

# EXHIBIT BB 8(b).2

# 100 LOCOMOTIVE TRANSCATION

# ALISTER OUEMAKOUA CHABI



## JUDICIAL COMMISSION OF INQUIRY INTO ALLEGATIONS OF STATE CAPTURE, CORRUPTION AND FRAUD IN THE PUBLIC SECTOR INCLUDING ORGANS OF STATE

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#### **INDEX: EXHIBIT BB 8(b).2**

Description	Pages
Affidavit of Alister Ouemakoua Chabi – 100 Locomotives Transaction	001 to 021
Annexure "AOC1"	022 to 036

# SUBMISSIONS TO THE ZONDO COMMISSION OF INQUIRY INTO STATE CAPTURE

#### 100 LOCOMOTIVES TRANSACTION

I the undersigned,

### ALISTER OUEMAKOUA CHABI

do hereby make oath and say that:

#### 1. INTRODUCTION

- 1.1 I am an adult male of full legal capacity. I am a founding member of ALL5 Holding Company Proprietary Limited ("ALL5").
- 1.2 The facts set out herein below fall within my own knowledge, save where the contrary appears from the context. The facts are to best of my knowledge both true and correct.
- 1.3 ALL5 was appointed by Mncedisi Ndlovu & Sedumedi Attorneys ("MNS") as part of its investigations into the procurement irregularities in the acquisition of the 100 Locomotives by Transnet Soc Limited ("Transnet"). The specific mandate of ALL5 was to focus on assessing the reasonableness and justiciability of the increase in the Estimated Total Cost ("ETC").



#### **Qualifications**

- 1.4 I hold the following qualifications:
  - 1.4.1 Bachelor of Economic Science from the University of the Witwatersrand;
  - 1.4.2 Post Graduate Diploma in General Management (PGDip) from the University of Pretoria's business school, the Gordon Institute of Business Science (GIBS); and
  - 1.4.3 Master of Business Administration (MBA), from the University of Pretoria's business school, the Gordon Institute of Business Science (GIBS).
- 1.5 I am a Technical member of the Actuarial Society of South Africa ("ASSA"), the body governing the actuarial profession in South Africa.
- 1.6 I am an Associate of the Institute and Faculty of Actuaries ("AFA") and Fellow of the Institute and Faculty of Actuaries ("FFA"). The Institute and Faculty of Actuaries ("IFoA"), is the UK's only chartered professional body dedicated to educating, developing and regulating actuaries internationally.
- 1.7 I am a Chartered Enterprise Risk Actuary ("CERA"), a global enterprise risk management credential accredited to me through the Institute and Faculty of Actuaries, as a member of the CERA Global Association.



#### Professional Experience

- 1.8 I am a qualified actuary. I started my career in 2007 and my experience covers investments, short-term insurance, pensions, healthcare and enterprise risk management.
- 1.9 I have rendered actuarial services to both public and private sector clients, consulting to retirement fund Trustees on their:
  - 1.9.1 investments: formulating Investment policies, developing Investment strategies, and managing investment funds;
  - 1.9.2 retirement benefits: assessing the solvency of pension and provident schemes and opining on the appropriateness of the assets backing their schemes' liabilities; and
  - 1.9.3 risk benefits: pricing and reserving on their schemes' death and disability benefits.
- 1.10 More recently, the bulk of my time has been spent consulting to the Council for Medical Schemes, a statutory body regulating medical schemes in South Africa, as a Technical Expert and member of the Costing Committee and consulting to institutional clients on the valuation of: retirement benefits, damages and investment portfolios.



#### Actuarial Standards

- 1.11 The Institute and Faculty of Actuaries ("IFoA") sets and maintains ethical and professional standards that all members must adhere to. The aim of these standards is to build and promote confidence in the work of actuaries and in the actuarial profession. The standards relate to the duties and responsibilities of actuaries in their varied practice areas, and the review of work undertaken by actuaries.
- 1.12 I am in good standing with the IFoA and that the work I have carried out adheres to the requirements of the following IFoA Actuarial Profession Standards ("APS"):
  - 1.12.1 APS X1 which sets out to determine the standards applicable to actuarial work. It requires, subject to the relevant legal requirements, that all members comply with the Actuaries' Code and the relevant APSs. I have to the best of my ability complied with the principles of the Actuaries' Code, the applicable standards and the relevant legal requirements.
  - 1.12.2 APS X2 which sets out the responsibilities of all members in relation to the application of work review, which may include independent peer review, to promote the quality of actuarial work.
    I have considered whether to apply Work Review and have, to the extent that it is appropriate and proportionate, ensured that Work Review was applied. An independent peer review was carried out



on the approach taken to modelling the various elements as well as the inputs and results obtained.

- 1.12.3 APS X3 which sets out the principles for actuaries to apply when instructed as an expert in relation to existing or contemplated legal proceedings. I have established clearly the nature and scope of my instruction. I also satisfied myself that the peer reviewers and me had the necessary level of knowledge and skill to fulfil the requirements of the instruction.
- 1.13 The Actuarial Society of South Africa ("ASSA") sets practice area specific Standards of Actuarial Practice ("SAP") that are mandatory for its members. The SAPs assist members in carrying out their professional responsibilities. They relate to the duties and responsibilities of actuaries in their varied areas of practice.
- 1.14 I am in good standing with ASSA and that the work carried out adheres to the requirements of the ASSA Standards of Actuarial Practice SAP 901, which provides guidance to actuaries when performing actuarial services to give intended users confidence that:
  - 1.14.1 actuarial services are carried out professionally and with due care;
  - 1.14.2 the results are relevant to their needs, are presented clearly and understandably, and are complete; and



1.14.3 the assumptions and methodology (including, but not limited to, models and modelling techniques) used are disclosed appropriately.

