

**November 11, 2017 – Statement of David Robert Fine**

**ANNEXURE A: REGIMENTS COMPANY PROFILE 2012**

# COMPANY PROFILE

**REGIMENTS CAPITAL**



REGIMENTS CAPITAL™

**July 2012**

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# 1 ABOUT REGIMENTS CAPITAL

Regiments Capital is an integrated investment banking and advisory firm focused on providing services to all sectors of government (national, provincial and municipal), state-owned enterprises and corporates. Regiments Capital consists of four core businesses:

- Financial Advisory
- Capital Markets
- Real Estate
- Proprietary Investments

As a leading financial advisor to public and private businesses across South Africa, Regiments Capital draws on the exceptional financial market skills of its members to provide unrivalled and unique solutions to its clients.

Since its inception in 2004, Regiments Capital's Financial Advisory business has successfully delivered on wide ranging mandates to a number of clients, including ACSA, City of Johannesburg, City of Tshwane, Transnet, SAA, City of Ekurhuleni and DBSA, amongst others. Projects typically include treasury restructuring, large scale capital raising, structured solutions for debt and/or equity, risk management solutions, etc.

The Group's Capital Markets business manages funds on behalf of its valued clients (such as the management of the sinking fund on behalf of the City of Johannesburg) and our Real Estate business generates significant returns through large property development opportunities. The most notable of these developments, the Kgoro Sandton Gateway (a large mixed-use development on the platform above the Gautrain station in Sandton), is currently in progress.

In addition to the Financial Advisory, Fund Management and Real Estate businesses, Regiments Capital's Proprietary Investments unit led a broad-based BEE consortium in the acquisition of 12.2% of Capitec Bank Holdings Limited. We previously held a stake in Nedbank through the Eyethu Corporate Scheme and have recently structured an investment into MTN through the MTN Zakhlele BEE scheme. Regiments Capital has also made a number of strategic investments in the private sector.

Regiments Capital's team comprises of leading corporate finance and economic professionals with extensive experience in transaction advisory, financial product engineering, financial modeling, large scale capital raising, fund management, structuring and property development.

The various business areas of Regiments Capital will be discussed briefly in the following sections.



## 1.1 ADVISORY

Since its inception in 2004, Regiments Capital's Financial Advisory business has successfully delivered on wide ranging mandates to a number of clients, including ACSA, Transnet, SAA, City of Johannesburg, City of Tshwane, City of Ekurhuleni, DBSA, amongst others. Projects typically include treasury restructuring, large scale capital raising, structured solutions for debt and/or equity, risk management solutions, etc.

Our financial advisory services cover the following areas:

- **Capital Markets Advisory:** Regiments Capital possesses a breadth and depth of expertise with respect to the debt capital markets encompassing debt raising, structuring, arranging, broking, trading, and investment. Regiments Capital has focused its debt origination services primarily on the public sector. Some of our accomplishments in capital market advisory includes the following:
  - Regiments Capital has successfully raised R1.5 billion in the form of short term funding and R1 billion in the form of long term funding for the City of Johannesburg;
  - Regiments Capital has played an important role in the development and upgrading of airport facilities by raising commercial funding of R1.75 billion and R4.2 billion DFI funding for the Airport Company of South Africa;
  - Regiments Capital has concluded (together with JPMorgan Chase and Calyon Bank Limited) a R5 billion Euro bond issue for Eskom Holdings Limited. This issue was 5 times oversubscribed.
  - Advising Sovereign Foods on a R700 million capital raising programme.
- **Treasury and risk management solutions:** Our clients also benefit from the specialized financial risk management solutions we provide and an in-depth knowledge of treasury functions we command. Regiments Capital designs and implements strategies for clients' treasury divisions to help them address the challenges of a rapidly transforming environment. Our close relationship with leading local and international financial institutions help clients to effectively underwrite the mix of products and provide world-class execution capabilities. The corporate solutions we provide include financial risk management consulting, cash and asset liability management. Some of the treasury and financial risk management projects we have completed thus far include:
  - Regiments Capital analysed and optimized the financial risk management framework and structured the treasury functions for Transnet;
  - Regiments Capital established a financial risk management framework and assisted in the establishment of the treasury functions for Airport Company of South Africa; and
  - Regiments Capital has successfully reviewed the treasury functions of the City of Tshwane and provided recommendations.

- **Structured financial solutions:** The Regiments Capital team's extensive experience in financial markets trading and structuring not only ensures that clients receive the very best advice and structuring services to enhance existing business operations, but also lays the path for future growth with the more efficient use of capital and access to advanced funding mechanisms. These structuring capabilities provide Regiments Capital an opportunity to leverage its capabilities to offer unique debt- and equity related products. Some of the structured solutions we provided to our clients include:
  - Optimization of the balance sheet of the City of Johannesburg;
  - Structured property solution for Ekurhuleni Metropolitan Municipality; and
  - Interest rate hedge strategy for ACSA totalling in excess of R6 billion.
  
- **Financial, Econometric and Escalation modelling:** As part of our commitment to provide the best and one-stop solutions to our esteemed clients, Regiments Capital's Economic Research Unit caters for the need of our external clients and internal clients including Regiments' Securities, Advisory, Investments and Fund Management businesses. The stock broking, private equity, advisory, securities, investments and fund management businesses benefit immensely from the research outputs of the Economic Research Unit. By maintaining econometric and quantitative approaches to its solutions, it sufficiently combines qualitative and quantitative techniques and produce deliverables that are as scientific as possible. Drawing on the skills of top class econometricians and a consortium of data providers and academics, Regiments Capital integrates a range of intricate modeling methods to present results and help clients forecast most likely outcomes and conduct policy simulations where required. Some of our major products include socioeconomic impact studies on policy interventions of the national, provincial and local governments. Along the various macro- and micro-econometric modeling, we also have a qualified and experienced team to conduct robust financial and cost escalation modeling for our clients. The cost escalation models we built at Regiments Capital integrate clients' financial models with specific econometric based cost driver models.
  
- **Strategy Advisory:** Regiments capital, through its subsidiary 'Burlington Consultants', has been able to assist clients with developing business plans and feasibility studies for market entries and new technology. Burlington is a leading provider of strategy development services in South Africa. Burlington is the market leader in areas of commercial due diligence and investment support, and is one of the few local players that can offer top tier strategy consulting services. Our approach is highly analytical to give fact-based solutions (Burlington sweats the detail).

Burlington has worked on over 150 engagements with more than 60 organisations ranging from major listed corporates to mid-sized private companies, private equity and institutional investors, and government and civic organisations.

Since its inception in Johannesburg, Burlington's unique offering has been well received by a broad spectrum of clients, resulting in sustained growth of our local team. The following factors have been critical to our success:

- A single-minded focus on delivering exceptional results for our clients
- An outstanding track record of past projects and client relationships
- The delivery of an international-standard, top-tier consulting product at rates that take into consideration the realities of local economics
- Local ownership and management who have an intimate understanding of the African business environment
- Senior staff with considerable local and international management consulting experience combined with non-consulting, real-world exposure to a range of industries
- An exceptional team of consultants nurtured through a structured development program
- AAA rated Black Economic Empowerment credentials

Burlington offers a full range of management consultancy and advisory services including strategy formulation, operational improvement and organisational development, aimed at assisting our clients in achieving full potential in their businesses.

In addition, our transaction services support investors assessing opportunities through commercial due diligence and assist vendors or entrepreneurs seeking funding by developing investment memoranda and business plans.

## **1.2 FUND MANAGEMENT**

Our fund management mainly provides innovative asset management solutions using a liability-plus approach. This is basically a risk management advisory service targeted at annuity funds.

The principal features of our asset management solutions include the following:

- Closely tracking our clients liabilities,
- Liabilities plus approach,
- Sophisticated infrastructure to support liability analysis and the impact of investment decisions,
- Dynamically manage the assets to match the liability, and
- Strong oversight and risk management.

Regiments Capital uses a dynamic asset-liability management approach in managing annuity based funds. Asset-liability management is the practice of managing risks arising from the mismatch between assets and liabilities. The dynamism introduced to our approach is due to the active management of assets that would respond to the possible changes in underlying liabilities.

Some of the areas where the Liability Plus approach has been successfully used include:

- Debt Redemption: Assist clients in managing and repaying large debt commitments on time.
- Rehabilitation Fund: Ensuring timely provision for the financial redemption of rehabilitation liabilities through identifying, managing and hedging the financial drivers impacting on the underlying liability.
- Post-Retirement Medical Liability: Post-retirement health benefits that are paid out after retirement. These unfunded medical liabilities are generally driven by medical inflation which has historically been significantly higher than general inflation.
- Retirement Annuity/ Pension Fund: Savings plan for retirement that is put in place to allow individuals to enjoy the same life style during their retirement as they do during their working life.

Regiments Capital has earned a reputation for designing and managing a successful debt redemption fund that has proven to outperform the benchmark over the years. Currently, Regiments Capital manages a debt redemption fund for the City of Johannesburg. The fund's outstanding performance over the years can be seen from the following figure.

### **1.3 STOCK BROKING (FIXED INCOME AND MONEY MARKET)**

In 2005, Regiments Capital acquired a 51% controlling interest in FFO Securities, a JSE registered stock-broking firm specializing in fixed income and money market transactions. In 2008, Regiments acquired the balance of equity in the firm, making it a 100% owned subsidiary, and proceeded to re-name the company "Regiments Securities". The company was recently ranked third by volume of fixed income transactions traded.

### **1.4 REAL ESTATE**

Our Real Estate business generates significant returns through large property development opportunities. The most notable of these developments are Kgoro Sandton Gateway – a large mixed-use development on the platform above the Gautrain station in Sandton, and Ferguson Office Development in Illovo.

Developing and managing property funds also falls under the purview of Regiments Real Estate. It currently manages the Gauteng Fund, COJ Fund, and Housing Fund.

## **1.5 PORTFOLIO AND STRATEGIC INVESTMENTS: OWN BALANCE SHEET INVESTMENTS**

In addition to the Financial Advisory, Fund Management and Real Estate businesses, Regiments Capital's Proprietary Investments unit led a broad-based BEE consortium in the acquisition of 12.2% of Capitec Bank Holdings Limited. We previously held a stake in Nedbank through the Eyethu Corporate Scheme and have recently structured an investment into MTN through the MTN Zakhlele BEE scheme. Regiments Capital has also made a number of other strategic investments in the private sector.

## 2 OUR CREDENTIALS

Regiments Capital operates primarily in the public sector space and caters for the complex needs of local, regional and provincial governments, state owned enterprises, corporations, institutions and entities responsible for infrastructure development.

### 2.1 FUNDING PLAN PREPARATION AND FUND RAISING CREDENTIALS

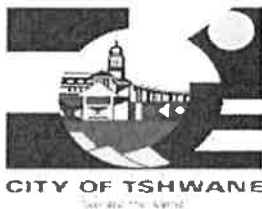
#### City of Johannesburg – Development of Funding Strategy for CoJ’s R11bn Medium Term Budget (2009 to Present)



In 2009, Regiments Capital was appointed as funding facilitator for the development of a funding strategy for CoJ’s R11 billion medium term budget.

Following approval of the funding strategy, Regiments Capital was appointed to assist the CoJ in implementing the recommendations of the funding plan. Over R2.3 billion of short and long-term debt was raised for their capital expenditure programme.

#### City of Tshwane – Long term sustainability financial plan July 2009



In 2009 COT appointed Regiments Capital to assess COT’s cash flow and liquidity, analyze revenue sources, identify critical success factors for COT and develop solutions to optimize COT’s balance sheet. Regiments capital raised 700 million for COT.

#### Eskom – Capital raising and issuance of a 500 million Euro bond (October 2005 – February 2006)



In October 2005, Eskom appointed Regiments Capital as joint lead managers together with Calyon and J.P. Morgan for the capital raising and issuance of a 500 million Euro bond.

#### Airports Company South Africa – Capital Raising Program (2006-2007)



In 2006, Regiments Capital was appointed by Airports Company South Africa (ACSA) as advisors in their capital restructuring program. A review on SAA's 5 year R21 billion capex and opex programs was then carried out. Appropriate financially modelled balance sheet trigger and target ratio's based on comparative airport analysis were developed together with a 5 year funding plan including spread of financial instruments.

Regiments designed, ran and managed of RFP processes for appointment of a ratings adviser and debt lead managers for SAA and assisted with the registration of R12 billion Domestic Medium Term Note (DMTN) borrowing program (including obtaining shareholder (NDOT) and National Treasury approvals); advised on the setup of a bond redemption fund; and successfully managed the inaugural ACSA R2 billion 12 year bond issues in March 2007.

#### ACSA – Re-appointment of Regiments Capital in March 2008



Review and update ACSA's Capital Expenditure Programme; requiring the preparation of an optimal funding plan through the modelling of all expected cash flows. Our mandate included assisting in the structure, pricing, placement and redemption planning of debt raised in fulfilment of ACSA's capital expenditure plan. We then reviewed ACSA's current financial risk management framework and executed the funding plan.

Our advisory services made recommendations for ACSA's revised financial risk management framework and placed key human resources at ACSA for the establishment of an optimal treasury, financial risk management and cash management solution. Regiments Capital then updated and reviewed ACSA's 5 year R22 billion funding plan and advised on the issuance of two of its bonds (AIR02 and AIRL01) collectively valued at R1.151 Billion.

Regiments assisted ACSA on the drafting, adjudication and appointment of ACSA's panel of advisors on the DMTN. In order to assist ACSA with the achievement of the proposed funding plan, Regiments Capital negotiated R9bn worth of committed general banking facilities with various local financial institutions having conducted a hybrid feasibility study; originating, structuring and advising on the pricing and quantum for a R1.75bn commercial banking term loan as well as R5bn term loan from various Development Finance Institutions including ECA Funding.

**Sovereign Foods – Analysis of the CAPEX plan and development of the funding plan  
(February 2008 – April 2008)**



In February 2008, Sovereign Foods appointed Regiments Capital to perform an analysis of the CAPEX plan and develop a funding plan. Sovereign Foods then engaged Regiments Capital to become the capital raising agent pursuant of the funding plan.

## 2.2 TREASURY REVIEW AND RISK MANAGEMENT CREDENTIALS

**Treasury review, analysis of asset portfolio, and balance sheet restructuring  
(September 2006 – February 2007)**



Regiments Capital performed a treasury review in 2007 involving reviewing the CoJ treasury policies, procedures and processes in line with the MFMA and National Treasury regulations.

Regiments Capital analyzed the asset portfolio for the CoJ and realized R650m from financial asset sales (Note: These financial assets were previously underperforming).

**Interest rate risk management: Facilitator of the execution of interest rate swap**

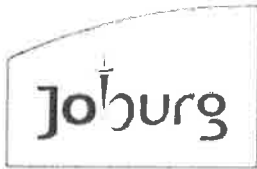


Regiments Capital was appointed to assist the CoJ to execute interest rate swap transaction in March this year.

The CoJ had a long term loan of R 1 billion that carried a flexible interest rate linked to 3-month JIBAR. The swap allowed the CoJ to fix the interest rate instead of paying a variable rate that they used to pay in the past.



#### Liquidity management: Bond redemption fund (Department of Treasury)



a world class African city

Regiments Capital designed a unique asset management solution to provide efficient redemption of all listed debt of CoJ in compliance with the terms of the MFMA. Management of a R5.7 billion (CoJ01, CoJ02, CoJ03, CoJ04, CoJ05 and new retail bond) sinking fund on behalf of CoJ, in line with the unique asset management solution. Regiments reports on the fund's performance on a quarterly basis to the CoJ senior treasury management team and semi-annually to the Asset and Liability Committee (ALCO).

