor does it constrain the Regulator from adopting a methodology different to that proposed by NPA.

4.2. The NPA has decided that its property activities do not fall under the tariff regime and, as a result, has decided that tariff increases on property are to be excluded from this application. Although debatable the Regulator has decided to accept this particular tariff application as proposed on the basis that it is largely compliant, except for a few notable exceptions and concerns.

4.3. There are key areas where the application falls foul of the Regulatory framework:

4.3.1. Directive 22(3) requires that the application set out the manner in which the tariffs have been calculated and the model used for determining them. The NPA did not do so and indicated that they did not have a particular model for determining and calculating tariffs and the relative ratios between different prices. They indicated the total revenue that they believed they required as an organisation, but not the methodology for calculating the tariffs themselves.

4.3.2. Directive 22(3)(b) requires that all operating costs, expenses and revenues incurred or generated from a port service or port facility, as well as the value

of the capital stock related to such services or facilities are to be declared in the application. The NPA did not give a breakdown per service and per facility in their application and indicated that they did not keep records in that manner. The capex programme provided has not been provided with the level of granularity necessary to make an accurate assessment on these matters.

4.3.3. Directive 22(3)(c) requires that the amounts to be invested and revenues that are to be utilized in port development, safety, security and environmental protection must be provided and the manner in which the tariffs will affect the cost of doing business in the ports. The NPA had indicated that they acknowledge that any increase in NPA tariffs will increase the cost of business, but no analysis or indications of the impacts of such increases and how that will affect the cost of doing business was provided.

4.3.4. Directive 22(6) requires that the NPA shall maintain such accounting and financial systems that are necessary to provide the Regulator with sufficient information to verify the pricing principles and models used by the NPA to calculate tariffs. The comment on the lack of a tariff model and principle above refers in this case as well. The generalized corporate level information was adequate for the purposes of the analysis within the context of the particular approach selected by the NPA, and the information provided was not independently verified by investigating the financial and accounting systems directly.

4.3.5. Directive 23(1) requires that the Regulator must have regard to whether the requested tariffs reflect and balance a range of considerations:

(i) 23(1)(a) - <u>a systematic tariff methodology that is applicable on a consistent and comparable basis</u>. No explanations were given as to a methodology that explains the variance between tariffs for the same cargo type but different commodities. The comments relating to the lack of a tariff methodology above refers.

(ii) 23(1)(b) - <u>fairness</u>. No explanation was furnished for differential tariffs for different commodities using the same handling classification. This is relevant to comments on a consistent methodology.

(iii) 23(1)(c) - <u>the avoidance of discrimination, save where such discrimination is in the public interest</u>. No explanation was given for any price discrimination and no price discrimination was identified. The differential tariffs for commodities were not explained nor the differences between export and import.

(iv) 23(1)(f) - the avoidance of cross-subsidisation, save where in the public interest. The low level of information detail with respect to services or facilities pricing and cost relationships etc, makes it difficult, if not impossible, to determine where and in which direction subsidisation takes place or if it does not. No claim or denial was made that any subsidization existed, or that such subsidization that existed was in the public interest and on which grounds public interest was determined.

(v) 23(1)(g) - promotion of access to ports and efficient and effective management and operation of ports. The information provided in the application was not sufficient to determine this, as no information was given on the access, efficiency and effectiveness.

5. The Application Specifics

5.1. The application submitted, has been developed on the Required Revenue basis by the NPA. This approach, though not determined as the appropriate approach, has not been rejected by the Regulator. The Regulator assessed the Application on this basis, and largely used the methodology applied by the NPA, except where the application was not appropriate or was incorrect in the opinion of the Regulator.

5.2. Bearing in mind that the NPA is a monopoly and does not have any competition, and bearing in mind that the rate of return methodologies apply as if they are being used by a company in a market that does not preclude others from competing with it, the Regulator assessed the Application within its methodology. The methodologies and applications generally assume that the company making investment decisions has options as to which areas and industries it may or may not invest in, but the NPA is only mandated to invest in ports. The impact of such components of the methodologies for defining appropriate returns need to be debated with all stakeholders to reach a credible articulation of the appropriate methodology for assessment and its application, and one which will inform future determinations.