#### 2. MANDATE

- 2.1 The mandate from MNS in relation to the 100 Locomotives Transaction was as to:
  - 2.1.1 identify the reasons for the R969 million increase in Estimated

    Total Cost ("ETC"), from R3.871 billion to R4.84 billion;
  - 2.1.2 test the plausibility put forward for the R969 million increase in ETC; and
  - 2.1.3 opine on the reasonability of the increase in ETC.

#### 3. METHODOLOGY

- 3.1 During its investigations, ALL5 relied on the following:
  - 3.1.1 documents that were provided to MNS by Transnet;
  - 3.1.2 documents independently sourced to validate the Business

    Cases and other information provided by Transnet; and
  - 3.1.3 benchmarking exercises conducted with industry players such as commercial banks, registered assets managers, brokers to test



my own analysis and confirm the market prices on forex hedging at the time of the conclusion of these transactions.

#### 4. SUMMARY OF FINDINGS

- 4.1 I concluded, from the investigations into the acquisition of 100 Locomotives Transaction, based on the ETC of R3.871 billion being acceptable, that:
  - 4.1.1 the reasons put forward for the increase in ETC were justifiable;
  - 4.1.2 the quantum of the increase in ETC (R969 million) was unjustifiable; and
  - 4.1.3 based on Rand/Yen exchange rate, a R230 million increase in ETC would have been acceptable.

#### 5. THE ACQUISITION OF 100 LOCOMOTIVES

5.1 The Transnet Board of Directors approved the procurement of 100 equivalent class 19E dual-voltage electric locomotives on 24 January 2014, at an ETC of R3.871 billion. As per the 24th January 2014 minutes of the special Board of Directors, the procurement of the 100 locomotives would mitigate the Market Demand Strategy volumes at risk due to the delay in the 1064 diesel and electric locomotives to be procured.



- 5.2 On 17 March 2014, Transnet signed a locomotive supply agreement with China South Rail ("CSR") for 100 equivalent class 19E dual-voltage electric locomotives at an escalated price of R4.84 billion.
- 5.3 On 23 May 2014, the Transnet Group Chief Executive, Transnet Group Chief Financial Officer and the Transnet Freight Rail Chief Executive ("Transnet Officials") submitted a memorandum to the Transnet Board of Directors for purposes of:
  - 5.3.1 noting the reasons for the increase in ETC; and
  - 5.3.2 approving the increase in ETC.

#### Reasons advanced for the Increase

5.4 The 23 May 2014 memorandum ("the Memorandum"), on paragraph 2, provides a summary of the reasons for the R969 million increase in ETC and quantifies each reason. A copy of the memorandum dated 23 May 2014 is attached hereto marked "AOC1". It notes as per the following table:

Update of business case for economic factors	R 495 m	51%
Scope Change	R 347 m	36%
Risk Mitigation - Forex, Escalation and Contingencies	R 373 m	38%
Discount Negotiated	-R 247 m	-25%

We refer to Table 1, under paragraph 22, to expound on each of the above reasons.



#### Update of business case for economic factors

Paragraph 23 of the Memorandum notes as follows: "The submission prepared in January 2014 for BOD and the Transnet Board meetings were based on economic forecasts obtained in May 2013". The R495 million increase in relation to the 100 locomotives is an adjustment to the locomotive price as at May 2013, for inflation and foreign currency fluctuations to March 2014. It is the aggregate of Item A ("Impact of the exchange rate to contract date") and Item B ("Impact of labour inflation, material inflation, CPI up to contract date") and is obtained by summing R369 million (R3.69 m \*100) and R125 million (R1.25m\*100).

#### Scope Change

5.6 CSR E-Loco Supply (Pty) Ltd (CSR), on 28 February 2014, tendered a submission for the supply of 100 20E dual-voltage electric locomotives.

These locomotives needed to be modified to meet Transnet's locomotive requirements hence, the reference to "equivalent class 19E dual-voltage electric locomotive". The submission quantified the cost of the modifications at R347 million (R3.47 million per locomotive). The breakdown of this cost is as follows:



Description	Cost
Cost of steel material added	R432 000,00
Cost of other changes: Traction blower power increase, heavy-duty bearings, axles, wheels, gears, pinions, cannon box, F-type coupler and draft gear	R2 738 400,00
Duty	R300 000,00
Total	R3 470 400,00

## Risk Mitigation - Forex, Escalation and Contingencies

- 5.7 Transnet, to mitigate fluctuations in cashflows arising from exposure to inflation and foreign currency risk, negotiated fixed Rand contracts. the Transnet Financial Risk Management Framework required that Transnet eliminate its exposure to foreign currency risk. Contingencies were set at 10% of the contract price for cost related to capital spares, variation orders and options. Risk Mitigation costs are marked D ("Cost to fix forward-looking escalation"), E ("Cost to fix forex hedging") and G ("10% Contingency for capital spares, variation orders, options etc.").
- These costs totalled R811 million (R8.11 million per locomotive).

  Contingency costs were R440 million (R4.4 million per locomotive).

  Inflation and foreign currency hedging costs totalled R371 million (R3.71 million per locomotive). It is therefore questionable that these costs were recorded at R373 million in the Memorandum.