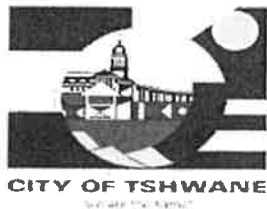
#### Funding Facilitator (June 2009): Financial risk management



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In 2009, Regiments Capital was appointed as funding facilitator in order to identify, measure, manage and report on financial risks within the approved cash management framework. Regiments Capital's key objective was to ensure that the cash resources of the City were utilised optimally and assist in the adequate planning of funding or investment decisions.

#### City of Tshwane – Treasury review (July 2009)



In 2009, the COT appointed Regiments Capital to assist COT treasury in reviewing and advising on a treasury model for the treasury. The COT treasury is primarily a group risk management and execution service provider, which in the course of its duties services a number of divisions of COT. Regiments Capital is currently making recommendations based on the review. Key risks are being identified, quantified and action plans recommended.

#### Denel: Identify, assess and measure exposure to foreign exchange risk



Denel appointed Regiments Capital to identify, assess and measure the company's exposure to foreign exchange risk since a substantial portion of Denel's costs are incurred in Euro or US dollars. A financial analysis of Denel's capital structure was performed together with a Rand/Euro market evaluation. Regiments developed a comprehensive strategy to protect Denel against foreign exchange risk advising on the percentage of exposure to hedge, what instruments to use and how often the strategy needed to be measured and reported.

#### Financial risk management framework and treasury policy and strategy



Regiments Capital was mandated by the largest state owned enterprise ("SOE") in South Africa to develop a financial risk management framework ("FRMF") that enabled the group to successfully embark on a significant corporate restructuring exercise. The Regiments Capital approach, unlike those of other advisory firms, was a solution driven approach and custom designed to meet the critical needs of the client.

The SOE therefore played an integral role in developing the design of the solution and, most importantly, Regiments Capital made available its diverse exposure to various first world treasury systems for the benefit of the SOE.

The mandate also entailed designing a template for the restructuring of the SOE's entire group treasury division to a world-class treasury in order to tackle the challenges of a rapidly transforming environment. Regiments Capital was actively involved in the implementation of the solution.

#### Development of an Enterprise Risk Management Framework (ERMF)

(July 2005 – January 2006)



Regiments Capital was mandated by SAA to develop an enterprise wide risk management framework ("ERMF") which mirrored the FRMF to ensure optimal decision making processes across the organisation. The scope of the project ensured that the ERMF process was aligned with the FRMF and the overall strategic objectives as defined in the overall restructuring program of the group.

**SASRIA – Development of a business plan for their expansion into Africa  
(February 2010 – May 2010)**



In February 2010, Sasria appointed Regiments Capital to develop a business plan for their intended expansion of their operations into Africa. It involved market and risk analysis, financial modelling and other aspects of a business plan for each country Sasria intended entering. Regiments also assisted with the submission of the business plan to National Treasury for approval according to section 54 (2) of the PFMA.

## 2.3 MODELING AND OTHER CREDENTIALS

**Nedbank - Assisted with the development of an econometric credit risk index model  
(September 2008 – December 2008)**

**NEDBANK**

Nedbank appointed Regiments Capital to assist with the development of an econometric credit risk model. The scope of the work consisted of:

- Single Factor Analysis,
- Multi-Factor Analysis,
- Default prediction,
- Development of the portfolio indices,
- Development of the master index,
- A Nedbank-specific forecast of asset-class and aggregated default rates,
- Regression analysis related to the various portfolios, and
- Back testing of the estimated variables.

**Development Bank of South Africa (DBSA) – Performed an independent valuation of the assets, used as collateral against its credit exposures (March 2009 – August 2009)**



Regiments Capital was appointed by DBSA to perform an independent valuation of all the collateral held by the bank. The scope of the work included:

- Providing an updated, complete and accurate collateral register of all the collateral currently held by DBSA. The register included collaterals from both performing and non-performing loans.
- Establishing a robust and logical approach to value the collateral
- Valuing the assets held as collateral.

**Development Bank of Africa – Assisted with the implementation of a Project Finance Risk Rating Tool (October 2008 – February 2009)**



Regiments Capital assisted the Development Bank of South Africa (“DBSA”) with the implementation of a Project Finance Risk Rating Tool.

The objective of the planned project was to build a rating model for the project finance portfolios, using a cash flow projection and simulation approach while:

- Prioritizing simplicity and flexibility over complexity and avoiding a ‘black box’ approach
- Tailoring the model to particularities of South African project finance deals (and more generally deals within the SADC region), including special attention to the multinational nature of transactions, and country-related risks including government support and legal systems
- Including standardized cash flow projection models to enhance consistency of credit analysis
- Enabling sensitivity and scenario analysis
- Offering the capability to link into monitoring/early warning processes, in particular the ability to re-rate projects already existing in DBSA’s portfolio.

**United Bank of Africa (UBA) – Implementation of a Top-Down Pillar II Capital Impact Assessment with Respect to Basel II Regulatory Capital (August 2008 – January 2009)**



Regiments Capital assisted the United Bank of Africa Plc (“UBA”) with the implementation of a top-down Pillar II capital impact assessment with respect to Basel II regulatory capital.

UBA which is the largest financial services institution in West Africa with a balance sheet size in excess of one trillion Naira and more than six million customer accounts engaged Regiments to assist with meeting both its regulatory and internal risk capital demands.

### 3 STAFF RESUME

#### 3.1 REGIMENTS CAPITAL

##### 3.1.1 EXECUTIVE DIRECTORS

<b>Name</b>	Litha Nyhonyha
<b>Current position</b>	Executive Chairman
<b>Years of experience</b>	20 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• BCom – University of Cape Town</li> <li>• Qualified CA(SA)</li> </ul>
<b>Professional associations</b>	<ul style="list-style-type: none"> <li>• Member of South African Institute of Chartered Accountants (SAICA)</li> </ul>
<b>Language skills</b>	English, Xhosa
<b>Country experience</b>	South Africa
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Capital</b> (2004 – current). Together with his existing partners, Litha started Regiments Capital. Litha is also a director of Worldwide, South African Express Airways (a wholly owned subsidiary of Transnet) and chairman of Plessey. He is the immediate past chairman of the University Council of the new North West University formed after the merger of the former Potchefstroom University and the former University of North West. Regiments Capital is the parent company of Regiments Fund Managers which runs the CoJ Debt Redemption (Sinking) Fund.</li> <li>• <b>Worldwide African Investments</b> (2001 – 2004). Litha joined Worldwide African Investments to restructure the group and develop its financial services strategy. This led to Worldwide focusing its financial interests on NBC Holdings, an actuarial consulting and fund administration business. In 2002 Litha was seconded by Worldwide to NBC to stabilise the business and return it to profitability. He successfully established the business but due to disagreement on strategy with the Executive Chairman decided to exit NBC at the same time the majority shareholder, Worldwide was exiting.</li> <li>• <b>SA Express Airways</b> (1994 – 2005). Litha was the Founder-Director of SA Express Airways and was also the Chairperson of the Audit Committee. He has served on the SA Express Board for over 10 years.</li> <li>• <b>Thebe Investment holdings</b> (1992 – 2001). In 1992 he established Thebe Investment Holdings, the first significant BEE investment holding company in South Africa, with Mr Vusi Khanyile. At Thebe, Litha was responsible for all acquisitions and growing NAV from R100 000 to over R500 million in a few</li> </ul>

	<p>years.</p> <ul style="list-style-type: none"> <li>• <b>Ernst and Young</b> (1989 – 1992). After completing his articles in 1989 he completed his articles of clerkship in Ernest and Young. After serving as senior audit manager, Litha moved to the corporate finance department of Ernst &amp; Young until his departure in 1992.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Financial Services Strategy Development</li> <li>• Acquisitions and NAV growth</li> <li>• Senior Audit Manager</li> <li>• Corporate Finance</li> </ul>

<b>Name</b>	Eric Wood
<b>Current position</b>	Executive Director
<b>Years of experience</b>	25 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• Masters of Management (ENT and NVC), <i>Cum Laude</i> (Wits)</li> <li>• Completed Accounting Articles</li> </ul>
<b>Language skills</b>	English, Afrikaans, Spanish
<b>Country experience</b>	South Africa, Poland, Czech Republic, Hungary
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• After completing his accounting articles in 1985, Eric joined the stock broking firm of <b>Frankel Kruger Vinderine</b> as a trainee bond dealer. There he established a bond option operation that grew to become the largest bond option broking business (by volume) in the SA market.</li> <li>• In 1988 <b>Investec Bank</b> approached Eric in order to set up a Fixed Income trading business. This business developed into the largest market maker of bond options and exotic fixed-income derivatives in SA. Under Eric's guidance the business was expanded into Equity derivatives trading, Fixed Income and Equity structuring and Gold and Kruger-rand trading. Eric was subsequently approached in order to expand Investec's interest rate desk into trading Caps, Floors and Swaptions in RSA and Eastern Europe. Eric was appointed to the Investec Group Strategy and Policy committee in 1994. He was instrumental in the appointment of Investec as official Market Makers for South African Government Debt and served as chairman of the Primary Dealers Association in 1999 and 2000. In addition, Eric was appointed to bond exchange EXCO in 1999 and 2000.</li> <li>• In January 2002 Eric left Investec Bank in order to pursue new business opportunities. He subsequently set up the infrastructure for a Hedge Fund</li> </ul>

	<p>business for <b>Credit Commerciae (Pty) Ltd</b> and proceeded to attract capital for the first of their hedge funds. He was involved in the trading and operating of this fund form 2002 to 2004.</p> <ul style="list-style-type: none"> <li>• In 2004, Eric left Credit Commerciae to jointly found <b>Regiments Capital</b>.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Statutory Audit and Advisory</li> <li>• Financial Risk Management and Governance</li> <li>• Foreign and Local Debt Origination</li> <li>• Regulatory Compliance</li> <li>• PFMA and MFMA</li> </ul>

<b>Name</b>	Niven Pillay
<b>Current position</b>	Director
<b>Years of experience</b>	23 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• BSc (Electrical Engineering/Computer Science). Princeton University.</li> <li>• Bachelor of Public and International Affairs - Princeton University</li> </ul>
<b>Language skills</b>	English
<b>Country experience</b>	South Africa
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• Niven started his career as a management consultant with <b>Andersen Consulting</b>.</li> <li>• In 1992, Niven joined <b>Standard Merchant Bank</b> to start up the Interest Rate Derivatives business. By 1994, Standard Merchant Bank enjoyed 70% market share in this business. In late 1994, Niven was appointed Director with responsibility for Derivatives.</li> <li>• In June 1995, Niven left SCMB to spend a 4-month stint with <b>Investec</b> with responsibility for cross-market structuring.</li> <li>• His next job was with <b>ABN Amro</b> where he spent 1 year establishing the trading operation in Johannesburg before being transferred to London to start up the Emerging Markets Derivatives business.</li> <li>• After 3 months, he joined <b>UBS</b> in London as Executive Director: Emerging Markets Derivatives.</li> <li>• He started at <b>Wipcapital</b> in December 1999 as Executive Director and Head of the Structured Markets Division until he left to join Regiments Capital in 2004.</li> <li>• Niven is currently in the process of setting up <b>Regiments Capital's</b> ALCO Risk Management Advisory (primarily to insurers and pension funds) and Fixed</li> </ul>

		<p>Income Fund Management business.</p> <ul style="list-style-type: none"> <li>• Niven is also the preceding Chairman of <b>Johannesburg City Power</b>.</li> <li>• Niven is the executive director in charge of the CoJ Debt Redemption (sinking) Fund since inception in 2006.</li> </ul>
	<p><b>Experience</b></p>	<ul style="list-style-type: none"> <li>• Consulting</li> <li>• Financial Modelling :It Systems, Interest Rate Derivatives &amp; Cross Market Structuring</li> <li>• Trading</li> <li>• Risk Management Advisory</li> <li>• Debt Redemption (sinking) Fund Specialist.</li> </ul>



### 3.1.2 REGIMENTS FUND MANAGERS: KEY PERSONNEL

<b>Name</b>	Paul Bate
<b>Current position</b>	Investment Strategist
<b>Years of experience</b>	31 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• C.A.I.B (1975)</li> <li>• Diploma in Financial Management (Damelin Management School 1983)</li> <li>• Managerial Finance, Advanced Management Finance, Tax and Management Planning (Wits Business School 1983 – 1985)</li> <li>• Advanced Financial and Banking Management-Wharton Business School, Philadelphia (USA 1985)</li> <li>• Banking and Managerial Finance-Insead International Business School Fontainebleau (France 1989)</li> <li>• Asset and Liability Management – Sungard Financial Systems, Boston (USA 1993)</li> </ul>
<b>Language skills</b>	English
<b>Country experience</b>	South Africa, Zimbabwe
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Capital Pty Ltd (2010 – present).</b> Senior Fixed Income/Money Market Trader and Fund Manager. Paul has been the Senior Trader on the CoJ Debt Redemption (sinking) Fund since joining Regiments.</li> <li>• <b>ALM (Asset and Liability Management) consultancy (2003 – 2009).</b> Commenced offering ALM workshops to banks on the African Continent and conducted in excess of 65 workshops in 14 countries outside of South Africa, including workshops for the International Finance Corporation of the World Bank. In addition workshops were conducted for banks/institutions in South Africa including ABSA, Nedbank, KPMG and Mercantile Bank. Established a relationship with Nedbank to conduct workshops and install ALM risk models in their Africa operations. Risk models were also installed into 5 other banks on the continent, including Bank Windhoek in Namibia.</li> <li>• <b>African Merchant Bank Ltd (1997 – 2002).</b> Approached to head up the Money Market Desk at AMB. His responsibilities as Head of Money Markets and Funding included balance sheet management, group funding, liquidity management, statutory requirements, money market trading, Head of Alco Committee, corporate lending and relationships as well as being a member of the Risk Committee. In January of 1999 Paul was seconded to African Bank (a subsidiary of AMB) in charge of the Treasury Division. His duties included risk management, treasury policies and procedures and Alco development. In 2002 Paul was appointed as Treasurer at AMB. Built an ALM risk model which was approved for</li> </ul>

	<p>use by Deloitte and Touche and the Reserve Bank.</p> <ul style="list-style-type: none"> <li>• <b>Msele Corporate and Merchant Bank Ltd (1995 – 1997).</b> A start up wholesale treasury operation that culminated in the formation of FBC and thereafter the merged entity with Fidelity Bank Limited. Paul departed before the FBC/Fidelity merger to join African Merchant Bank Ltd.</li> <li>• <b>Standard Merchant Bank Ltd (1981 - 1995).</b> Upon relocating to South Africa, Paul joined Standard Merchant Bank as a Manager in the Banking Division responsible for corporate clients. In 1983 he was tasked to establish the Domestic Treasury Trading Desk running 2 corporate asset books. These books grew from start-up of R100m to R3bn at the end of 1995 with a client base in excess of 400. Between 1986 and 1988 his role broadened to asset liability management, product pricing, bank funding and money market trading. In 1990 he was appointed as the Assistant General Manager in the Treasury Division responsible for the running, structure and control of SMB's balance sheet. Following the merger of SMB and the corporate division of SBSA, Paul was appointed as the Director of Funding and Corporate. His portfolio including the funding of the entire Standard Bank Group with an asset base of R65bn.</li> <li>• <b>Barclays Bank International Ltd (1965 – 1981).</b> Paul began his career at Barclays Bank Zimbabwe in October of 1965. Following numerous promotions throughout his career at Barclays, Paul departed as an Assistant Branch Manager responsible for 65 Employees. Paul and his family immigrated to South Africa in 1981.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Asset Liability Specialist and ALM Training Expert</li> <li>• Fixed Income and Money Market Trading</li> <li>• Risk Management</li> <li>• Debt Redemption (sinking) Fund Trading Specialist.</li> </ul>