5.3. The NPA used the following formula for required revenue:

"Revenue Requirement = (cost of capital x regulatory asset base ("RAB") + operating costs + depreciation + taxation expense"[1]

5.4. This is in accordance with the standard approach to Revenue Requirement and is the one used by the National Energy Regulator of South Africa.

---

[1] Equation 1

5.5. The standard exposition is:

$$RR = (v - d + w)r + D + E + T$$[2]

With:

- v = value of the assets used in the regulated services
- d = accumulated depreciation on such assets
- w = working capital
- r = return on the capital reasonably expected
- D = depreciation accounted for in the period of the tariff
- E = operating expenses
- T = taxation expense
- v – d + w = Regulated Asset Base

5.6. The Regulated Asset Base

5.6.1. The Regulated Asset Base (RAB) submitted by NPA was R 45.677 billion. This was comprised of a 2010/2011 opening RAB of R 44.705 billion, a capital budget of R 2.782 billion, depreciation of R 837 million, and a closing RAB of R 46.65 billion. The average of the opening and closing balances was therefore R 45.677 billion according to their calculations.

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 as 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 RAB 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 R 44.02 billion, while the Historic Depreciated valuation was merely R23.49 billion), including those raised by the comments process.

5.7. RAB determined by The Regulator.

5.7.1. In the calculation of the initial RAB for 2010/11, the NPA had incorrectly added the (2009/2010) capital expenditure of R 3.489 billion and the depreciation of

[2] Equation 2

R 686 million, to arrive at a combined capital expenditure and depreciation of R 2.888 billion, while in fact, these add up to R 2.803 billion. The 2010/2011 starting assets minus depreciation for NPA should therefore be R 44.635 billion, rather than the R 45.677 billion claimed in the application.

5.7.2. The financial year end assets minus depreciation would therefore be R 46.650 billion according to the NPA, but corrected for their arithmetic error, it is R 46.580 billion. The average assets, minus depreciation for 2010/2011, is therefore R 45.608 billion.

5.7.3. In the methodology selected by the NPA, working capital is added to the net of assets as valued and accumulated depreciation. In application to equation 2 above, the value of the working capital is therefore added to the assets minus accumulated depreciation. The NPA selected to ignore the effect of working capital on the RAB, and treated it as zero because it was a negative number in their application. The working capital for the NPA is – R 2.443 billion.

5.7.4. Inserting these numbers into the above equation determines that:

RAB = v-d +w
= R 45.608 billion + (- R 2.443 billion)
= R 43.165 billion.

5.8. Cost of Capital

5.8.1. The NPA application follows the Capital Asset Pricing methodology to determine the cost of capital. The application indicated that the NPA had moved from their previous approach of using pre-tax WACC to the new Transnet approved post-tax WACC approach. The regulatory framework does not dictate or preclude this approach. The application requested that the real post-tax WACC for NPA be assessed as being 6.02%. The Regulator determined that the post-tax WACC should be 5.15%, when applying all its determinations on the elements below.

5.8.2. The formula for calculating the weighted average cost of capital under the CAPM is as follows:

$$WACC = \frac{E_q}{V} \times K_e + \frac{D_t}{V} \times K_d$$

Where:

E_q = market value of the company's equity;
D_t = market value of the company's debt;

K_e = the cost of equity or shareholder's required return;
K_d = the cost of debt or the lender's required return; and
V = $E_q + D_t$

5.8.3. Cost of Equity

(i) The requested real post-tax cost of equity requested in the application was 9.35%. The Regulator determined that the real post-tax cost of equity was 7.77%.

(ii) The Capital Asset Pricing Model cost of equity methodology used by the application is as follows:

Ke = Rf + β(MRP+CRA)

Where:
Ke = cost of equity
Rf = risk free rate
B = Beta
MRP = Market Risk Premium
CRA = Country Risk Assessment

(iii) Risk Free Rate

5.8.3.iii.1. The application has used the pre-tax Risk Free Rate. Both the pre-tax and the post tax risk free rates have been used in a range of jurisdictions and applications across the world. Specifically, NERSA has refused to accept the pre-tax Risk Free Rate in its assessment of the pipelines tariff applications. The risk free rate in the application was 2.94%, but when the post tax risk free rate was applied it was 0.64%.