#### Discount Negotiated

- The Memorandum records a discount of R247 million (R2.47 million) per locomotive. This assumes that the base price of the locomotives was R3.871 billion (R38.71 million per locomotive) as at May 2013. Paragraph 13 of the Memorandum states as follows: "The acquisition of 100 equivalent Class 19E Dual voltage Locomotives was approved by the Board of Directors on 24 January 2014 at cost of R3.871 billion excluding the cost of hedging for foreign exchange movements and excluding the cost of future escalation costs."
- 5.10 The discount that should have been recorded, after allowing for the omitted contingency cost of R440 million and on the assumption that the base price as at May 2013 was R3.871 billion, is R684 million (R6.84 million per locomotive). The recorded discount of R247 million needs to be clarified.

#### Validation of R3.871 billion ETC

5.11 The validation of the ETC of R3.871billion fell beyond the scope of my initial mandate at the time of producing my report on the increase in ETC. Subsequently, I was requested to validate the ETC R3.871 billion presented to and approved by the Transnet Board. Based on my analyses of the initial ETC of R3.871 billion, I found the following:



- 5.11.1 The local component of the locomotive price was based on a local content of 40% instead of 60%.
- 5.11.2 The foreign component of the locomotive price was based on a foreign content of 50% instead of 40%.
- 5.12 The result of 5.11.1 and 5.11.2 was a R3.93 million understatement in the locomotive price as at March 2014, R38,27 million compared to R34.34 million per locomotive.
  - 5.12.1 The amounts to be paid in 2014 and 2015, net of the advance payment of 10% of the contract value as at April 2013, were overstated by R3,99 million and R11,68 million respectively.
- 5.13 The net result of 5.11.1, 5.11.2 and 5.12.1 was a R494 million understatement in the ETC of R3,871 billion as at April. The ETC, after adjusting the 100 Locomotives Financial Model for 5.11.1, 5.11.2 and 5.12.1, amounts to R4,365 billion.
  - 5.13.1 The analyses to follow were premised on the ETC of R3,871 billion having been accurately modelled and reasonable. Allowing for an adjusted base price as of May 2013 of R38,27 million per locomotive, in Table 1 of the Memorandum, can be expected to result in an ETC higher than R4,840 billion.



#### Locomotive base price

- 5.14 CSR provided a base price of R28 860 000.00 as at April 2012 for a class 20E dual-voltage electric locomotive, in its 28 February 2014 tender submission. The Memorandum notes a price of R34.34 million (excluding escalation and hedging costs) per locomotive as at May 2013. The price of R28 860 000.00 per locomotive was therefore adjusted for inflation and foreign currency changes between April 2012 to May 2013. The local content of 60% provided in paragraph 15 of the Memorandum was assumed correct because there was not enough information to verify the foreign and local content at the time of writing the report.
- 5.15 Paragraph 24 (a) of the Memorandum refers to Rand/Yen exchange rates in justifying the foreign currency adjustment costs to March 2014. It has therefore been concluded that the foreign component was subject to Japanese economic conditions. As such, Japanese and South African producer price inflation and exchange rates have been used in adjusting the April 2012 prices to May 2013.
- 5.16 South African producer prices increased by 5.7% while Japanese producer prices decreased by 0.8% between April 2012 and May 2013. A weighted average rate of inflation of 3.1% was used on the basis that 40% of the locomotive content would be subject to Japanese economic conditions. This amounted to an escalation cost of R895 957 per locomotive. The Rand depreciated by 10.4% against the Japanese Yen

- over the same period, resulting in a foreign currency adjustment cost of R1 198 055 per locomotive.
- 5.17 The resulting base price per locomotive as of May 2013, allowing for an update in economic conditions, is R30 954 012 per locomotive. The base price of R34.34 million per locomotive, as per the Memorandum, is R3.39 million more than expected.

#### Backward-looking exchange rate

- 5.18 This cost item is marked A in Table 1 of the Memorandum and is an adjustment on the May 2013 locomotive base price for changes in the exchange rate to the contract date, March 2014. Rates of exchange obtained from the South African Reserve Bank ("SARB") website a 3.51% depreciation in the Rand against the Yen (R0.1015/Yen to R0.1051/Yen) between May 2013 and March 2014.
- The Memorandum notes a foreign currency adjustment cost of R3.69 million per locomotive based on a 10.74% depreciation in the Rand against the Yen and a base price of R34.34 million per locomotive. The recalculated cost amounts to R0.43 million per locomotive based on a 3.51% in the Rand against the Yen and a base price of R30.95 million per locomotive. This represents an excess cost of R3.26 million that could not be justified.

#### Backward-looking inflation

- 5.20 This cost item is marked B in Table 1. It represents the inflation adjustment to the locomotive price to allow for local and foreign price inflation between May 2013 and March 2014.
- 5.21 The Memorandum, in paragraphs 24 (b) (c) and (d), expands on the inflation values considered. Inflation figures of 8.5% for labour, 10.8% for material and 6.4% for producer prices, averaging 8.57%, have been noted for the local content. An average rate of 1.9% (average of 1.3% and 2.5%) has been noted for the foreign content. A combined inflation figure of 3.7% on both the local and foreign content, based on inflation of 8.57% locally and 1.9% applied to the foreign content, would imply a local content percentage of 27%, well below the DTI requirements of 60%.
- 5.22 Data obtained from Statistics South Africa and the Organisation for Economic Co-operation and Development shows that overall producer prices between May 2013 and March 2014 increased by 7.42% and 1.01% in South Africa and Japan respectively. Assuming that the local content requirements of 60% were met, this equates to a combined inflation rate of 4.86%. This is higher than the rate of 3.7% applied in the Memorandum. The result is, therefore, a higher inflation cost to that provided in the Memorandum, R1.5 million compared to R1.26 million per locomotive.