<b>Name</b>	Sybil Kekana
<b>Current position</b>	Senior Investment Analyst
<b>Years of experience</b>	13 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• Bachelor of Commerce Honours (Finance) Pretoria University</li> <li>• Diploma in Investment Management ( Johannesburg University)</li> <li>• Bridging Certificate Theory of Accounting (Johannesburg University)</li> </ul>
<b>Professional association</b>	• Member of the Association of Corporate Treasurers of Southern Africa
<b>Language skills</b>	English, North Sotho

<b>Country experience</b>	South Africa
<b>Employment history</b>	<p>Sybil Kekana started her career at <b>Standard Bank of Southern Africa</b> in 1991 as a graduate trainee. She spent two years at the bank before moving to <b>Rennies Travel</b> as a Foreign exchange consultant in charge of dealing in foreign exchange sales to leisure and corporate clients. In 1993, Sybil was promoted and moved to the internal audit department of Rennies Travel. She worked as an internal auditor in charge of branch audits. In 1996 she moved to <b>Price Waterhouse Coppers (PwC)</b>. She worked with PwC from 1996-2000 as an internal auditor, responsible for manufacturing and public sector audits. Amongst the others her major clients included Medscheme, Land Bank, Hudaco, Department of Housing and Transnet. She gained valuable experience in various systems and processes, legislation compliance and GAAP in practice during her years with PwC. Sybil was in charge of overseeing these audits from inception to audit report stage. Sybil's diligence, attention to detail and meticulous approach to audit assignment contributed to her success in this field.</p> <p>She joined <b>Standard Corporate and Investment Bank</b> in 2000 working as a senior manager on the Interest Rate Derivatives Sales and Structuring division where she was responsible for structuring interest rate solutions for a portfolio of clients. Her main job functions included providing pricing on interest rate products such as swaps, options and cross currency interest rate swaps to corporates and parastatal clients. The 5 years spent at Standard Bank was instrumental in shaping her career in the financial market. Apart from executing deals with clients Sybil was instrumental in developing training manuals for graduate trainees at the bank. As part of her development on interest rate sales and structuring she conducted educational seminars involving mechanics of financial markets to corporate and parastatal clients.</p> <p>Sybil joined the <b>South Africa Post Office</b> in 2006 as a Treasury Dealer in charge of managing Post Office's R4 billion investment portfolio. She reported to the Post Office Group monthly Asset and Liability Committee on the performance of the portfolio. Sybil project managed the implementation of a treasury management system for the Post Office Group. She is also member of the working committee responsible for Postbank corporatisation scheme. She is an ex-officio member of the Postbank Committee.</p>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Interest rate derivatives sales and structuring</li> <li>• Funds management</li> <li>• Internal Audit</li> <li>• Managing of sinking fund sales and distribution.</li> </ul>

<b>Name</b>	<b>Andrew Daniel Lanyi</b>
<b>Current position</b>	Portfolio Manager

<b>Years of experience</b>	10 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	MSCi Physics, Cambridge University (2002)
<b>Language skills</b>	English
<b>Country experience</b>	South Africa, New York, United Kingdom
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Capital</b> (Mar 2012 - Present). Daniel is currently a portfolio manager at Regiments Fund Managers.</li> <li>• <b>Rand Merchant Bank</b> (Jun 2010- Oct 2011). Daniel was an Interest Rates and Derivatives Trader</li> <li>• <b>Royal Bank of Canada</b> (2008-2009). Daniel was an Interest Rates Trader, specifically trading EMEA Interest Rates (European, Middle East and Africa) Interest Rates.</li> <li>• <b>HSBC</b> (2007-2008). Daniel was an Interest Rates Trader, specifically trading Rand/Poland EMEA Interest Rates (European, Middle East and Africa) interest Rates.</li> <li>• <b>Goldman Sachs</b> (2002-2006). Daniel was a GT10 EFEX forwards trader, specifically trading the Emerging Markets EFEX spot and forwards, Options (all categories) and EMEA Interest Rates (European, Middle East and Africa).</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Interest Rates Trading EFEX spot and forwards</li> <li>• Emerging markets EFEX Trading</li> <li>• Options Trading</li> <li>• EMEA(European, Middle East and Africa) Interest Rate Trading</li> </ul>

<b>Name</b>	Shaun Dunstan
<b>Current position</b>	Portfolio Manager
<b>Years of experience</b>	10 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• BCom (Finance), University of the Witwatersrand, 2001</li> <li>• SACI Certificate, 2002</li> <li>• RPE Certificate, 2003</li> </ul>
<b>Language skills</b>	English
<b>Country experience</b>	South Africa, New York, United Kingdom

<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Fund Managers</b> (Mar 2012 - Present). Shaun is currently a portfolio manager at Regiments Fund Managers.</li> <li>• <b>Standard Bank SA</b> (Jul 2011 - Feb 2012). Shaun was a head of Bond trading at Standard Bank, managing bond trading book and driving Standard Bank brand awareness locally and offshore.</li> <li>• <b>Nedbank Capital</b> (Jun 2009 - Jun 2010). Shaun was a member of Interest Rates Sales and structuring for the asset managers.</li> <li>• <b>Deutsche Bank</b> (May 2006 - Jun 2009). Shaun was the Bond Market Maker and Trader, specifically to generate Income and stimulate business development and growth for foreign bond trading between South Africa and United Kingdom market.</li> <li>• <b>Rand Merchant Bank</b> (Mar 2003 - May 2006). Shaun started as a trainee and moved across all desks (Money Market, FRA SWAPS FX Commodities and Bond Desk). He was then promoted to the Interest Rate desk in charge of the interest rates desk and the Bond Book primarily to facilitate trades for client services.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Fixed Income trading</li> <li>• FX Trading</li> </ul>

<b>Name</b>	Brett Mahon
<b>Current position</b>	Fund Manager / Quantitative Analyst
<b>Years of experience</b>	9 years
<b>Nationality</b>	South African
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• BSc. Engineering (Electrical), University of the Witwatersrand, 2002</li> <li>• FSB Registered Persons Exam, RE5, 2010</li> </ul>
<b>Language skills</b>	English
<b>Country experience</b>	South Africa, Ireland
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Fund Managers</b> (Mar 2011-Current). <i>Hedge Fund Manager and Quantitative Analyst</i>. Brett manages the Duality Systems Primary Fund. The fund is a market-neutral quant equity fund. Brett also assists in general system design, research and modelling for the Regiments Group.</li> <li>• <b>Duality Systems</b> (Nov 2008-Mar 2011). <i>Director</i>. As a director of the business Brett oversaw all aspects of the business and specialised in system design,</li> </ul>

		<p>trading strategy design and risk management.</p> <p>Brett also co-authored the systems used throughout the business. These systems managed all aspects of the fund from live trading, risk analytics and back-office profit and loss management</p> <ul style="list-style-type: none"> <li>• <b>Coronation Capital</b> (Oct 2005-July 2008). <i>Risk Manager</i>. Major responsibilities involved monitoring and managing group-wide market and credit risk, including risk reporting for the executive board. Reporting and analysis was required for both for the local and offshore (UK and Ireland) branches of the group. This reporting included Value at Risk, volatility / underlying risk matrices and total market and credit exposure. Brett developed a system running in C#, R (mathematics package), VBA and SQL to achieve these ends. In addition to this, the company ran the <i>SunGard Front Arena</i> front-to-back office system. Maintenance and upgrading this system from a functional point of view was his responsibility.</li> <li>• <b>Comair Limited</b> (June 2005-October 2005). <i>Application Development Contractor</i>. Work included analysis and development of software for the airline. The project included both windows forms applications and web applications. This ran on top of a web service layer along with web components. These components formed the basis of the www.kulula.com website.</li> <li>• <b>MyBeat Interactive</b> (Jan 2004 – June 2005). <i>Senior Software Developer</i>. Brett performed full life-cycle development of various products and services offered by the company. He was involved in the architecture/design phase through development, testing and software maintenance. He was also responsible for the database design aspects and performance tuning of the live systems</li> </ul>
	<p><b>Experience</b></p>	<ul style="list-style-type: none"> <li>• Quantitative Analysis – Statistical Modelling, Monte-Carlo analysis, Time-series analysis.</li> <li>• Software Architecture and Development</li> <li>• Algorithm Design</li> <li>• Project Management, Business Development</li> <li>• Equity analysis and trading</li> <li>• Risk Management – Market and credit risk management across asset classes</li> <li>• ALM Risk Management of sinking funds.</li> </ul>

	<p><b>Name</b></p>	<p>Michael Barber</p>
	<p><b>Current position</b></p>	<p>Fund Manager / Quantitative Analyst</p>
	<p><b>Years of experience</b></p>	<p>9 years</p>

<b>Nationality</b>	South African
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	BSc Engineering (Electrical), Wits 2002, <i>Cum Laude</i>
<b>Language skills</b>	English
<b>Country experience</b>	South Africa, United Kingdom
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Fund Managers</b> (Mar 2011 onwards). Michael is currently a hedge fund manager and quantitative analyst at Regiments Fund Managers. He has also worked on exotic derivatives pricing, and software systems design and optimisation for the Regiments group.</li> <li>• <b>Duality Systems</b> (Oct 2009 to Mar 2011). Michael was a director and quantitative analyst at the market-neutral equities fund, focusing on trading system development and analysis. His analytical work included the design of the statistical modelling framework used in the business, development of advanced statistical models, cointegration modelling, and other statistical arbitrage work. On the systems side, he handled the design and construction a high-frequency algorithmic trading solution, as well as the analytics infrastructure used for all the live market instrumentation for real-time trading decisions.</li> <li>• <b>Deutsche Bank, South Africa</b> (Jul 2007 to Oct 2009). Michael was a quantitative developer responsible for the design and implementation of high frequency statistical arbitrage trading systems in several emerging markets, including South Africa, Brazil and Turkey. Related work included the design and testing of related systems, including low-latency market data feeds, tick data archival and analysis, and statistical analysis. He was also responsible for the deployment and integration of an online pre-trade risk-analytics solution.</li> <li>• <b>RiskWorX</b>, including <b>Rand Merchant Bank</b> and <b>Standard Bank</b> (Sep 2006 to Jul 2007). Michael was employed as a risk analyst and integration engineer. As a risk analyst, he was responsible for developing pricing algorithms for various vanilla and exotic instruments traded by Standard Bank, as well as assisting with the value-at-risk calculations and reporting. As an integration engineer, he was responsible for integration of front-office and risk systems, diagnosis of errors, resilience planning, and system performance optimisation.</li> <li>• <b>Mintek</b> (Feb 2003 to Sep 2006). Michael was a senior engineer at Mintek, responsible for designing and building advanced, high-performance online process control systems for the minerals processing industry. His main focus was on AC arc furnace control systems, statistical process control, and several components of system integration and user interfaces.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Statistical modelling</li> <li>• Optimisation and machine learning</li> </ul>

	<ul style="list-style-type: none"> <li>• Advanced software design, development, and integration</li> <li>• Derivatives pricing and modelling</li> <li>• Trading strategy development and back-testing</li> <li>• Statistical arbitrage and high frequency trading</li> <li>• Risk analytics</li> <li>• Sinking fund analysis</li> </ul>
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<b>Name</b>	Thabo Letlaka
<b>Current position</b>	Fixed Income Trader
<b>Years of experience</b>	4 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• Post Graduate Diploma in Management (Actuarial Science Conversion) (University of Cape Town (UCT), 2007)</li> <li>• Bachelor of Science (Mathematics and Statistics) (Rhodes University, 2004)</li> </ul>
<b>Professional associations</b>	<ul style="list-style-type: none"> <li>• Actuarial Society of South Africa Student</li> </ul>
<b>Language skills</b>	English, Xhosa
<b>Country experience</b>	South Africa
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Capital Pty (Ltd)</b> (August 2008 - Current). Thabo joined Regiments Fund Managers as a Risk Associate in the Trading team. He is also working with Health Monitor Company (a company in the Regiments Capital group) working in the HIV/AIDS team modelling the cost impact of HIV/AIDS on entities</li> <li>• <b>RisCura Solutions Pty (Ltd)</b> Started in February 2008 and left later that year. Thabo's responsibilities lay in the unitisation team. He did reporting and analysis on the performance of the Funds and also handled other queries that the Fund's trustees required. The second set of responsibilities he had, were with the quantitative (quant) research team, where he handled quant queries.</li> <li>• <b>Momentum Collective Benefits</b>. 4 Months of Vacation Work as a UCT student. As a university student Thabo Letlaka worked for Momentum Collective Benefits as Risk Analyst in the (Premiums) Quotes division, where he analysed the premiums groups of lives for various Sums Assured. This was on an initial and re-broke basis.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Economic Modelling</li> <li>• VBA Development</li> </ul>



	<ul style="list-style-type: none"> <li>• Sinking Fund Performance Analysis</li> <li>• Healthcare Actuarial Modelling</li> <li>• Fixed Income and Derivative Trading</li> </ul>
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<b>Name</b>	Louis Schutte
<b>Current position</b>	Risk Analyst
<b>Years of experience</b>	5 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• MSc. Quantitative Risk Management – North West University (2005)</li> <li>• BSc. Honours Quantitative Risk Management – North West University (2004)</li> <li>• BSc. Business Mathematics and Informatics – Potchefstroom University (Cum Laude) (2003)</li> <li>• N4, N5, N6 Mechanical Engineering – Potchefstroom Technical College (1999)</li> </ul>
<b>Language skills</b>	English, Afrikaans
<b>Country experience</b>	South Africa
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Capital (August 2008 – current).</b> Louis joined Regiments Capital as a Risk Analyst in the Financial Risk Advisory unit in August 2008. Louis Managers the Risk process of the CoJ Debt Redemption (sinking) Fund. Since joining Regiments he has been working on a collateral valuation project for a development bank. He also worked on a Basel II project for a Nigerian bank in which Regiments was asked to calculate the overall regulatory capital as per the Basel II accord for the entire banking group. Other projects that he worked on include writing of a business plan for a SOE and loan analysis for the two major municipalities in Gauteng.</li> <li>• <b>Standard Bank (2007 – 2008).</b> Louis was part of a project team that conducted a proof of concept project to implement an Integrated Financial and Management Accounting solution for Standard Bank Off-shore Group on three of their products. The solution was part of SAP Bank Analyser. Tasks performed include documentation, customising and testing. He was also assisting in the customising of the SAP Balance Analyser which is part of the SAP Bank Analyser by doing customising, testing and writing of documentation. The system was being implemented for one retail product as the analytical finance solution in a proof of concept project.</li> <li>• <b>ABSA (2006 – 2007).</b> Louis undertook creating SAS data sets in preparation for stress testing models to be built, assisting with maintaining and updating the QRM system for market and credit risk and with the population of the Bank Act</li> </ul>