5.8.3.iii.2. The Regulator considered the specific application, and decided to give the NPA the benefit of the doubt surrounding the appropriate Risk Free Rate to use and accepted the pre-tax Risk Free Rate, subject to an engagement with all stakeholders prior to the next tariff application that defines the appropriate Risk Free Rate methodology.

(iv) Beta Co-efficient

5.8.3.iv.1. The treatment of risk in the CAPM approach is dealt with mainly in the Beta. Bearing in mind that the NPA is a monopoly that has statutory protection, has limited competition in the region, and using the required revenue approach to tariff setting ameliorates some of its risk, the NPA still faces some risk and can expect to be rewarded for taking such risk. The application requested a Beta of 1.13. This was based on reference Betas of a range of 6 ports and port systems that were provided by the NPA. As the NPA is not a listed entity, and is not even a corporatised entity, it has to rely on the Beta's of similar companies to define its own Beta. The Beta is a measure of the risk faced by a company. The NPA has no or limited competition, in the region, which reduces the risk faced by the organisation.

5.8.3.iv.2. The application had quoted an asset Beta of 0.62% which was determined by reference to the ports quoted in the application. The ports or port systems quoted were a list determined by the NPA and did not have any comparators that were at least the size of the NPA. On a cargo throughput basis, the largest was a port system that was slightly larger than Saldanha. The smallest port quoted had a lower output than East London. The combined total throughput of the 6 companies quoted by the NPA as comparators was just above half of NPA's throughput (in the period just before the financial crisis, to remove regional anomalies resulting from the crisis).

5.8.3.iv.3. In the application, the comparators were de-levered and re-levered using a formula that differed from the previous year's practice by the NPA, on the basis that Transnet had changed its leveraging methodology (no technical explanation was provided). The Regulator in assessment of the Beta used the Hamada de-levering and re-levering equation as that was the one most appropriate and used by NPA in its previous application(although not assessed because the Directives were not in place as yet).

5.8.3.iv.4. The Regulator used an asset Beta for the global ports industry of 0.5 as used by the Queensland Competition Authority. This was decided as an interim approach for this assessment, pending a process to include all stakeholders that would determine the comparators which would be used to define an asset Beta for the NPA. This process would be concluded prior to the next tariff application. Re-levering this to arrive at an equity Beta for NPA, using the Hamada, resulted in an

equity Beta of 0.7945. The Regulator then added a factor of 0.0555 to this determined Beta to give the NPA a greater margin for their capex programme. The allowed Equity Beta for the application is therefore 0.85.

(v) Market Risk Premium

5.8.3.v.1. The requested Market Risk Premium in the application was 5.68%. This was accepted as a reasonable Market Risk Premium and within the parameters determined by other analysis.

(vi) Country Risk Assessment

5.8.3.vi.1. As the regulated activities do not occur outside of the Republic of South Africa and the application did not rely on assets or investments in foreign jurisdictions for its Required Revenue approach, the country risk assessment was therefore 0, as requested in the application.

5.8.4. Cost of Debt

(i) The application requested a real post-tax cost of debt of 1.96%. Although slightly higher than the cost of debt of equivalent South African infrastructure companies (state owned), all less profitable and on similar gearing levels, the cost of debt applied for was accepted by the Regulator.

5.9. Operating Costs

5.9.1. The expenses in the 2010/2011 application amounted to R 2.474 billion. In the application, the forecast expenses for the financial year 2009/2010 were R 2.180 billion. The NPA therefore requested a 13.5% increase in operating expenses. The weighted average volume growth forecast for the year was projected at 7.56%. Effectively they wished to move 7,5% more traffic while increasing total costs by 13.5%. In the application for tariff year 2009/2010, although not assessed, NPA had forecast expenditure R 609 million greater than the expenses allocated to that year in this application. Labour expenses were forecast at R 1.244 billion in the 2009/2010 application, but in this application are articulated as R 1.056 billion for the same period. The Regulator was not convinced that the rates of increase requested were justified.