#### Design modification costs

- 5.23 These costs are marked C in Table 1. The breakdown of these costs has been provided in paragraph 5.6 and represent the costs of modifying the locomotive from a 20E dual-voltage electric locomotive to a 19E dual-voltage electric locomotive. These design modification costs were provided as at February 2014. They were valid to 31 March 2014 and, therefore, did not require inflation and foreign currency adjustments to March 2014.
- The combination of the locomotive base price as at May 2013 (R30.95 million), the foreign currency adjustment cost to March 2014 (R0.43 million), the inflation adjustment cost to March 2014 (R1.5 million) and the design modification cost as at March 2014 (R3.47 million) provides the expected price of a 19E dual-voltage electric locomotive as at March 2014. This is R36.36 million.

#### Forward-looking inflation

5.25 The cost associated with inflation going forward is marked D in Table 1. It represents the amount Transnet contracted to with CSR so as not to be exposed to varying levels of price inflation between March 2014 and September 2015. Paragraph 17 of the Memorandum notes that the 1st locomotive will be delivered in February 2015 and the 100<sup>th</sup> in September 2015. I have therefore projected a uniform distribution in the delivery of the locomotives as per the table below.



	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
Number of Locomotives	13	13	13	13	13	13	13	9

Thirteen locomotives will be delivered each month from February 2015 to August 2015.

The balance of 9 will be delivered in the last month, September 2015.

- 5.26 March 2014 prices would need to be escalated to determine the price per locomotive in each of the months starting February 2015 and ending September 2015. The Memorandum pegs the cost of this escalation at R2.63 million per locomotive. Paragraph 62 argues for the use of local inflation rates given the high percentage of local content envisaged of 60%. The Memorandum notes further, in paragraph 64, that 6% is an appropriate benchmark for this escalation, equating to a 9% increase over 18 months, and as such the 7.7% increase is reasonable.
- 5.27 However, an escalation rate of 6% should not be applied to the foreign component which is subject to Japanese economic conditions. I have, therefore, applied inflation/escalation rates as per the table below.

	PPI	Content	Weighted average
South Africa	6.0%	60%	3.60%
Japan	2.0%	40%	0.80%
			4.40%



Based on a local escalation rate of 6.0%, a foreign escalation rate of 2.0% and a 60/40 split in local/foreign content, I arrive at a total escalation cost of R1.92 million per locomotive. The difference between R2.63 million and R1.92 million, of R0.71 million, could not be justified.

#### Foreign exchange hedging

5.28 The cost associated with hedging the foreign component of the locomotive price between March 2014 and September 2015 is marked E in Table 1.

The rates used in the appraisal of the 100 locomotives Business Case were Rand/Yen exchange rates as per the table below:

A C	2013	2014	2015
Rand/Yen	0.0982	0.0923	0.0940
Rand appreciation		-6.08%	-4.27%

These were obtained from the Bureau of Economic Research (BER), an institution that monitors and forecasts economic trends. The rates noted above are not forward rates but forecast rates. The finalisation of the Business Case on these rates, considering the requirements of Transnet's Financial Risk Management Framework to hedge foreign currency exposures, can be read to mean that the locomotive supplier would be willing to carry the foreign currency risk by guaranteeing future locomotive prices at the noted BER rates. It is worth noting that these rates show an



appreciation in the Rand against the Yen and as such a lowering in the cost of the Yen.

5.30 The Memorandum, however, when putting forward a case for the depreciation in the Rand, references the Euro, the Pound Sterling and the US dollar. It does not reference the Yen. This does not accord with paragraph 24 (a) on the backward-looking foreign currency adjustment which indicates that the currency of interest is the Yen. The cost of R1.08 million per locomotive has been accepted owing to the lack of clarity on the appropriate currency exposure, being somewhat in line with that computed on the Dollar and materially lower than that computed on the Yen.

#### Discount

5.31 This benefit is marked F in Table 1 of the Memorandum. A discount of R2.47 million per locomotive seems to have been agreed to on 17 March 2014, the contract signing date. This represented (approximately) 5% of all costs. A different (and likely lower) agreement might have been reached on the discount had the figures been as per the recalculations. I have therefore allowed for a proportionately lower amount of R2.09 million (5,32% of R39,37 million) as a discount per locomotive.

#### **Contingencies**

5.32 This cost is marked G in Table 1of the Memorandum. I have not been provided with the costs of capital spares, variation orders and options and have therefore kept with the assumptions in modelling the Business Case by allowing for a 10% contingency on all costs (the base price, modification costs, backward- and forward-looking inflation, and foreign exchange costs). The result as per my calculations is a cost of R3.7 million per locomotive.

#### Conclusion

- 5.33 In concluding, having built up the price of a 20E dual-voltage electric locomotive provided by CSR as at April 2012 to March 2014, allowed for design modification costs as at March 2014 to meet Transnet's 19E dual-voltage electric locomotive requirements and mitigated for risks such foreign currency and inflation, a reasonable/acceptable price ETC for the transaction would be R4,1 billion. The excess of R739 million could not be justified on the bases explained above.
- 5.34 The submissions from CSR were in Dollars whereas the "100 Locomotives" Business Case and the Memorandum justifying the increase in ETC used a Rand/Yen basis. It is important to note that there are differences in economic conditions between Japan and the United States. The analysis on a Rand/Dollar basis produces a revised ETC of R4,478 billion. Assuming that the ETC R3.871 billion is correct, this amounts to an increase of R362 million that cannot be justified.

Disp

**DEPONENT** 

CERTIFY that the deponent has acknowledged that he knows and understands the contents of this affidavit which was signed and sworn to, before me, at ILLOVO on this the day of 26 November 2019, the Regulations contained in Government Notice No. R.1258 dated 21 July 1972 (as amended) and Government Notice No. R.1648 dated 19 August 1977 (as amended) having been complied with.