	<p>returns 200 series from SAP BW as required by the SARB. He also assisted in implementing the Basel II solution in QRM by making sure that the regulatory capital was being calculated correctly. He performed all the functions relating to the Calculation Process technical setup and configuration based on the Basel II approaches selected by ABSA for Retail and Wholesale lines of business on the SAP Credit Risk Analyser which is part of the SAP Bank Analyser. Louis also assisted in sorting out data issues relating to the Calculation Process of the regulatory capital requirement of ABSA bank for Retail and Wholesale, ran the Calculation Process in the SAP Credit Risk Analyser, analysed the errors and results and reported back to managers on a monthly basis. He re-configured the Credit Risk Analyser in release 5 of SAP and assisted with the population of the Bank Act returns 200 series from SAP BW as required by the SARB.</p> <ul style="list-style-type: none"> <li>• <b>ABSA Insurance (2005 – 2005).</b> Louis managed a small research project as part of M Sc. studies on the insurance cycle, the factors that impact it and how it could potentially be forecasted.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Process Consultant</li> <li>• Quantitative Risk Management</li> <li>• SAP – Bank Analyser: Including configuration of the Credit Risk Analyser</li> <li>• SDL (FDB)</li> <li>• AFI</li> <li>• BW Business Explorer</li> <li>• Risk and Data Analysis Skills using SAS</li> <li>• Risk Dimensions</li> <li>• Enterprise Miner (Data Mining)</li> <li>• S+, R and Matlab programming language</li> <li>• Sinking Fund Risk Specialist</li> </ul>

<b>Name</b>	Tiro Mokoka
<b>Current position</b>	Business Development Associate
<b>Years of experience</b>	5 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	BCom – Business Management (UNISA)
<b>Language skills</b>	English, Tswana
<b>Country experience</b>	South Africa, United Kingdom

<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Capital (2012-Present)</b>. Business Development Associate. Tiro is involved in growing the business. This includes meeting with clients, determining their requirements and communicating these to Regiments in order to build custom solutions.</li> <li>• <b>Keliana Management (2008-2008)</b>. Marketing and Events Manager. Tiro planned, managed and controlled the marketing campaign for Emoyeni Conference Centre. It was his mandate to manage CRM with clients, and expand the client base. All events at the centre were planned, and executed by him.</li> <li>• <b>South African Breweries (2007-2008)</b>. Events Co-ordinator. Tiro's duties involved planning, managing and controlling all beer selling opportunities such as beer fests, concerts, fashion shows, golf days and sports days to name a few. He also managed all staff, promotional activities, catering and security for the events. Tiro planned the annual/quarterly/monthly budgets for the events department, and implemented the events strategy for SAB Isando.</li> <li>• <b>Verpakt services (2006-2007)</b>. Risk and fraud contact agent</li> <li>• <b>First National Bank (2005-2005)</b> .Financial sales consultant</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Business strategy consultancy</li> <li>• Marketing</li> <li>• Events management</li> <li>• Marketing</li> </ul>

<b>Name</b>	Brian Gritzman
<b>Current position</b>	Risk Administrator
<b>Years of experience</b>	4 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• BSc(Mathematics and Mathematical Statistics), Wits, 2009</li> </ul>
<b>Language skills</b>	English
<b>Country experience</b>	South Africa
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Capital (2009 – present)</b>. Brian joined the Regiments Fund Managers division as a Risk Analyst. Brian forms part of a team that is responsible for the management of the debt redemption fund. His main responsibilities amongst the others include, overseeing the fund's risk and investment management processes and modelling and developing structured products. He is also part of a team augmenting the current risk system on the existing platform to a new platform developing the functionality on the new risk system. Brian was appointed to</li> </ul>

		<p>oversee and manage the migration of COJ's debt redemption fund from the Dibanisa back office to Maitland.</p> <ul style="list-style-type: none"> <li>• <b>Regiments Capital (2008 – 2009).</b> Brian joined Regiments Capital as a Risk Analyst assigned to the Development Bank of South Africa (DBSA) Project undertaken for the Workout and Recovery Unit. In addition, Brian formed part of the Nedbank Credit Risk Index (CRI) Project Team designed to provide the client with a relative risk measure for providing credit to a portfolio exposure.</li> </ul>
	<b>Experience</b>	<ul style="list-style-type: none"> <li>• Risk analysis</li> <li>• Back office administration</li> <li>• Risk administration</li> </ul>

### 3.1.3 REGIMENTS ADVISORY: KEY PERSONNEL

<b>Name</b>	Andile Nyhonyha
<b>Current position</b>	Head of Advisory
<b>Years of experience</b>	16 years
<b>Home office</b>	Johannesburg
<b>Professional qualifications</b>	Bjuris, LLB
<b>Country experience</b>	South Africa
<b>Employment history</b>	<p>Andile started his career in 1994 at Standard Merchant Bank (Treasury Division) in the back office, providing support for the dealing room and compliance with the SARB exchange control regulations. In 1995 at the time when SCMB was merging with some divisions of Standard Bank to form Standard Corporate and Merchant Bank, Andile joined the Corporate Finance department where he was responsible for identifying merger and acquisition opportunities and advising and funding Black Economic Empowerment opportunities. He left SCMB in 1999 and joined Legae Securities as the Executive Director responsible for Corporate Finance. When Legae Securities was sold to Wipcapital in 2000, he founded Wip Treasury Solutions, which he ran as the Chief Executive Officer. In November 2001 Andile was appointed Head of Corporate Finance at Wipcapital. Andile left Wipcapital at the beginning of 2003 to establish Regiments Holdings and Regiments Capital. . Andile left Regiments in 2007 to establish Mfanta Investment Holdings. In November 2010 he rejoined Regiments as Head of Advisory.</p>

<b>Name</b>	Tewodros Gebreselasie
<b>Current position</b>	Senior Economic Advisor / Senior Econometrician
<b>Years of experience</b>	14 years
<b>Nationality</b>	Eritrean
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• MCOM in Economics (Specialization in Trade &amp; Investment) – University of Pretoria (Jan 2005 - Sep 2006) – Cum Laude</li> <li>• MPhil in International Business Management – University of Pretoria (Jan 2002 - Dec 2003) – Cum Laude</li> <li>• BCom (Honours) in Economics – University of Pretoria (Jan 2004 - Dec 2004)</li> <li>• BCom (Honours) in Business Management – University of Pretoria (Feb 2001 -</li> </ul>

	<p>Dec 2001)</p> <ul style="list-style-type: none"> <li>• B.A. in Business Management – Addis Ababa University (Sep 1989 - Jul 1992)</li> </ul>
<b>Professional associations</b>	<ul style="list-style-type: none"> <li>• Economic Society of South Africa (ESSA)</li> </ul>
<b>Language skills</b>	English
<b>Country experience</b>	South Africa, Eritrea, Ethiopia
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Employment, Growth and Development Initiative, Human Sciences Research Council of South Africa, Pretoria</b> (Sep 2006 – May 2008). Tewodros conducted rigorous studies on growth, poverty reduction, and unemployment in South Africa. The studies mainly focused at evidence based scenarios for halving unemployment and poverty as part of South Africa’s growth path. He also published peer-reviewed academic journal articles and participated in local and international workshops and conferences and was involved in conceptualizing research projects and writing up project proposals for funding.</li> <li>• <b>Faculty of Law &amp; Department of Economics, University of Pretoria, South Africa</b> (Mar 2006 – Sep 2006). Tewodros coordinated the LLM (in Trade and Investment law) and MCOM (Economics in Trade and Investment) Trade Programmes. The Programmes were designed to address the shortage of African experts in trade and investment areas who can represent African interest at multinational foras, principally WTO. He also organized the Annual African Trade Moot Competition.</li> <li>• <b>Pan-African Investment Pty Ltd, Johannesburg</b> (Mar 2006 – Sept 2006). External Consultant contracting to do financial modelling. Successfully completed to build a robust financial model for a project that cost R400 million (US\$ 57 million). Involved in econometric modelling of the contribution of the Tourism sector of South Africa.</li> <li>• <b>Medstra Business Administrators, Pretoria</b> (Jan 2005 – Mar 2006). Compiled statistical information on the profile of new and existing clients of BESTMED Medical scheme and assisted the Finance Section.</li> <li>• <b>Department of Economics, Pretoria</b> (Jan 2005 – Mar 2006). Part-time Researcher on modelling South African exports to the rest of the World using panel econometrics technique. The modelling work involved all industries at SIC 3 digit classification.</li> <li>• <b>Commercial Bank of Eritrea, Asmara</b> (Nov 1998 – Feb 2001). Undertook quantitative and qualitative analysis of credit information and documentation as the Credit Administration Officer.</li> <li>• <b>Commercial Bank of Ethiopia, Addis Ababa</b> (May 1994 – Sep 1998). Tewodros was a Relationship Officer who identified the specific needs for banking products of each corporate account customer, while conducting on-going</li> </ul>

	financial evaluation and analysis.
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Research Specialist on growth, poverty reduction, and unemployment</li> <li>• Economics - Trade &amp; Investment Specialist</li> <li>• Trade Projects Coordinator (LLM / MCOM / Trade Moot)</li> <li>• Financial and Econometric Modelling</li> <li>• Panel econometrics Technique Modelling (SIC 3 digit classification)</li> <li>• Quantitative and Qualitative Credit Analysis</li> </ul>

### 3.1.4 REGIMENTS PROPERTY: KEY PERSONNEL

<b>Name</b>	Umeiya Majam
<b>Current position</b>	Corporate Finance Specialist
<b>Years of experience</b>	15 years
<b>Home office</b>	Johannesburg
<b>Professional qualifications</b>	CA (SA) H Dip Tax Law
<b>Language skills</b>	English
<b>Country experience</b>	South Africa
<b>Employment history</b>	Umeiya brings a wide range of public and private sector experience to Regiments Capital. After obtaining her primary financial advisory education in Structured Finance at ABSA and Real Africa Durolink, she has been involved in various domestic and foreign debt and equity capital raising initiatives, merger and acquisition transactions and consulting assignments, primarily through Leverage Finance and Kurisa Finance. Highlights of her career include the restructuring of the property portfolio and divisions of Telkom SA, the corporatisation of the municipal-owned entities of City of Johannesburg, the cross-border merger and acquisition of Gateway Telecommunications across four countries, and the disposal of the non-core businesses of Transnet. Umeiya has also managed transfers of employees in respect of disposal transactions with Labour Unions, parliamentary and legislative amendment processes as well as inter-governmental business transfers.

<b>Name</b>	Phia van der Spuy
<b>Current position</b>	Property Specialist
<b>Years of experience</b>	15 years
<b>Home office</b>	Johannesburg
<b>Professional qualifications</b>	M Com (International and Local Taxation); CA(SA); B Com Hons (Industrial



	Psychology)
<b>Country experience</b>	South Africa
<b>Employment history</b>	Phia has experience in domestic and cross-border vanilla and structured property finance, encompassing the financing of existing property, as well as property developments in the commercial, industrial, retail and housing sectors. She also worked for a property developer as part of the implementation team and was responsible for the funding of its asset book, as well development feasibility studies of prospective development opportunities and actual developments undertaken. Her role also included asset management through the optimisation of assets, including reducing funding and operating costs and increasing income from tenants. She headed business development for a private equity housing fund.

### 3.1.5 REGIMENTS SECURITIES: KEY PERSONNEL

<b>Name</b>	Thabo Maseko
<b>Current position</b>	Head Fixed Income Sales Trader
<b>Years of experience</b>	12years
<b>Home office</b>	Johannesburg
<b>Professional qualifications</b>	<ul style="list-style-type: none"> <li>➤ Bachelor of Commerce (Financial Management) (UP)</li> <li>➤ ACI Institute Dealing Certificate</li> <li>➤ JSE Traders Certificate</li> <li>➤ Financial Engineering (UP)</li> <li>➤ Junior Certificate IFM (SAFEX)</li> <li>➤ Ordinary Certificate IFM (SAFEX)</li> <li>➤ Addressing Corporate Needs With Treasury Instruments</li> <li>➤ Credit Monitoring And Control (IBF*)</li> <li>➤ Accounting For Treasury And Derivative Products (IBF*)</li> <li>➤ Identifying And Managing Credit Risk In Derivatives (IBF*)</li> <li>➤ Credit Monitoring And Control (IBF*)</li> <li>➤ Introduction to Trade Financing (IBF*)</li> <li>➤ Effective Relationship Management (IBF*)</li> </ul> <p>*IBF Institute of Finance and Banking (Singapore)</p>
<b>Language skills</b>	<ul style="list-style-type: none"> <li>➤ English, North Sotho, Zulu, Afrikaans</li> </ul>
<b>Country experience</b>	South Africa, Singapore
<b>Employment history</b>	<ul style="list-style-type: none"> <li>➤ Thabo Maseko started his career at African Merchant Bank of in 1999 as a graduate trainee. He spent his time at the bank trading foreign Exchange Spot, Forwards, Currency futures and Currency options on the Rand.</li> <li>➤ Trainee at Deutsche Bank Singapore and Asia Pacific Head Office. Areas of training, Trade Finance, In-house Consulting, Capital Markets Sales, Corporate Banking sales and Private Banking. The other area was at the Monetary Authority of Singapore (IBF*).</li> <li>➤ He then co-founded Sakhumnotho Group of Companies responsible for Investment Advisory Services to Corporate clients and internally for the group. His duties also included deal structuring, Capital Raising, Project evaluation and Valuations.</li> <li>➤ He then moved to Maude Street Securities as Fixed Income Sales Trader for Institutional Sales. Ran a proprietary Trading book of Bonds and bond Options for the company as well.</li> <li>➤ Later on Joined Legae Securities as both Fixed Income and Equities Sales Trader. Primarily developing trade Ideas, and Trade Forecasting and Research writing</li> </ul>

		<p>and distribution.</p> <ul style="list-style-type: none"> <li>➤ He then also ran a co-founded a corporate advisory and business planning consultancy firm. Leruo Corporate Consulting. Was responsible also for Capital Raising for small businesses and NGOs.</li> </ul>
	<p><b>Experience</b></p>	<ul style="list-style-type: none"> <li>➤ Interest rate derivatives sales and structuring</li> <li>➤ Forex Trading</li> <li>➤ Technical Analysis</li> <li>➤ Corporate Finance</li> <li>➤ Capital Raising</li> </ul>

### 3.1.6 REGIMENTS CAPITAL PRINCIPAL INVESTMENTS: KEY PERSONNEL

<b>Name</b>	Jonathan Loeb
<b>Current position</b>	Senior Corporate Financier
<b>Years of experience</b>	5 years
<b>Home office</b>	Johannesburg
<b>Professional qualifications</b>	<ul style="list-style-type: none"> <li>➤ ACMA (Chartered Institute of Management Accountants, UK)</li> <li>➤ B Com Honours (Finance)</li> </ul>
<b>Country experience</b>	South Africa
<b>Employment history</b>	<ul style="list-style-type: none"> <li>➤ Jonathan is currently a key member of the corporate finance team at Regiments Capital. He is responsible for the analysis, structuring (financial and tax) and implementation of deals both within the group and for clients.</li> <li>➤ Prior to joining Regiments, he spent two years as the CFO of a small renewable energy business focused on the conversion of waste gases into electricity. His key responsibilities included capital raising, accounting, budgeting, etc.</li> <li>➤ After his studies, Jonathan worked within the Strategic Finance division of Deloitte Consulting. He worked as an analyst on projects for some of the world's largest mining/resource companies.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>➤ Finance</li> <li>➤ Capital Raising / Project Finance</li> <li>➤ Private Equity</li> <li>➤ Mining/Resources</li> <li>➤ Renewable Energy</li> </ul>