5.9.2. The Regulator on engaging on the expenses determined the following:

(i) Labour costs be increased by inflation plus 3%;

(ii) Energy expenses be accepted at 24.7% increase;

(iii) Rates and taxes be accepted at 28.3% increase;

(iv) Contract payments be accepted as requested;

As the energy, rates and taxes escalation occurs at rates other than the change in the level of prices in the economy, the specific increases were allowed. The above inflation increases in labour costs were allowed to accommodate for expected changes in wage settlements and additional staff. As contract payments are determined by reference to contracted liabilities they were accepted as proposed.

5.9.3. All other costs be increased by inflation only (5.56%).

5.10. Depreciation

5.10.1. The requested depreciation of R 837 million was accepted, although the actual expended in the financials would be assessed and the various processes around determination of elements of the tariff approach would assess the depreciation allowance and methodology to be applied to subsequent applications.

5.11. Taxation Expense

5.11.1. The application requested an effective tax rate of 28.84%. This was considered to be extremely high, particularly considering that corporate tax rates are 28%. The Regulator accepted the effective tax rate as requested for this assessment, in spite of considering it an area that would need to be addressed in the processes prior to the next application.

6. "Required Revenue" Result

6.1. The application of the above amendments to the NPA 2010/2011 tariff application has the following result:

Return on Capital:		R 2 225m
Depreciation:	+	R 837m
Operating Expenses:	+	R 2 364m
Tax Expense:	+	R 813m
Total Revenue:	=	R 6 239m
Contract Income:	-	R 219m
Required Revenue2010/2011:	=	R 6 020m

6.2. The resulting increase in tariffs is therefore calculated as follows:

2010/2011 Volume growth (in application):	7.56%
Expected Revenue 2009/2010:	R 5 360m
Volume adjustment :	R 5 765m
2010/11 minus 2009/10:	R 660m
Revenue increase:	12.32%
Tariff Increase:	4.42%

7. Concerns of the Regulator

7.1. The Regulator has raised a few concerns that would need to be addressed before the next tariff application is submitted or a timetable for the resolution of some matters should be developed. These elements need to be engaged upon by The Regulator, the NPA, and stakeholders in a public process. Some have been raised above in the body of the decision elements.

7.2. The RAB valuation methodology needs to be determined, as the various revaluations and the resulting returns on the revaluations and the increases in depreciation allowances may result in higher tariffs than are required to recoup investments, cover costs and make a profit. The valuation methodology needs to be the subject of a broad debate on the appropriateness thereof.

7.3. The current appropriateness of the capital structure of the NPA used in the application needs to be assessed. That is not to suggest that the NPA has to change its capital structure to that of one determined as the lowest weighted average cost of capital considered appropriate, at the expense of the Transnet covenants with its funders or its strategy, but the level of gearing that is considered appropriate in a tariff model that is used in the assessment of tariff applications.

7.4. The depreciation methodology and application needs to be assessed to ensure its appropriateness. The treatment of revaluations in future depreciation expenses also needs to be assessed and taken into account in engaging on the tariff approach.

7.5. The matters with respect to the relative equity in the different tariffs was raised by numerous stakeholders and the exact tariff methodology that is required by the Directives should be engaged upon, as this is non-compliant, although the Regulator has accepted the current position for this tariff application.

7.6. The dividend policy resulting in payment of dividends of R15.969 billion from 2006 to 2009, while the company runs a negative working capital as well as it raising concerns about being able to afford its capital programmes, needs to be managed in a way that addresses the concerns of the NPA, but also that an appropriate regulatory approach is in place that ensures the needs of all stakeholders are met in so far as is sustainable in the long term. This does not suggest that the company change its strategy coherence and capital approach, but that the tariff setting methodology must address these matters and treat the applications for tariff increases appropriately.