COMMISSIONER OF OATHS

AMOD & VAN SCHALK INC COMMISSIONER OF OATHS EX-OFFICIO PRACTISING ATTORNEY RSA

011 027 6187

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Johannesburg

# **Annexure "AOC 1"**



EXHIBIT 14

Transmet SOC Ltd Registration Number Carlton Centre 150 Commissioner Str. Johannesburg 2001 P.O. Box 72501 Parkview South Africa, 2122 T +27 11 308 2526 F +27 11 308 2312



#### **MEMORANDUM**

www.tcansnet.net

To: Transnet Board of Directors (BOD)

From: Brian Molefe, Group Chief Executive

SUBJECT: INCREASE IN ESTIMATED TOTAL COST (ETC) FOR THE ACQUISITION OF 100 EQUIVALENT CLASS 19E DUAL VOLTAGE ELECTRIC LOCOMOTIVES FOR THE EXPORT COAL LINE

#### **PURPOSE:**

- The purpose of this memo is:
  - a) for the 80D to note of the reasons for the increase in ETC.
  - b) to request that the BOD approves an Increase in the estimated total cost for the acquisition of 100 equivalent Class 19E Dual Voltage Electric Locomotives for the Export Coal Line from R3.871 billion to R4.840 billion.

#### **EXECUTIVE SUMMARY:**

In summary the increase in ETC of R 969 million can be attributed to the following:

Update of business case for economic impacts	R 495 m	51 %
Scope Change	R 347 m	36 %
Risk Mitigation - Forex, Escalation and Contingencies	R 373 m	39 %
Discount Negotiated	- R 247 m	- 25 %

- 3. 90 % of the ETC increase relates to changes in market conditions and the risk tolerance level of the company. Whilst 39 % of the ETC increase relates to strategic factors such as localisation and competition. These increases have been offset by competitive negotiations that realised a benefit of 25 %.
- 4. 36 % of the ETC Increase relates to the scope change however considering the discount negotiated the cost of the scope change is reasonable.
- 5. The need to incur these costs has been justified and the associated costs are reasonable in the circumstances.
- 6. The final price is comparable to the Mitsui proposal except for additional scope change items allowed for in the ETC.

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- 7. The NPV of the business case remains positive at R 7.1 billion.
- 8. Impacts on the 2014/15 corporate plan has been assessed and mitigated.
- Risk mitigation measures have been developed and are being implemented to ensure benefits are realised.
- This acquisition in conjunction with other locomotive acquisitions will significantly contribute towards the company achieving its original MDS targets of 350 mt by 2018/19.

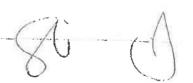
#### BACKGROUND:

- 11. The rationale for the investment in the 100 equivalent class 19E Dual Voltage Electric locomotives is to mitigate against the shortfall on MDS volumes anticipated due to the tractive capacity shortage as a result of the delivery on the 1064 locomotive programme taking longer than expected.
- 12. The 100 equivalent Class 19 E Dual Voltage locomotives are destined for the Export Coal Line. This will result in 125 existing Coal Line locomotives being cascaded and deployed to the General Freight Business until such time that the 1064 locomotive contract starts to produce locomotives (August 2015) where after the 125 cascaded locomotives will be run out.
- 13. The acquisition of 100 equivalent Class 19E Dual Voltage Locomotives was approved by the Board of Directors on 24 January 2014 at a cost of R 3.871 billion cost of future escalation costs.
- 14. A contract to acquire 100 electric locomotives was concluded with CSR E Loco Supply (Pty) Ltd on 17 March 2014 at a cost of R 4.4 billion <u>Including</u> the cost of future escalations and foreign exchange hedging costs, thus resulting in an increase in ETC of R 969 million.
- The contract concluded with CSR E Loco Supply (Pty) Ltd includes a supplier development requirement of 60 % as per DTI codes for local content.
- The locomotives will be delivered at a rate of between 12 to 20 locomotives per month. 40 Locomotives will be manufactured in China with the remainder being manufactured locally by TE.
- 17. The 1<sup>st</sup> locomotive will be delivered in February 2015 with the 100<sup>th</sup> locomotive being delivered in September 2015. This represents an 18 month period due to the TE and localisation requirements which we are currently trying to shorten which will enable MDS volumes to be achieved.
- PFMA approval for this transaction is being sought as it is above the R 3.9 billion Section 54 threshold, due to the increase in ETC.
- DPE has indicated that processes are underway to facilitate such approval. The contract entered into with CSR E Loco Supply (Pty) Ltd is subject to PFMA approval being obtained.

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#### DISCUSSION:

- 20. In order to analyse the increase in ETC two factors need to be considered:
  - Updated economic data from business case date to current (backward looking);
  - Future financial risks emanating from the transaction and costs associated to mitigate these risks (forward looking).
- 21. This document has been prepared to explain the increase in ETC on this basis, concentrating on why these costs needed to be incurred and were these costs reasonable in the circumstances.
- 22. The Increase in ETC of R 969 million is due to the following reasons (refer Table 1 below):
  - a. Forex movements from the approved business case to award date (backward looking) (Item A of Table 1)
  - b. Inflationary related escalations from the approved business case to award date (backward looking) (Item 8 of Table 1)
  - c. Variations to design for a higher specification for CSR locomotive (strategic) and due to the localisation requirement of 60 %, Transnet Engineering (TE) will assemble the locomotives and enable it to become an OEM (strategic) (Item C of Table 1)
  - d. The cost of fixing future escalations over the life of the contract (forward looking risk mitigation) (Item D of table 1)
  - e. The cost of fixing forex exposure over the life of the contract (forward looking risk mitigation) (Item E of Table 1)
  - f. Contingencies related to variation orders, options (such as electronically controlled pneumatic braking and wire distributed power etc.) and capital spares (Item G of table 1)
  - g. As part of the negotiation process a further discount of R 2.4 million per locomotive was negotiated on the basis of ensuring that the price is market related.