### 3.1.7 REGIMENTS CAPITAL: KEY OPERATIONS PERSONNEL

<b>Name</b>	Kyansambo Vundla
<b>Current position</b>	Chief Financial Officer
<b>Years of experience</b>	12 years
<b>Home office</b>	Johannesburg
<b>Professional qualifications</b>	<ul style="list-style-type: none"> <li>➤ CA (SA)</li> <li>➤ BCom Accounting - Rhodes University (2001) – Earned with distinction <ul style="list-style-type: none"> <li>▪ Awarded the Rhodes Honours Scholarship for distinguished achievement in undergraduate studies and</li> <li>▪ Norman Harris Prize for the top taxation student in the Commerce faculty</li> </ul> </li> </ul>
<b>Language skills</b>	➤ English, French, Zulu
<b>Country experience</b>	10 Yrs (South Africa) and 2 yrs (United Kingdom)
<b>Employment history</b>	<ul style="list-style-type: none"> <li>➤ Kyansambo completed her period of articles with BDO Spencer Steward (JHB), during which time she attained her CA (SA) designation.</li> <li>➤ Then moved to London and worked on the Arbitrage desk as a Product Controller for Credit Suisse First Boston.</li> <li>➤ Consulting for various Investment firms upon her return and spending a brief time at Teba Bank as a Business Performance Analyst, she then moved to Momentum Group Limited and served as CFO for the Employee Benefits Division for over 3 years before joining Regiments Capital.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>➤ Financial Markets,</li> <li>➤ Pension Funds Insurance,</li> <li>➤ Enterprise Risk Management,</li> <li>➤ Financial Management, and</li> <li>➤ Management Consulting.</li> </ul>
<b>Other responsibilities</b>	<ul style="list-style-type: none"> <li>➤ Served as an Audit committee member for the Bonitas Medical Aid Fund,</li> <li>➤ Currently a Non-executive director for the AltX listed Workforce Limited.</li> </ul>

<b>Name</b>	Reyana Sallie
<b>Current position</b>	Group Legal and Compliance Officer
<b>Years of experience</b>	10 years
<b>Home office</b>	Johannesburg
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• Bachelor of Arts (1991)</li> <li>• Bachelor of Laws (1994)</li> <li>• Certificate in Compliance Management (2001)</li> <li>• Advanced Diploma in Banking (2002)</li> <li>• Advanced Company Law (2012)</li> </ul>
<b>Language skills</b>	English, Afrikaans
<b>Country experience</b>	South Africa, Middle East
<b>Employment history</b>	<ul style="list-style-type: none"> <li>• <b>Regiments Capital</b> (2011-Present). Reyana was appointed as group legal and compliance officer.</li> <li>• Reyana has been employed in a legal and/or compliance capacity for the last 10 years at a number of reputable international banks including <b>UBS</b> (2003-2005), <b>Barclays Capital</b> (2005-2006), <b>ABN AMRO Bank</b> (2006-2008) and at <b>Deutsche Bank</b> (2008-2010) in the Dubai International Financial Centre.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Legal and Compliance</li> <li>• Investment Banking</li> </ul>

### 3.2 REGIMENTS HEALTHCARE: RISK MONITOR GROUP AND M-CARE

<b>Name</b>	Izak J v H Fourie
<b>Gender</b>	Male
<b>Ethnicity</b>	Caucasian
<b>M-Care role</b>	Executive Committee Member: Chairman
<b>Education</b>	<ul style="list-style-type: none"> <li>• MBChB. Stellenbosch University (1974)</li> <li>• Med (Urology) (cum laude). University of the Orange Free State (1981)</li> <li>• MBA. Graduate School of Business Administration, University of the Witwatersrand (Wits) (1991)</li> <li>• Post Graduate Diploma in Health Management: Economics and Financial Planning (cum laude). University of Cape Town (1995)</li> </ul>
<b>Healthcare experience (professional history)</b>	<ul style="list-style-type: none"> <li>• Urologist in private practice in Durban and Johannesburg (1981 – 1988)</li> <li>• Medical Advisor to the Lesotho Highlands Water Project (1989 – 1992)</li> <li>• Medical Advisor to the Chamber of Mines of South Africa. Responsible for the co-ordination, policy formulation and strategic planning of all healthcare related issues in the mining industry (1990 – 1996)</li> <li>• Extraordinary Professor, Department of Actuarial and Insurance Science, University of Pretoria (1995 – 2003)</li> <li>• Started own healthcare consulting company from which the Risk Monitor Group has evolved (1996 – present)</li> </ul>
<b>Additional positions held</b>	<ul style="list-style-type: none"> <li>• Board Member of the South African Institute for Medical Research (1991 – 1995)</li> <li>• Director of the Rand Mutual Assurance Company Ltd and the Rand Mutual Assurance Life Company Ltd (1994 – 1996)</li> <li>• Member of the Compensation Board (Tripartite advisory body to the Compensation Commissioner and Minister of Labour) (1994 – 1997)</li> <li>• Consultant to the Department of Transport on the Medical Aspects of the proposed new Road Accident Fund Act (1996 – 1999)</li> </ul>

<b>Name</b>	Ferdi Preller
<b>Gender</b>	Male
<b>Ethnicity</b>	Caucasian
<b>M-Care role</b>	CEO M-Care ManCo
<b>Education</b>	Accounting, North West University
<b>Professional history</b>	<ul style="list-style-type: none"> <li>• Lecturer, North West University</li> <li>• Strategic consultant to the petroleum industry</li> </ul>
<b>Healthcare experience</b>	<ul style="list-style-type: none"> <li>• Founder of M-Care</li> <li>• Instrumentally involved in the running of sub-acute facilities over the last 15 years</li> <li>• Founder of iSomi Management Services – provider of administrative services to medical practices</li> <li>• Steering committee member of Board of Healthcare Funders – assisted the BHF in developing standards and criteria for the sub-acute sector</li> <li>• More than 25 years experience in healthcare economics</li> </ul>

<b>Name</b>	Sonja Krause
<b>Gender</b>	Female
<b>Ethnicity</b>	Caucasian
<b>M-Care role</b>	Executive Committee Member : Facility Roll-out Project Manager
<b>Education</b>	Bachelor of Business Science (Honours in Marketing, cum laude) – University of Cape Town (2004)
<b>Professional history</b>	TNS Customer Equity Company (2006-2008): Research Executive – Worked as a market researcher, with specific focus on a global brand equity measurement tool – managed projects, compiled reports, provided technical advice and conducted training



	<p>Burlington Consultants (2008-present): Consultant – Worked as a consultant on strategic advisory and implementation projects. Core skills developed include research, analytical skills, communication skills, client relationship management, strategy development, project planning and management</p>
<p><b>Healthcare experience</b></p>	<p>Two extensive projects for two healthcare NGOs focused on:</p> <ul style="list-style-type: none"> <li>• Business plan development</li> <li>• Strategic planning</li> <li>• Operational reviews, including development of organisational structures, processes and associated roles and responsibilities</li> <li>• Implementation planning</li> </ul> <p>Strategy development and project planning for the M-Care rollout</p>

### 3.3 BURLINGTON MANAGEMENT CONSULTANTS: KEY PERSONNEL

<b>Name</b>	James Smith
<b>Date of birth</b>	15 April 1975
<b>Gender</b>	Male
<b>Ethnicity</b>	White
<b>Current position</b>	Director
<b>Education</b>	<ul style="list-style-type: none"> <li>• Bachelor of Science Engineering (Chemical) (cum laude) – Wits University (1996)</li> </ul>
<b>Professional experience</b>	<p><b>Burlington Strategy Advisors (2004 –current):</b> Partner and founding Director of Burlington Strategy Advisors (Pty) Ltd</p> <p><b>Bain and Company (1998 – 2003):</b> Consultant with Bain and Company, a leading global strategy house, in their Johannesburg and London offices</p> <p><b>Palabora Mining Company (1996 – 1998):</b> Process engineer and production manager for smelter and refinery operations on the Palabora copper mining operations</p>
<b>Summary of relevant experience</b>	<ul style="list-style-type: none"> <li>• 12 years consulting to CEOs and MDs of small, medium and large organisations</li> <li>• 1 year of running own small retail business</li> <li>• 9 years of training, coaching and mentoring experience</li> </ul>
<b>Sector experience</b>	<ul style="list-style-type: none"> <li>• Agriculture, financial services, government, information technology, manufacturing, non-governmental organisations, resources, retail and wholesale, general services, telecommunications, transportation, FMCG</li> </ul>

<b>Name</b>	Andrew Titterton
<b>Date of birth</b>	3 September 1971
<b>Gender</b>	Male
<b>Ethnicity</b>	White
<b>Current position</b>	Director
<b>Education</b>	<ul style="list-style-type: none"> <li>• Bachelor of Science Engineering (Chemical) (cum Laude) – University of Cape Town</li> </ul>
<b>Professional experience</b>	<p><b>Burlington Strategy Advisors (2007 – 2009):</b> Company Director</p> <p><b>Northroad Consulting (2003 – 2007):</b> Company founding partner. Responsible for operations and sales within the consulting environment.</p> <p><b>Bain and Company (1997 – 2003):</b> Progressed from Associate Consultant to Manager at international strategy consultancy.</p> <p><b>Anglo American (1994 – 1997):</b> Technical assistant to Managing Director of Anglo American Research Laboratories.</p>
<b>Summary of relevant experience</b>	<ul style="list-style-type: none"> <li>• 14 years consulting to CEOs and MDs of medium and large organisations</li> <li>• 11 years of training, coaching and mentoring experience</li> </ul>
<b>Sector experience</b>	<ul style="list-style-type: none"> <li>• Agriculture, financial services, FMCG, government, information technology, manufacturing, non-governmental organisations, resources, retail and wholesale, general services, telecommunications, transportation, utilities</li> </ul>

**November 11, 2017 – Statement of David Robert Fine**

**ANNEXURE B: NIVEN PILLAY ALLEGATIONS IN JULY 2014**

# McKinsey&Company

August 7, 2014

## BY EMAIL

Attn: Eric Wood  
Regiments Capital (Pty) Ltd  
91 Central St  
Johannesburg 2198, South Africa

Dear Mr. Wood;

In light of recent attention related to Niven Pillay and Regiments Capital and its affiliated and associated entities (collectively, "Regiments") related to Mr. Pillay's relationship with Brian Hlongwa, we provide this letter to reconfirm your statements regarding the matter and to provide additional terms with regard to Regiments' relationships with McKinsey Incorporated and affiliated entities (collectively, "McKinsey").

In an email to Norbert Dorr and Vikas Sagar dated July 28, 2014, you stated the following and hereby reconfirm that to the best of your knowledge:

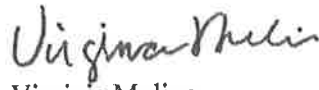
- Niven Pillay and Brian Hlongwa are personal friends, and this friendship predates the establishment of Regiments Group (Regiments has been going for 10 years). This friendship was established when Mr. Pillay was non-executive chairman of City Power and Mr. Hlongwa was an MMC for the City of Johannesburg.
- Messrs. Pillay and Hlongwa have together invested in a number of residential property developments (including a Hyde Park residential development, and the Singaraja-Benmore development). As we understand some of these investments made money (Hyde Park), but others lost money (Singaraja).
- Any monies paid by Mr. Pillay to Mr. Hlongwa relate solely to these investments and are entirely unrelated to Regiments Group (including Regiments Healthcare).
- Regiments Healthcare was established by Regiments Capital to make proprietary investments in, and perform advisory work for, the South African healthcare sector, both public and private. At the time mentioned in the articles, the CEO of Regiments Healthcare was Dr. Shane Dorfman (a medical doctor with an MBA).
- Regiments Healthcare was appointed by 3P Consulting to examine the feasibility and economic viability of the Pholateng PPP's in the Gauteng Public Hospitals, a small piece of consulting for which Regiments Healthcare was paid R3.2m. A portion of the required work was sub-contracted to KPMG by Regiments Healthcare. In consideration of this consulting work, Regiments submitted a detailed assessment of the Pholateng PPP's to 3P Consulting, and a copy of this detailed report has been submitted to the Special

**Proprietary and Confidential**

August 7, 2014  
Page 3

We hope the above provisions will allow us to continue our relationship with Regiments and provide services to our Clients. If you have further questions, please contact our Associate General Counsel Melissa Milstead at 202-662-3153 or [Melissa\\_Milstead@McKinsey.com](mailto:Melissa_Milstead@McKinsey.com).

Regards,



Virginia Molino  
General Counsel

Agreed to this \_\_\_ day of August, 2014  
Regiments Capital (Pty) Ltd  
By:

---

By: Eric Wood  
Title: Executive Director



REGIMENTS CAPITAL™

**BY EMAIL**

Ms V Molino  
General Counsel  
McKinsey and Company  
1200, 19<sup>th</sup> Street, Northwest  
Washington  
United States

22 August 2014

Dear Ms Molino

**REGIMENTS CAPITAL (PTY) LTD / ASSURANCE LETTER**

1. I refer to your letter dated 7 August 2014 and wish to advise that we have now had an opportunity to consider the contents a request made to agree to certain trms. Despite your deadline, thank you for the indulgence of further time extended.
2. We are mindful of the concerns expressed and wish to reassure you of our commitment to maintain and enhance our working relationship
3. The allegations in the media have no doubt created an impression of improper conduct on the part of Niven Pillay ("Niven"), an executive director of Regiments Capital (Pty) Ltd ("**Regiments**") and the Regiments Group. It has equally cast negative aspersions on Regiments.
4. Our law, like that in the United States has a presumption of innocence until proven guilty. Whilst these press allegations have cast aspersions, please be mindful of the fact that these articles had been prepared on information selectively obtained. Attempts by both Regiments as well as Niven to engage directly with the law enforcement authorities are ongoing to address the allegations.
5. Whilst you may not be aware, Regiments has over the last decade worked tirelessly in order to build its business brand and reputation. The press reports are therefore of huge concern to us as a business and to Niven, one of its founding members.
6. Before dealing with your request that we agree to certain terms, I feel that it is necessary to share with you certain information so that you are also aware of the steps being taken by Regiments and Niven.
7. Having conducted an initial internal investigation, both parties remain of the view that the allegations in the press are baseless and ill-conceived. However, to ensure that these allegations are objectively and independently considered, Regiments is in the process of appointing a legal firm and a forensic investigation firm to independently conduct a review in respect of the allegations and advise the Regiments Board accordingly. Such investigation will take into consideration the press reports as well as the Court papers involving the Special Investigations Unit's investigation. This investigation is to commence shortly and we anticipate that it will take 2 – 3 weeks for completion.
8. We further wish to advise that independent of steps being taken by Regiments, that Niven is also seeking independent counsel in order to take steps to exonerate his name and standing which has been impaired as a consequence of the press reporting.
9. In relation to my email exchange with Norbert Dorr and Vikas Sagar dated 28 July 2014 the contents set out therein are self-explanatory and I reconfirm the contents to the extent that your bullet points (1 to 7 on pages 1 and 2) in your abovementioned letter accurately records this.

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info@regiments.co.za

Regiments Capital (Pty) Ltd

Reg No (2004/023761/07)


Directors : Litha Nyhonyha, Niven Pillay, Eric Wood

www.regiments.co.za

Regiments Capital (Pty) Ltd is an authorised financial services provider: FSP No 16831



Yours faithfully



Mr Eric Wood  
Executive Director





**November 11, 2017 – Statement of David Robert Fine**

**ANNEXURE C: LETTER TO TRANSNET ON TERMINATION OF RELATIONSHIP  
WITH REGIMENTS**

Mr Garry Pita  
Group Chief Financial Officer  
Transnet SOC Ltd.  
Carlton Centre  
150 Commissioner Street  
Johannesburg  
2001

23 February 2016

Dear Garry,

Thank you for our meeting this week and the opportunity to reflect on the progress of our partnership with Transnet. We value our relationship with Transnet who we see as a critical enabler of the South African economy and its success will enable economic growth and improve competitiveness of South African companies. Our Partner group is committed to and passionate about this relationship. We believe we have had impact in supporting Transnet through its growth phase and now through a perfect storm of external macroeconomic factors.

We also took this opportunity to share some of our concerns around our relationship with the contracted Supplier Development partner, Regiments Capital.

Since our discussion, our Partner group has resolved to end the current relationship with Regiments Capital as soon as possible and to put greater effort into ensuring that our improved diligence process for SD partners, including Trillian Capital Partners is fully adhered to. This is informed by a number of factors including, concerns around underperformance by Regiments Capital and elements of our risk management policy.

Our risk management policy designed to maintain our hard earned reputation which we believe our clients also value. This policy takes a very conservative approach to working with persons that are politically exposed or potentially politically exposed. The recent media articles concerning Mr. Mahommed Bobat, who was, until very recently employed by Regiments Capital, were a trigger for an internal review led by our global risk and legal teams. The review underscored the risk in the current situation involving Regiments Capital and Mr. Bobat as a potentially politically exposed person as too high and resulted in the decision to end the relationship. The fact that this was the second situation in which the issue of reputational risk has arisen was a contributing factor. The previous incident involved the allegations against Mr. Niven Pillay; which resulted in him not being allowed to work on any assignments involving McKinsey.

Our risk management practices have evolved significantly in line with the accelerating changes in best-practice risk management. As part of this, our diligence processes for partnering and sub-contracting in general have been tightened to ensure, amongst others, that we are fully apprised of the composition of our partners including with respect to:

- Shareholding of holding companies
- Ultimate beneficial shareholders
- Related parties and group companies (e.g., significant lenders)
- Executive management team and other "key man" dependencies for both the company and group companies

This is to provide assurance that, among other things, we do not have exposure to politically exposed persons.

In the case of supplier development relationships in South Africa, we are required to ensure that partner/sub-contractor meets three additional criteria:

- Majority Black ownership
- Majority Black management and staff or a clear and committed plan to deliver this outcome
- Capability and capacity to execute work and deliver benefits that are commensurate with the share of fees earned

We have been informed that Regiments Capital's management advisory business is transitioning ownership to Trillian Capital Partners. They will be subject to the ownership composition, management and staff composition and capability criteria above. We are not able to commence a relationship with Trillian, or any other partner/sub-contractor until these criteria have been met and approved by our global risk and legal teams.

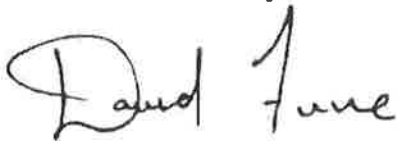
We have met Mr. Eric Wood to discuss Regiment Capital's underperformance in the ongoing GFB and cost optimization project and our broader concerns on the scale and pace of transformation at Regiments. Specifically:

- The resourcing supplied by Regiments for the delivery of the GFB and cost optimization was well below the numbers contracted for the fee split agreed. In many instances the resources staffed on Regiments' teams were unsuitable to deliver the work. We have shared the feedback on number and quality of resources and their performance on an ongoing basis with Regiments. In addition, we have submitted an invoice of R19m, with detailed backup, to Regiments to compensate McKinsey for the additional resources we have had to deploy to fill the gaps created by under-resourcing. We have done this to ensure Transnet's success took precedence over contractual concerns
- Transformation expected at a management and technical level has not occurred at the rate that we believe is possible at Regiments. We believe this is an important obligation for a SD partner to meet

We, however, remain committed to supplier development and have worked hard to meet our SD commitments to Transnet in letter and spirit. There are numerous examples, including with Regiments, where we have been successful in building new capabilities e.g., coal line. Our experience and knowledge for creating high-quality supplier development is available to Transnet to ensure achievement of its SD objectives. Given the pace of scale of Transnet's SD objectives, you may wish to reflect on whether one SD partner alone is sufficient to deliver the desired impact. The evidence in the GFB optimization project, which required a significant and fast scale-up of resources, would argue for multiple partners. In addition to being urgent, the SD partner transition on the GFB also presents an opportunity to reassess the SD approach. We would welcome the opportunity to be a thought-partner with you on this.

Once again, we are deeply committed to the long-term success of Transnet. We look forward to the opportunity to discuss this further and its implications on current contractual commitments.

Yours sincerely



David Fine  
Director



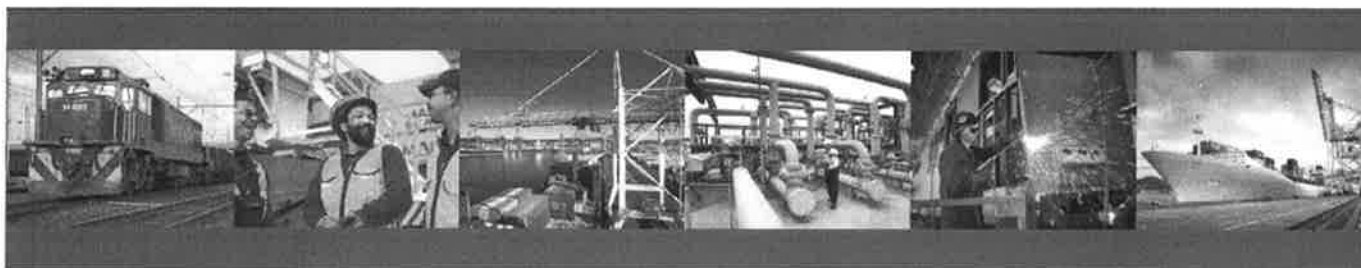
Vikas Sagar  
Director

cc: Mr. Siyabonga Gama, Acting Group Chief Executive, Transnet SOC

**November 11, 2017 – Statement of David Robert Fine**

**ANNEXURE D: 1064 LOCOMOTIVES: BUSINESS CASE RECOMMENDATIONS,  
LETTER OF WITHDRAWAL, RELEVANT PRESS ARTICLES**

# Procurement of 1064 Locomotives for the General Freight Business



<b>Date of Submission to Board</b>	18 <sup>th</sup> April, 2013
<b>Addressed To</b>	Board of Directors
<b>Title of Submission</b>	Procurement of 1064 Locomotives for the General Freight Business
<b>Date of Review</b>	25 <sup>th</sup> April, 2013

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## A. PURPOSE

This business case provides the rationale to invest in the profitable General Freight Business (GFB) by procuring 1064 new locomotives (465 diesel, 599 electric). This business case demonstrates a clear need to *accelerate locomotive deployment* to enable delivery against Transnet's Market Demand Strategy (MDS) and achieve South Africa's broader socioeconomic objectives. The new locomotive purchase will:

- Create value for Transnet by enabling TFR to deliver 170 mt by 2018/19 and thereby achieve its MDS target. This will result in a positive NPV (R2.7 billion at the TFR hurdle rate of 18.56 percent and R34.1 billion at the TFR WACC of 12.56 percent), top-line growth, enhanced return on assets (ROA), and an improved environmental footprint.
- Lower the cost of doing business in South Africa by enabling operational efficiencies that will increase customer satisfaction and facilitate a shift from road to rail.
- Create and preserve 28,000<sup>1</sup> direct and indirect South African jobs, and R68 billion in economic impact through local supplier development.

A robust procurement strategy that is aligned with Government socio-economic policies and appropriate governance processes have been designed and instituted to ensure transparency, fairness, and value maximisation for Transnet and South Africa. A funding plan and forex management strategy are detailed in the business case.

The risks that are inherent in a procurement event of this nature have been identified and mitigation strategies are in place. Accordingly, it is recommended that the 1064 Locomotives Business Case be approved at a cost of R38.6 billion excluding borrowing costs.

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<sup>1</sup> Proportional to MDS-related job creation of 288,000

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## B. EXECUTIVE SUMMARY

### Business need

Transnet Freight Rail (TFR) is moving from a strategy of “responding to confirmed demand” to creating “capacity to unlock demand”. The MDS is informed by future planned investments that support the move from road to rail by targeting rail-friendly traffic currently on the road as well as other volume growth opportunities. As part of Transnet’s MDS, TFR has committed to grow its volumes by 143 million tonnes, from 208 million tonnes to 350 million tonnes; over 60 percent of this growth is expected to be delivered by the General Freight Business (GFB), which will grow from the current 82.6 million tonnes to 170 million tonnes by 2019. TFR plans to invest R194 billion in capital to deliver this growth in total volumes; of this, R143 billion is planned to be invested in GFB, R19 billion in export iron ore and R32 billion in export coal. Of the total capital invested in GFB, 53 percent will be expansionary and 47 percent sustaining capital.

This investment in growing GFB volumes make business sense, as it lowers the cost of doing business and accelerates a modal shift from road to rail. The majority (85 percent) of the growth in GFB demand is generated by: rail-friendly bulk commodities that need to be transported long distances such as manganese, magnetite, and domestic iron ore; bulk commodities with certain demand, like coal needed for Eskom’s power stations; and container-based commodities for which existing demand moves on road and will shift to rail. Moreover, South Africa is well-positioned on global cost curves for GFB commodities that are exported, such as manganese, magnetite, and thermal coal, which mitigates the volume downside due to inevitable global commodity volatility.

### Current and new fleet requirements

The average age of the TFR GFB fleet is currently 32 years and comprises 1889 locomotives, which are broadly divided into workhorses and shunters, with the workhorses being the prime income generators. There was a major procurement of over 1000 locally manufactured electric locomotives in the 1970s and 1980s, which became the workhorses of the current fleet. No new locomotives were purchased for GFB from 1992 through to 2008 when the GFB fleet was augmented by a series of purchases that included 50 “like new” diesels, 100 diesels, and 43 diesels; currently, 95 new electrics are on order from China. These purchases were not sufficient to meet market demand and achieve a road to rail migration.

The economic design life of a locomotive is 30 years. In the absence of new locomotives, the workhorse fleet was given life-extending upgrades where possible that extended the working life to 45 years. However, this has resulted in increased maintenance costs as well as difficulty in obtaining spares. As the most cost-effective and technology-compatible options for extending the life of a locomotive are exhausted, further extensions are no longer economically cost-effective or technologically practical.

### Proposed way forward on locomotive fleet expansion-related economic impact

The recommended way forward is for TFR to proceed with programmatic procurement of new locomotives. TFR has explored two options: continuing with the status quo, which is economically unviable and does not support the volume ramp-up envisaged by the MDS, putting the entire MDS at risk; new locomotive acquisition is the only viable and recommended option:

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- **A status quo scenario.** The current fleet has already begun to run out. Based on TFR's current Locomotive Fleet Plan, the number of locomotives in the GFB fleet will decline from 1889 in 2014 to 1592 by 2019, with further run-out thereafter as the oldest and costliest assets in the fleet are retired. Half the fleet will be retired within 10 years and nearly the entire fleet within 20 years. If this run-out is not addressed, TFR would only have capacity to transport 85 million tonnes in 2019 – 85 million tonnes short of its MDS commitment, representing a cumulative revenue shortfall versus the MDS plan of R73 billion over this period. MDS will not be executed and there will be a negative impact on cash interest cover (CIC) and gearing.
- **A new locomotive procurement scenario.** TFR has to invest in new locomotives to replace its current aged fleet and to support its planned volume ramp-up. To achieve this, TFR needs to procure of 1064 locomotives (465 diesel and 599 electric) over the next 7 years. Procuring 1064 new locomotives between 2013/2014 and 2018/2019 would have a positive NPV of R2.7 billion (discounted using TFR's hurdle rate of 18.56 percent; NPV would be R34.1 billion if discounted using TFR's WACC of 12.56 percent). Accordingly, the only viable solution to deliver on GFB's R53.8 billion revenue MDS target in 2019 is to procure new locomotives.

#### **Benefits of the 1064 locomotive acquisition programme**

The 1064 locomotive acquisition will benefit Transnet, South Africa and South African business.

For Transnet, the locomotive acquisition programme will:

- Enhance locomotive operational efficiency thereby increasing asset utilisation.
  - TFR will leverage new technology specification locomotive efficiencies. The new locomotives increase the rate of the fleet's availability and reliability. In addition, further operational efficiencies may be possible by leveraging increased tractive effort to limit the number of locos needed for a given flow or redesign of flows altogether (e.g., some flows have both AC and DC lines, which currently require stops and changeovers between different locomotive types but will not with dual-electric locomotives).
  - The programme offers TFR an opportunity to standardise its locomotive fleet by procuring a limited number of locomotive types. This will result in a host of benefits including simplified maintenance.
- Create business opportunities for Transnet Engineering (TE) to substantially participate in the localisation programme and thereby retain a portion of the locomotives' spend within Transnet.
- Significantly impact TE with respect to maintenance practices and consolidation of maintenance depots where the new locomotives have extended service intervals and on-board diagnostic health monitoring systems where full advantage is to be taken of the currently available technology and international best practice. This is the result of a full deployment plan developed by business unit, year, class of locomotive and depot.
- Enhance Transnet's return on assets and increase financial sustainability. This will be driven by volume growth and declining unit costs of production and will be achieved despite the increase in depreciation.

For South Africa, this large-scale procurement programme will:

- Create R68 billion in localisation benefits for the South African economy. Transnet stipulates local content of 55 percent for diesel and 60 percent for electric locomotives. Given the economies of scale on the purchase of 1064 locomotives with the stipulated localisation

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requirements, desired localisation can be achieved for only a 2 percent average cost of localisation – an additional investment of R400 million. This equates to a highly attractive benefit cost ratio of 170 to 1.

- Catalyse the sustainable development of a South African locomotive production industry based on the procurement of 1064 locomotives over approximately 7 years and an estimated on-going annual need of 80 locomotives driven by TFR’s 30-year replacement life policy.
- Develop manufacturing skills, which will ultimately support not only the locomotive industry but also South Africa’s manufacturing sector more broadly.
- 28,000 indirect and direct South African jobs, created and preserved.
- Achieve greater road safety and fewer road fatalities by supporting the shift from road to rail
- Energy savings will be achieved, with 8- 10% lower fuel consumption for diesels and 18% energy savings for electrics. For the diesel locomotives alone, this will result in savings of over 31,000 tonnes of CO2 and R5 million per year by 2018/2019.

For South African business, the locomotive acquisition will:

- Increase customer satisfaction and enhance the ease of doing business as higher locomotive reliability results in better adherence to schedules.
- Lower the cost of doing business by catalysing a shift from road to rail, which is a more cost-effective mode of transportation for distances over 300 kilometres. Given the spatial dispersion of South African centres of economic activity and the distances between the centres of production and ports, this will benefit most businesses.
- Lower infrastructure repair costs driven by the road to rail shift as damage to roads from the current trucking of commodities like coal is reduced. In addition, it will contribute towards a reduction in road traffic fatalities.