#### Table 1

		R.(m)	ž,
Price per locomotive as per Board submission 21 January 2014 excluding Hedging and Escalation costs		34.34	
Impact of the exchange rate to contract date (backward booking)	Α	3.69	10.7%
Impact of labour inflation, material inflation, CPI up to contract date (backward looking)	B	1.25	3.7%
Additional cost for variations for higher locomotive specification and additional duties	С	3.47	10.1%
Cost to fix forward boking escalation (ferward boking)	D	2.63	7.6%
Cost to fix forward forex hedging (forward locking)	E	1.08	3.1%
Discount negotiated	F	-2,47	-7.2%
Final Contracted Price per Locomotive		44.00	
Final Contracted Price for 100 Locomotives		4100,00	
10 % Contingency for capital spares, variation orders, options etc.	Ç.	440.00	
Proposed ETC for 100 tocomotives including contingencies	F'.2	4840.00	
ETC requested per 21 January 2014 Board submission		3871.00	
Therefore increase in ETC requested		969.00	

## BACKWARD LOOKING ECONOMIC AND OTHER FACTORS THAT HAVE IMPACTED THE PRICE:

- The submission prepared in January 2014 for BOD and the Transnet Board meetings were based on economic forecasts obtained in May 2013.
- 24. 10 months have elapsed since the initial calculations resulting in a number of parameters having materially changed between the business case preparations and the contract negotiation. These are summarised in the table below:

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Table 2

	Board Submission January 2014	Negotiation/ Contracting Stage	½ movem ent
Rand to the Yen	0.09823	0.10878	10.74%
Local CPI	100%	105.10%	5.10% **
Local Hot rolled Steel plates Index	100%	110.80%	10.80% **
Local PPI	100%	106,40%	6.40% **
Chinese Equivalent CPI index	100%	102.50%	2.50% **
US Equivalent CPI Index	100%	101.33%	1.33% **
Euro Equivalent CPI index	100%	102.08%	2.08% **
Japanese Equivalent CPI index	100%	101.34%	1.34% **
** Index movements calculated from May 13 to Mar 14	(10 Months)		

#### Item A of Table 1

a. Foreign exchange rates: The rand has depreciated by 10,74 % against the Japanese Yen. This has impacted the expected price of the locomotive as per the business case and ultimately the Estimated Total Cost (ETC) as approved by the Board by approximately 10,74 %.

Consequently the additional 10.7 % per A in Table 1 above is reasonable.

#### Item B of Table 1

- b. Labour cost increase: During the May 2013 to March 2014 period the cost of labour increased in South Africa by higher than CPI, as evidenced by the higher than CPI wage settlement that Transnet entered into at 8.5 % for a two year period. Due to the localisation requirement of 60 %, Transnet Engineering (TE) will assemble the locomotives and consequently local labour will be utilised for the assembly.
- c. Material cost increase: A significant component of the locomotive is steel which is impacted by the steel commodity price of which the trading currency is in US Dollars. The local hot rolled steel plate's Index increased by 10.8 % over the period.
- d. Inflation, Local Producer Price Index Increase on average by 6.4 % over the period affecting the locally sourced scope of the project. Foreign equivalent indices increased on average by about 1.3 % to 2.5 % over the same period. This together with the foreign exchange deterioration indicated above resulted in the Import component of the project increasing.
- e. Statistics SA report that the headline CPI annual inflation rate in April 2014 was 6.1 %, further explained in the Business Day article "CPI breaches Reserve Bank target" dated 22 May 2014.

Increase in ETC for 100 Electric Locomotives

- f. Applying the relevant proportion of each of the labour, material and other input costs which make up the basket of items required for the manufacture of the locomotives over the 10 month period, would result in the net 3.7 % increase in the locomotive price.
- g. Consequently the net impact of 3.7 % on the locomotive price due to the change in economic conditions as per item B in Table 1 above is reasonable.

# FORWARD LOOKING ECONOMIC FACTORS AND MEASURES TO MITIGATE FINANCIAL RISK THAT HAVE IMPACTED THE PRICE:

#### Forex

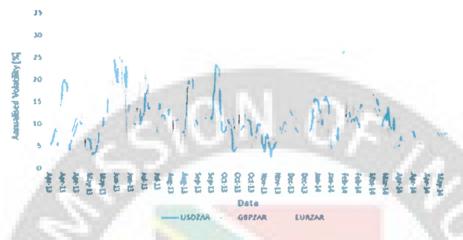
- 25. The Financial Risk Management Framework (FRMF) approved by the Board of Directors (BOD) does not permit Transnet accepting forex exposure on committed transactions.
- 26. The South African Reserve Bank (SARB) also does not permit SOC's to accept open exposure on foreign currency contracts.
- 27. In addition credit rating agencies and bond holders both prefer conservative risk appetites and consequently would also support fixing our forex exposure.
- 28. Consequently the cost of foreign currency hedging to mitigate and protect the Company against foreign currency devaluation is an inherent cost of the transaction.
- 29. Costs related to forex are influenced by market forces which are not within managements control and therefore were not included in the ETC for the business case submission. The impacts of these forex related costs would only be known once the contract was negotiated and finalised as they are based on market conditions and sentiment at the time.
- The cost of fixing the forex exposure is impacted by currency volatility and time or duration of the exposure.
- 31. The recent volatility in the foreign exchange rate of on average up to between 15 & 20 % directly impacts the transaction cost as can be seen on Table 3 below:



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#### Table 3

Rend 5 day ennualised Standard Deviation over the past year



- 32. In addition the ZAR currency is one of the most volatile and fragile currencies in the world. This view is substantiated by the ZAR currency being termed as one of the "fragile five" by economists and financial markets (refer diagram below).
- 33. Business Day reported on 18 March 2014 that the Rand is in for a "Rocky ride" for the rest of the year (Refer article "Rocky Ride forecast for 'still to expensive' Rand)
- 34. The generally held consensus view is that due to the twin deficit of the RSA budget and the current account, and the weak economic outlook supports Rand devaluation in the medium to long term.