**Programmatic procurement strategy and evaluation criteria**

Transnet’s procurement strategy for the acquisition of 1064 new locomotives, approved by the Board, includes the following key aspects:

- Alignment with the Government of South Africa’s socioeconomic policy framework, including CDSP, NGP, NDP, SSI, and IPAP2.
- Increasing local content through developing skills, creating jobs, and transferring technology. Transnet’s programmatic procurement strategy follows threshold requirements for locomotive localisation, in line with those designated by the National Treasury (i.e., 55 percent for diesel, 60 percent for electrical locomotives).
- Approaching the market through an open tender process to attract the broadest possible supplier base and maximise value for South Africa and Transnet. Tenders have been issued for both locomotive types. The RFP closure date is April 28th, 2013.
- A six-step evaluation methodology will be applied based on the evaluation criteria: price 60 percent; supplier development 20 percent; and Broad-Based Black Economic Empowerment (B-BBEE) 20 percent.

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## Managing sensitivities and risks

Procuring Transnet's 1064 new locomotives in the most capital-efficient way requires a detailed understanding of inherent volatilities, risks, and mitigation plans. The locomotive requirement and the pace at which Transnet needs to deploy its capital in the base case scenario is shaped by two factors:

- **Volume volatility.** TFR's overall locomotive procurement programme is based on current, validated MDS GFB volumes. However, given the volatility in the global and domestic economy, the realisation of these volumes may be different than planned. If volumes grow faster or, vice versa, slower than the MDS plan, Transnet must adjust its locomotive procurement accordingly. This flexibility needs to be built into its procurement and contracting strategy to enable it to accelerate or throttle back the pace of locomotive purchases without penalties.
- **Operational efficiency potential.** TFR's current Fleet Plan estimates the number of locomotives including the potential efficiencies that can be captured from technology improvements and operational flexibility of new locomotives. Further operational efficiencies may be possible by leveraging increased tractive effort to limit the number of locomotives needed for a given flow or redesign of flows altogether. These operational efficiencies have not been incorporated in the business case- capturing them could reduce the number of locomotives needed and improve the upside of this business case. The aforementioned flexibility Transnet builds into its procurement strategy will also address this sensitivity.

The following are some of the key risks and sensitivities that are important to consider and mitigate:

- **Volumes.** Of all variables, volume risk has the greatest potential to impact NPV. For example, with a slight underperformance (7 percent versus MDS targets), Transnet would experience revenue shortfalls of R16.4 billion and a reduction in NPV of R1.7 billion. However, under the worst case scenario (growth of volumes in line with GDP as opposed to MDS), NPV would be reduced by over R20 billion. This reinforces the aforementioned need for a flexible procurement and contracting strategy, allowing locomotives to be brought online as they are needed.
- **Delivery schedule.** TFR already has a shortfall of DC electrics, with the electric locomotive shortfall projected to grow to approximately 122 electrics and 32 diesels by 2015. Given the previously expected timelines to procure new locomotives locally, TFR may not be able to close this shortfall until the end of the MDS period. Under the base case (procurement in line with schedules stipulated in the RFP), R13.3 billion in MDS revenues would be at risk; this would more than double under a moderately delayed scenario with further downside under the worst-case scenario. As a result, procurement and production timelines are being tightly managed to ensure the swiftest possible locomotive delivery, and immediate mitigation strategies are being explored. These include front-loading orders with international suppliers and exploring leasing options.
- **Tariffs.** The MDS GFB tariffs are expected to increase faster than CPI through 2020 (7 percent versus 6 percent). Given that the pricing on almost all GFB commodities is below the cost of full economic recovery even after taking into account all efficiencies, the pricing corridor in TFR's plan is achievable. However, should global and local economic conditions create challenges and tariffs above CPI cannot be implemented, the implication would be a reduction in the NPV of the business case by upwards of R4 billion.
- **Foreign exchange exposure.** Assuming target levels of localisation, a change in the Rand to US dollar exchange rate of 10 percent would represent a ~R1.2 billion impact on capital expenditure. Given 15 percent devaluation of the rand against the US dollar over the past year

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alone, such volatility is not unrealistic. See the Treasury Section below for the mitigation strategy.

- **Locomotive purchase price.** Closely linked to foreign exchange fluctuations are additional locomotive price risks that need to be actively managed during contracting and negotiations (e.g., change order risks related to detailed specifications). A purchase price increase of 10 percent would have a -R1.5 billion impact on NPV.

#### **Transnet Treasury requirements relating to the locomotive acquisition**

**Funding plan.** The acquisition of 1064 locomotives will cost R38.6 billion and has been included in the overall MDS funding amount of R86.5 billion over the next 6 years. Consequently, the funding options will include those in the borrowing plan as contained in the approved Transnet Corporate Plan 2013/2014. A mixture of cash generated by operations and external borrowing will be used to fund the acquisition. Two-thirds are assumed to be financed using cash generated by operations, and about R13 billion will need to be raised externally. The external funding will be raised utilising both the Global Medium Term Note programme for dollar funding and established domestic sources for Rand funding – e.g., the Domestic Medium Term Note programme. In addition, options like development finance institutions (DFIs) and export credit agencies (ECAs) will be considered to lower the cost of funding.

**Foreign exchange exposure management.** Transnet’s Group policy on Financial Risk Management requires that all contracts must be either Rand-based or effectively hedged to minimise the risk of financial loss due to exchange rate fluctuations. Should a Rand-based contract not be possible, hedge accounting will be applied to manage any foreign exchange volatility. The project will be hedged according to the Group Financial Risk Management Framework.

#### **Robust governance**

Given the magnitude of this transaction, Transnet has developed a clear governance framework, including:

- The highest standards of confidentiality, reinforced through a High-Value Tender process with oversight from Transnet Internal Audit.
- A 1064 Locomotive Steering Committee meeting, chaired by the Group Chief Executive Officer, has been instituted. This Steering Committee is constituted as a sub-committee of Group ExCo.
- A PMO has been established at TFR with specific responsibilities for: tracking progress towards milestones; establishing and owning a virtual data room based on best practice; scheduling Steering Committee meetings at the request of the Chair and following up on action items; and ensuring that confidentiality protocols are in place.

#### **Ensuring operational readiness**

TFR has operational readiness plans in place to ensure efficient deployment of its new locomotives:

- **Critical path interdependencies – integrating locomotives, demand, wagons, infrastructure and operations.** Wagons are tightly linked to the commodities they transport, while locomotives relate to the mass but not the commodity itself; thus, locomotives are allocated according to the tons transported over the particular operating section.

The proposed diesel locomotives can operate over most of the network with the notable exception of long tunnels. Current single voltage electric locomotives (AC or DC) are confined

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according to the current electrification network. This imposes operational inefficiencies due to the traction changes. The new electric locomotives will be dual voltage, eliminating the need to change tractive power and enabling trains to bypass yards.

In addition to the flexibility afforded by the locomotive standardisation above, the 1064 locomotive dependencies with megaprojects, such as Manganese and Waterberg, have been considered and addressed. Human Resources planning is equally critical to execute a programme of this magnitude. For example, to support the overall TFR fleet ramp-up, TFR will need to train 3065 train drivers and assistants. To address current driver shortfalls and increasing requirements over time, TFR will need to begin training drivers immediately.

- **Maintenance regime.** TE will be significantly impacted with respect to maintenance practices and the consolidation of maintenance depots. New locomotives have extended service intervals and on-board diagnostic health monitoring systems, requiring a different maintenance regime than TE currently delivers (e.g., larger “super depots” for large-scale maintenance, with smaller stations for refuelling and other basic services).

### Conclusion

Transnet’s purchase of 1064 locomotives is a critical procurement event that will facilitate Transnet’s delivery against its MDS targets, transform the business, increase operational efficiencies and support local supplier development. Transnet’s procurement strategy will be flexible enough to adapt to actual locomotive demand that is realised over time.

### Recommendation

Transnet recommends to the Board of Directors for approval:

- The acquisition of 1064 locomotives for the General Freight Business
- Estimated total costs of the acquisition of R38.6 billion as per the Corporate Plan (excluding the potential effects from forex hedging, forex escalation, other price escalations and borrowing costs).

Signed by:

\_\_\_\_\_  
Brian Molefe  
Group Chief Executive

\_\_\_\_\_  
Siyabonga Gama  
TFR Chief Executive

\_\_\_\_\_  
Anoj Singh  
Group Chief Financial Officer

Johannesburg, 25<sup>th</sup> April, 2013

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## C. BUSINESS CASE

### 1. Context

Transnet's MDS is driven by Transnet's shift in strategic focus from "responding to confirmed demand" to creating "capacity to unlock demand". In addition, it is a response to the National Development Plan and National Growth Plan imperatives seeking to contribute to South African economic growth and create jobs on an unprecedented scale.

#### Shift in Transnet's strategic focus and resulting infrastructure needs

The TFR MDS was borne of a number of strategic drivers. These include:

- The intent to make a significant contribution to national objectives embedded in the New Growth Path and the National Development Plan – to create capacity, to enable an export-led strategy, to develop infrastructure and to create jobs and develop skills.
- To address the legacy structural imbalances in the freight transport system. Significant tonnages of freight are conveyed by road rather than rail which contribute to high logistics costs (and compromises country competitiveness) and to the cost of externalities. Greater tonnages of traffic being transported by rail would make a significant contribution to reducing the number of heavy trucks on roads; overall transport and logistics costs; cost of externalities i.e., road damage, road accidents, road congestion, noise pollution, carbon emissions, the impact of rising fuel prices.
- To pursue opportunities for growth in transportable GDP by targeting rail-friendly opportunities.

The MDS is informed by future planned investments that generate rail-friendly traffic and target rail-friendly traffic currently on the road. As part of this strategy, TFR has committed to grow its volumes by 142 million tonnes to 350 million tonnes by 2018/19. Over 60 percent of this growth is expected to be delivered by the General Freight Business (GFB), which will grow from the current 82.6 million tonnes to 170 million tonnes by 2019 and is the focus of this business case. To enable this strategy, Transnet plans to invest R308 billion over the next 7 years. The total investment directed to TFR will be R194 billion to deliver on its significant volume growth targets; of this R143 billion is planned to be invested in GFB, R19 billion in export iron ore, and R32 billion in export coal. Of the total capital invested in GFB, 53 percent will be in expansionary projects.

GFB's current situation is an important point of departure to fully understand the business case. While TFR has steadily ramped up investments since 2004/05, these have been largely directed at the export iron ore and export coal businesses. By contrast, little has been spent on expanding GFB capacity and infrastructure since 1992. Even in more recent years, as per the Exhibit below, the focus of GFB capex has been maintenance rather than expansion.

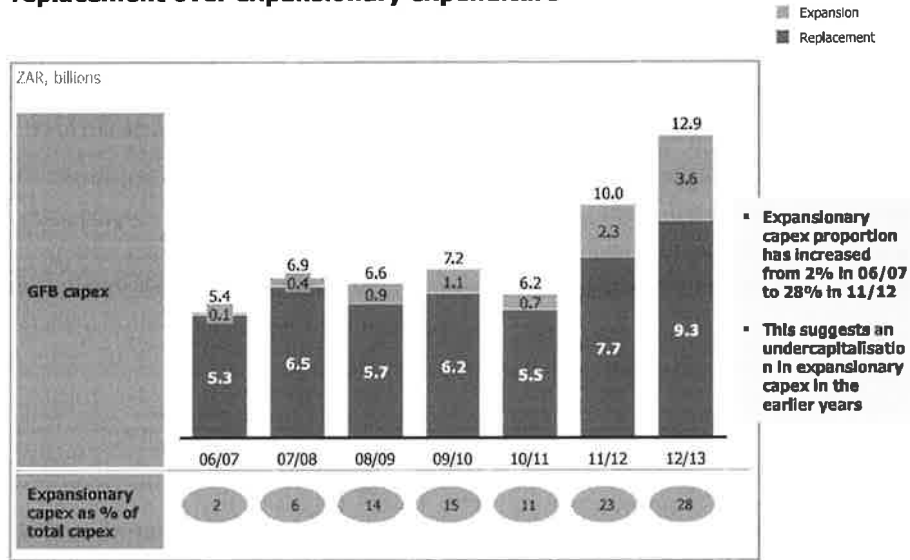
Even in more recent years, as seen in the exhibit below, the focus of GFB capex has been maintenance rather than expansion.

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EXHIBIT 1

**GFB expansionary has historically been undercapitalised with focus on replacement over expansionary expenditure**



This has left GFB highly undercapitalised, with its aging infrastructure unable to meet current market demand let alone generate and service new freight demand in sectors where South Africa has a comparative advantage. This not only limits the growth of Transnet but more importantly hampers the growth of South Africa’s economy and leaves the cost of doing business in South Africa uncompetitive, particularly as the road share of total freight transport has increased over time at the expense of rail. It is therefore imperative to rectify this and to enable TFR to service current rail-friendly demand, stimulate further demand, and catalyse a shift from road to rail.

The MDS will address these issues, laying out a plan to improve financial stability, productivity, and operational efficiency and to shift demand from road to rail. Through this strategy, Transnet will: reduce its cost of doing business while becoming more carbon efficient; enable economic growth, job creation, and skills development; and create opportunities for localisation, empowerment, and transformation.

Investing in GFB is a sound business decision. The growth in GFB volumes is driven by commodities and flows that are rail-friendly and attractive for TFR. The majority (85 percent) of the growth in GFB demand is generated by rail-friendly bulk commodities that need to be transported long distances – manganese, magnetite, domestic iron ore, containers; with certain demand – e.g., coal needed for Eskom’s power stations; and commodities for which existing demand moves on road and will shift to rail. Moreover, South Africa is well-positioned on global cost curves for GFB commodities such as manganese, magnetite, and thermal coal, which mitigates the volume downside due to inevitable global commodity volatility.

Although global growth has been constrained by the slowdown in global and local economic activity, the strategic intent of the MDS remains, and volumes are projected to grow from 82.6 million tonnes in 2012/13 to 170 million tonnes in 2018/19.

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## National Development Plan (NDP) and National Growth Plan (NGP) imperatives

Transnet is an important enabler of South Africa's NDP and NGP.

### *Alignment with priority infrastructure initiatives for South Africa*

The NDP aims to address poverty and inequality by creating a favourable environment for public and private investment to create jobs and increase disposable incomes. Its imperatives include economic growth, job creation and skills transfer, infrastructure investment in rail, power, and other industry, a reduction of GHG emissions, and positioning South Africa positively. To achieve full employment, the economy will have to create 11 million jobs by 2030, requiring economic growth of 5.4 percent. The South African government has made infrastructure a major priority, recently announcing the establishment of a Presidential Infrastructure Coordinating Commission and planning investments of more than R800 billion over the next 3 years. Transnet's major infrastructure projects are important pillars of Strategic Integrated Projects (SIPs) and playing their role in delivering on economic growth and job creation objectives.

### *GHG emission commitments*

As a state-owned enterprise and one of the top 10 carbon emitters in South Africa, Transnet has placed reducing carbon emissions high on its agenda. South Africa – having set aggressive targets for carbon mitigation (a 34 percent reduction by 2020 committed at COP 15<sup>2</sup> in Copenhagen) and hosting COP 17<sup>3</sup> in Durban in 2011 – will count on state-owned entities to be role models in this regard.