#### Table 4



35. A historical regression analysis conducted by Regiments Capital indicates that the ZAR currency is on a trend of devaluation as Indicated in Table 4 above.

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Increase In ETC for 100 Electric Locomolives

Table 5



- 36. In addition Regiments Capital conducted various currency trend scenarios as indicated in Table 5 above. All scenarios indicate a general devaluation in ZAR over the medium term.
- 37. The imminent risk of the Ukraine crisis and its impact on emerging markets also had an impact on the decision to fix the exchange rate exposure.
- 38. In addition the delivery schedule for the locomotives, of 18 months, also impacts the cost of hedging as the length of the exposure impacts the costs. The longer the period the higher the premium paid due to unknown outcomes in the future.
- 39. Alternative methods, such as call and put option structures, to reduce cost and mitigate against forex exposure risk were explored in conjunction with Regiments Capital Including methods in which Transnet would participate in any possible upside in Rand movements. These methods were evaluated from a cost benefit perspective and consequently the FEC route proved most beneficial and practical to mitigate forex risk.
- In addition the accounting treatment of options was not optimal as per opinion obtained from KPMG as it would result in the creation of an embedded derivative.
- 41. The cost to hedge this exposure was obtained from banks by the suppliers. This was then vetted by Transnet Treasury and Regiments Capital for reasonability. They both found the rates and cost to be acceptable.
- 42. Consequently the 3.1 % per E in Table 1 above is reasonable.

84

## Locomotive Specification and other Factors including Localisation

- 43. As a result of the decision taken to award the 360 electric locomotive contract and the 240 electric locomotive contract as part of the 1064 tender process, to CSR and Bombardier Transportation respectively, made these two OEM's the biggest suppliers of electric locomotives to Transnet.
- 44. Strategically this supported the decision to create a competitor to Mitsui for the build of electric locomotives for the Coal Line to positively impact the total life cycle cost of locomotives deployed on the Coal line (as motivated in the original business case).
- 45. This required certain additional modifications and variations to be made to the existing 20 E locomotive specification to achieve the heavy haul requirements for the Coal Line.
- 46. A strategic decision was taken at a Transnet level that TE should be enabled to eventually become an OEM of locomotives. This procurement process was used as a catalyst to facilitate this strategy.
- 47. This procurement event was subject to the 90/10 PPPFA adjudication requirements which would result in an approximate premium of 10 % being acceptable to National Treasury for localisation and other strategic imperatives including competition.
- 48. The discount negotiated offsets a portion of the cost of the scope change.
- Consequently the additional 10 % per C in table 1 above is justified and is reasonable.
- 50. The contracted locomotive price is based on the above factors as well as the general outcome of the negotiation process.

#### **Escalation of Input Costs**

- Given the size, magnitude and risk tolerance of the Company due to MDS execution, cash flow certainty is of paramount importance when trying to plan over a long term horizon.
- 52. This ensures that the company is able to manage its key financial metrics such as gearing, cash interest cover and the A/B ratio (required by rating agencies).
- 53. In addition credit rating agencies and bond holders both prefer conservative risk appetites and consequently would also support fixing our escalation exposure.
- 54. Careful consideration had to be given to accepting other risks such as labour, steel etc. and being exposed to market conditions.
- 55. Consequently it was decided to fix escalation for these input costs and gain certainty of cash flows.

Increase in ETC for 100 Electric Locomotives

- 56. Costs associated with fixing these input costs are largely driven by market sentiment at the time of contracting such as the Items mentioned below.
- 57. Labour unrest and strikes in the platinum sector has put significant pressure on forward looking labour costs. As indicated earlier Transnet is subject to an 8.5 % wage adjustment for the 2014/15 financial year.
- 58. The contractor has also built a risk premium into their pricing for forward looking inflation, to cater for the unpredictable nature of the labour environment within South Africa and the risk associated with TE carrying out this additional new scope of work.
- 59. Statistics SA report that the headline CPI annual inflation rate in April 2014 was 6.1 %, further explained in the Business Day article "CPI Breaches Reserve bank target" dated 22 May 2014.
- 60. The SARB and National Treasury 2014 Budget Review forecasts CPI at 6.2 %, 5.9 % and 5.5 % for the years 2014, 2015 and 2016 respectively.
- 61. The MPC also is concerned about upward inflationary pressure on the economy as they have increased the Repo rate by 100 basis points recently in response to managing the upward inflationary pressures.
- 62. The high level of local content (60%) makes local indices more applicable to assess the cost of escalations going forward.
- 63. Applying the relevant proportion of each of the labour, material and other input costs which make up the basket of items required for the manufacture of the locomotives, would result in the net 7.7 % increase.
- 64. Hence a CPI of 6 % (which excludes a premium for risk) escalated for 18 months results in a 9 % increase, thus the 7.7 % per D in Table 1 above is reasonable.
- 65. Escalations of input costs have been verified by Transnet by using publicly available data and by Regiments Capital using their intellectual property methodology and techniques.

#### Contingencies

The contracted price of R 4.4 billion excludes the cost of any requirements for capital spares, variation orders and options (such as electronically controlled pneumatic braking and wire distributed power etc.) and as such an additional 10 % (R 440 million) has been added into the request for additional ETC for this (refer item G of Table 1 above).

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#### FINANCIAL IMPLICATIONS:

- The business need and rationale remains as indicated in the original business case submission approved by the Board.
- 67. The financial model for the Business Case has been updated for the following based on the signed contracts:
  - a. Final pricing
  - b. Revised cash flow profile for the capital investments
- 68. The updated NPV result is a positive NPV of R7 099 million at the new hurdle rate of 15.2 % and R10 702 million at the TFR WACC of 12.6 %. The NPV at the original hurdle rate of 18,56% was R4 201 million.

#### BUDGET IMPLICATIONS:

- 69. The investment is included in the 2014/15 seven year capital investment plan.
- 70. The contracted delivery schedule and cash flows have changed as compared to the investment included in the 2014/15 seven year capital investment plan.
- 71. In order to ensure that Transnet's approved key affordability limits (gearing and cash interest cover) are not breached, a capital prioritisation process will be undertaken, such that other investments which do not impact MDS volume targets would be deferred.
- 72. The difference between the January 2014 business case and the cash flows agreed with the contractor is illustrated in the Table 4 below:

#### Table 4

	Rand Millon					
-0.3	ETC	2013/14	2014/15	2015/16	2016/17	
Business Case	3 871	343	1 737	1 439	352	
Contracted	4 840	1320	1888	1 486	145	
Difference	-969	-977	-151	-47	207	

- 73. In order to secure quicker delivery of the locomotives to address the MDS volumes at risk, a larger advance payment (R 1.3 billion) had to be made to the contractor in the 2013/14 financial year. As confirmed by a letter received from the supplier this was required by the supplier in order to cover costs to ensure quicker delivery. The rationale as explained by the supplier was confirmed reasonable by Transnet's external auditors and was capitalised accordingly in the financial statements at 31 March 2014.
- 74. The Impact of the locomotive acquisition on the 2014/15 corporate plan as well as the Impact of the prioritisation process; updating for the change in volumes, revenue, EBITDA and capital due to the combination of the 1½0 electric

Increase In ETC for 100 Electric Locomotives



locomotives, 1064 locomotives and 60 Diesel locomotives contracts is reflected in the graph below:

Original CP How Leco Capex + Rayleed Volumes with New Loco Schedule Revised MDS



- 75. As can be seen from the graphs the initial two years of the 2014/15 Corporate Plan has been negatively impacted by the locomotive acquisitions.
- 76. However after the planned EBITDA and optimisation initiatives that have been factored into the model the ratios are within acceptable levels.
- 77. The Initiatives Identified to meet the Corporate Plan targets are detailed in Annexure A.

### RISK MANAGEMENT:

- 78. In order to manage risks associated with this transaction a risk management framework is in the process of being developed.
- 79. A Locomotive Steering Committee has been set up to manage the operational issues associated with the locomotive acquisition and will address the following risks:
  - Locomotive delivery
  - The wagon build program
  - · Infrastructure requirements
  - Operational readiness
  - Commercial and Volumes

Increase in ETC for 100 Electric Locomotives

84-1

- 80. A socio economic monitor will be appointed to ensure socio economic benefits will he realised.
- In order to mitigate against late delivery risk, a penalty regime capped at 10 % of the contract price has been agreed to with all bidders.
- Escalation risk has been mitigated by fixing the price of the locomotives. 82.
- Forex risk has been mitigated by hedging the price of the locomotives by using the suppliers balance sheets.
- All advance payments are secured by an on demand advance payment guarantee issued by a bank with a minimum long term credit rating of an A- Fitch rating or equivalent.
- In order to mitigate against default of Supplier Development (SD) commitments, and SD penalty clause has been included in the supply agreements. An SD bond has also been obtained to cover risk against default.
- CSR have agreed to provide a 24 month warranty on the locomotive as well as a 6 year warranty on the traction motor and a 12 month warranty on spares.
- 87. A liability cap of 15 % of the contract price is included in the supply agreement thereby limiting Transnet's exposure in the unlikely event of breach of contract by Transnet.

#### SOURCE OF INFORMATION AND REFERENCES:

- Data quoted in the memo above has been sourced from:
  - Statistics South Africa release P0141
  - Business Day 22 May 2014 "CPI Breaches Reserve Bank target"
  - Business Day 18 March 2014 "Rocky Ride forecast for still too expensive Rand
  - Reserve Bank and National Treasury 2014 Budget Review
  - Regiments Capital (transaction advisory services)
  - KMPG (accounting opinions)

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 PWC (locomotive localisation opportunities for TE and South African industry)



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#### **RECOMMENDATION:**

#### 89. It is recommended that:

- a) the BOD take note that the main reasons for the Increase In ETC is due to the exclusion of the following costs from the 24 January 2014 submission:
  - The cost of hedging for foreign exchange movements;

li. The cost for future inflationary escalations;

iii. The cost of additional scope for Transnet Engineering (TE);

- lv. The cost of changes in economic conditions (forex and inflation) between approval of the business case and award of the contract
- b) the BOD approves an Increase in the estimated total cost (ETC) for the acquisition of 100 equivalent Class 19E Dual Voltage Electric Locomotives for the Export Coal Line from R3.871 billion to R4.840 billion.

Recommended by:

Anoj Singh

Group Chief Financial Officer

Date: 2265 14

Recommended by:

Siyaboriga Gama

TER Chief Executive

Date: 2014/2020

Recommended by:

Brian Molefe

Group Chief Executive Officer

Date: 23 . 5. 14.