With the National Treasury making significant strides towards implementing a carbon tax, and the Department of Environmental Affairs developing national marginal abatement cost curves (MACCs) and carbon budgets, carbon reduction will become a strategic imperative for major emitters like Transnet.

## 2. Business need

To deliver on MDS, GFB will need to grow its volumes transported from 82.6 million tonnes to 170 million tonnes between 2012/13 and 2018/19.

### 2.1 The shift from road to rail

One of the drivers of this shift is TFR's stated objective to capture market share from road. The rationale for this is that:

- Rail is cheaper than road for long-haul transportation of large parcel sizes, thus reducing the cost of doing business and making South African goods more competitive. The exhibit below shows the cost saving of rail over road per given route and commodity.
- Rail produces lower emissions per gross tonne kilometre than road, thus assisting South Africa's GHG emissions reduction effort.

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<sup>2</sup> The 15th Conference of the Parties (COP 15) to the United Nations Framework Convention on Climate Change (UNFCCC) – Copenhagen.

<sup>3</sup> The 17th Conference of the Parties (COP 17) to the United Nations Framework Convention on Climate Change (UNFCCC) – Durban, South Africa.

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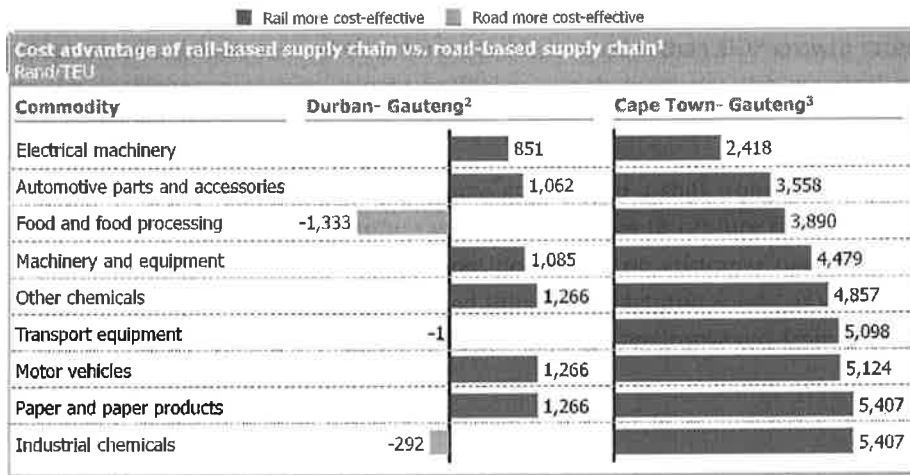
- Haulage by road damages road infrastructure, requiring a significant investment to repair the roads.

Furthermore, for developing economies like South Africa, economic growth results in a relatively higher increase in trade volumes – and therefore freight demand – than GDP growth rates would otherwise imply (i.e., a higher container volume multiplier, which measures the marginal effect of economic growth on freight volumes).

Therefore, given the clear impetus for volume growth and a shift from road to rail, delivering on the MDS depends on TFR’s ability to capture volumes. TFR plans to capture rail-friendly volumes from road by developing a comprehensive value proposition based on customer needs. Rail-friendly goods are typically mineral and mining commodities and some manufactured goods, as well as raw material inputs to manufactured goods (such as steel and cement) that are conveyed from siding to siding in large parcel sizes, over relatively long distances.

## EXHIBIT 2

### Road to rail shift has a cost advantage in most commodities in key corridors at long distances



<sup>1</sup> The supply chain comprises direct costs (transportation, warehousing, admin) and indirect costs (lost sales, obsolescence, inventory carrying cost) for exports from Gauteng to relevant port in 2009

<sup>2</sup> Land distance of ~707km from Gauteng to Durban

<sup>3</sup> Land distance of ~1250km from Gauteng to Cape Town

SOURCE: Stellenbosch University; Transnet quotes, MEX; LOGOS model

## 2.2 GFB demand increase by commodity

From the TFR Corporate Plan, freight rail volume projections per commodity from 2013-2019 are summarised in the following exhibit. The projections represent a market demand view of volumes in support of South Africa’s New Growth Path (moderated in line with port capacity and Eskom electricity supply), and they reflect a significant growth in volume for the overall general freight commodities.

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EXHIBIT 3

**MDS volumes by commodity**

<b>Business Unit</b>	<b>2013/14 Budget</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
Agriculture & Bulk Liquid	12.66	14.39	15.63	18.02	18.66	19.26
Coal	16.86	19.92	24.93	36.34	44.61	48
Manganese	8.7	8.72	11.57	13.05	15.56	17.03
Containers and Automotive	12.63	14.27	18.32	19.94	15.25	16.71
Mineral Mining & Chrome	18.53	20.32	24.45	28.89	30.11	30.57
Steel & Cement	21.84	26.66	32.37	35.23	36.47	38.89
<b>General Freight (mt)</b>	<b>91.21</b>	<b>104.27</b>	<b>127.27</b>	<b>151.46</b>	<b>160.66</b>	<b>170.45</b>
Coal (Export Coal)	77	81	81	84	95	97.5
Export Iron Ore	61.5	62.3	62.3	70.3	78.3	82.5
<b>TFR Total (mt)</b>	<b>229.71</b>	<b>247.57</b>	<b>270.57</b>	<b>305.76</b>	<b>333.96</b>	<b>350.45</b>

To capture these increases in freight demand, GFB has developed a commodity-level commercial strategy. The next two exhibits show the sources of growth from the major commodity flows and the various strategies developed to address them. See Supporting Documentation section E1 for the full 7-year commodity growth. Growth in coal volumes will be driven by Eskom's shift from road to rail on the Eskom-Tutuka and Eskom-Majuba flows and the development of new power stations. Steel and cement will be driven by a competitive pricing strategy aiming to capture domestic coal, and iron ore volume growth from the government infrastructure development plan. The focus on unlocking capacity for junior miners will capture volume growth from manganese export. Mineral volume growth will be secured through penetrative pricing strategies in the growing market.

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EXHIBIT 4

**Rationale for 79mt increased commodity demand for GFB from 91mt in 2013/14 to 170mt in 2018/19 (1/2)**

Flow	Commercial strategy	Key flows	Growth (Δ mt)	Rationale
Coal	<ul style="list-style-type: none"> <li>▪ Capture increasing coal export volumes</li> <li>▪ Eskom move from road to rail</li> <li>▪ Secure volumes through take or pay contracts</li> </ul>	▪ Export TCM/ Maputo	8.1	▪ TCM to expand due to Limpopo projects (Vale and Makhado)
		▪ Eskom – Tutuka	6.5	▪ Transition from rail containers to tippler solutions in 2 years
		▪ Eskom – Majuba	5.2	▪ Eskom road to rail migration plan
		▪ Coal - Other	11.3	▪ Sustained strong demand for SA coal due to China and India emerging as net thermal coal importers
Steel and cement	<ul style="list-style-type: none"> <li>▪ Customer-focused value proposition to secure volumes</li> <li>▪ Revision of pricing strategy</li> <li>▪ Exploring markets ex-SA</li> </ul>	▪ Coal (domestic)	3.8	▪ Driven by growth in other industries (e.g., Steel, timber)
		▪ Iron ore (domestic Sishen)	2.8	▪ Domestic and regional consumption of steel fuelling demand for iron-ore & new iron ore export from Thabazimbi to Richards Bay/Maputo
		▪ S&C - Other	10.4	<ul style="list-style-type: none"> <li>▪ Cement volumes to increase in line with SA's GDP growth (4% on average)</li> <li>▪ Freight rail is also targeting rail-friendly volumes in this sector</li> </ul>
Manganese	<ul style="list-style-type: none"> <li>▪ Unlock capacity for junior miners</li> <li>▪ Capacity review process</li> </ul>	▪ Manganese	8.3	▪ SA's share of world output set to grow with expansion projects planned by both traditional miners and junior miners

EXHIBIT 5

**Rationale for the 79mt increased commodity demand for GFB from 91mt in 2013/14 to 170mt in 2018/19 (2/2)**

Flow	Commercial strategy	Key flows	Growth (Δ mt)	Rationale
Mineral, mining and chrome	<ul style="list-style-type: none"> <li>▪ Pricing aimed at market penetration</li> </ul>	▪ Magnetite (Export Maputo)	2.4	▪ Demand from China driven by steel production
		▪ MMC - Other	9.6	▪ Gold ore and other minerals enjoy healthy demand
Intermodal	<ul style="list-style-type: none"> <li>▪ Containerise mineral products</li> <li>▪ Develop Freight hubs in key areas</li> </ul>	▪ Coal (Eskom – Camden)	2.6	▪ Demand increase driven by increased electricity usage
		▪ Containers	1.6	▪ Rail container volumes to increase in line with Freight rail's objective of increasing market share along key intermodal routes such as the Natcor
Agriculture and bulk liquid	<ul style="list-style-type: none"> <li>▪ Transnet Rail and Port capacity support for agri-logistics and rural infrastructure</li> <li>▪ Demand shift from road to rail</li> </ul>	▪ Grain, maize, wheat and foodstuffs	2.1	▪ Demand increase driven by increased electricity usage
		▪ Other	4.5	<ul style="list-style-type: none"> <li>▪ Increased over border demand from Botswana and Mozambique</li> <li>▪ Sappi expansion</li> </ul>
Total			79.2	

## 2.3 Investment history and locomotive fleet run-out in GFB

### Overview

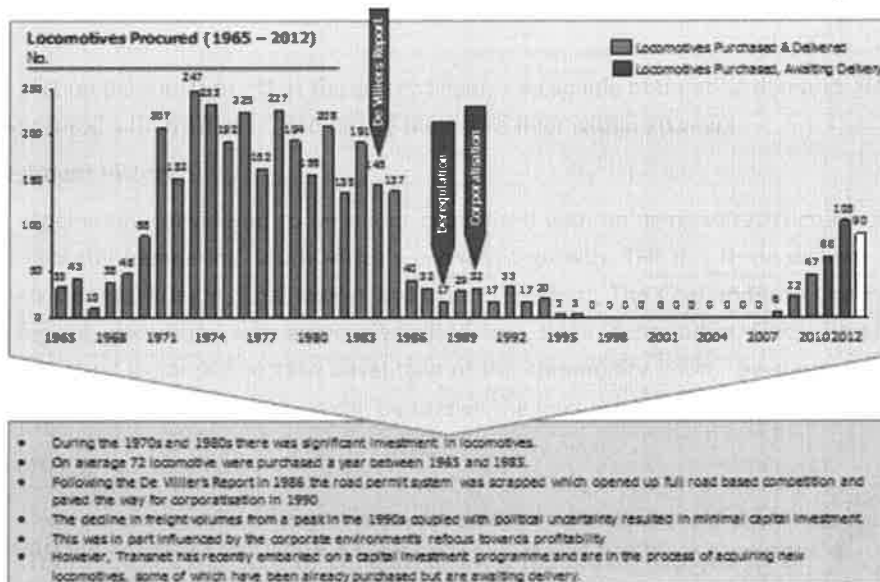
This section demonstrates that the current fleet is incapable of meeting demand. Half the fleet will need to be retired within 10 years and nearly the entire fleet within 20 years.

### Investment history

TFR is generally considered to be under capitalised with an aging infrastructure unable to deliver and consequently hampering South Africa's economic growth. TFR has three distinct areas of operations, namely General Freight, Coal Export and Iron Ore Export. The Coal and Iron Ore Export operations are ring-fenced operations with assets dedicated to a single commodity. Since 2004/05, they have been upgraded and expanded to take advantage of the commodity boom. By contrast, little has been spent on General Freight since 1992, as can be seen in the next exhibit.

### EXHIBIT 6

The decline in general freight volumes, political uncertainty and corporatisation of rail led to a significant fall in investment



- During the 1970s and 1980s there was significant investment in locomotives.
- On average 72 locomotives were purchased a year between 1965 and 1983.
- Following the De Villiers Report in 1986 the road permit system was scrapped which opened up full road based competition and paved the way for corporatisation in 1990.
- The decline in freight volumes from a peak in the 1990s coupled with political uncertainty resulted in minimal capital investment.
- This was in part influenced by the corporate environment's refocus towards profitability.
- However, Transnet has recently embarked on a capital investment programme and are in the process of acquiring new locomotives, some of which have been already purchased but are awaiting delivery.

Source: Team Analysis, Transnet Locomotive Modernisation Fleet Plan - December 2010

1

### Remedial actions to mitigate locomotive run-out

The expected useful life of a locomotive is 30 years with a full mid-life intervention at approximately 16 to 18 years, which is part of the normal life cycle of the locomotive. The average age of the TFR General Freight Locomotives is 32 years and current programs have extended the life of the workhorse locomotives to a maximum of 45 years. All the locomotives that were suitable for life extending interventions have already been targeted and the remaining locomotives are technologically incompatible.

Locomotive mid-life interventions are part of the normal life-cycle process to achieve the design life of a locomotive. The mechanical components have a life of 30 years but the electrical and electronic

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components and systems have a shorter life based on natural degradation and the rapid evolution of control technology. Electrical spares generally have a ten year guaranteed availability after which they become obsolete and often unavailable. Component replacement within the design life of a locomotive is not life extending but part of the planned total cost of ownership.

However, although Transnet policy assumes a locomotive lifecycle of 30 years, two primary strategies were adopted to mitigate locomotive run-outs and extend the useful locomotive life to 45 years.

The first implementation was to upgrade the workhorse 6E series of locomotives to the 18E series through a partial redesign, a rebuild and upgrade of components, and the replacement of the electro-mechanical control system with an electronic control system. These upgrades improved locomotive output from 170kN to 200kN and extended locomotive life by 15 years. The first of the upgraded locomotives will run out in 2017/18.

The second implementation was an upgrade program to the class 34D and 37D locomotives supplied by General Electric (GE) and General Motors (GM). These upgrade programs comprise a mix of extensive routine maintenance, rewiring and partial body repair. The differentiating upgrade feature is replacing the outdated and obsolete control systems with state of the art electronic control systems which improve control and prevent driver abuse. By analogy, it can be compared to traction control on a modern motor car that prevents wheel spin.

#### **The impact of undercapitalisation on locomotive performance**

The extension to 45 years was a consequence of not being able to afford new locomotives at the time and was not a formal restatement of policy. By extending a locomotive's life to 45 years, TFR has suffered higher faults per million kilometres, lower gross tonne kilometres, and substantially higher maintenance costs. This has decreased customer satisfaction, leading to a shift from rail to road, increased the Total Cost of Ownership (TCO) of locomotives and reduced TFR's ROA.

Life extension programmes normally range from 10 to 15 years. Beyond the 15-year period the technology becomes outdated. Although refurbishment options may seem cost-effective on the surface, as the life of a locomotive is extended, failures increase. As locomotives age, maintenance becomes increasingly difficult. Spares become difficult to obtain because of shrinking markets and outdated technologies. There are also fewer skills to maintain dated technologies, as newer entrants are unwilling to skill themselves on previous technologies. These operational inefficiencies and failure rates have compromised TFR's ability to increase its volumes and have contributed to a rail-to-road shift.

Purchasing new locomotives would allow TFR to depreciate its costs over a 30-year useful life. More importantly, due to the increased reliability that new locomotives provide, Transnet would be able to significantly increase the volumes it transports. This would drive substantially higher ROA for the business.

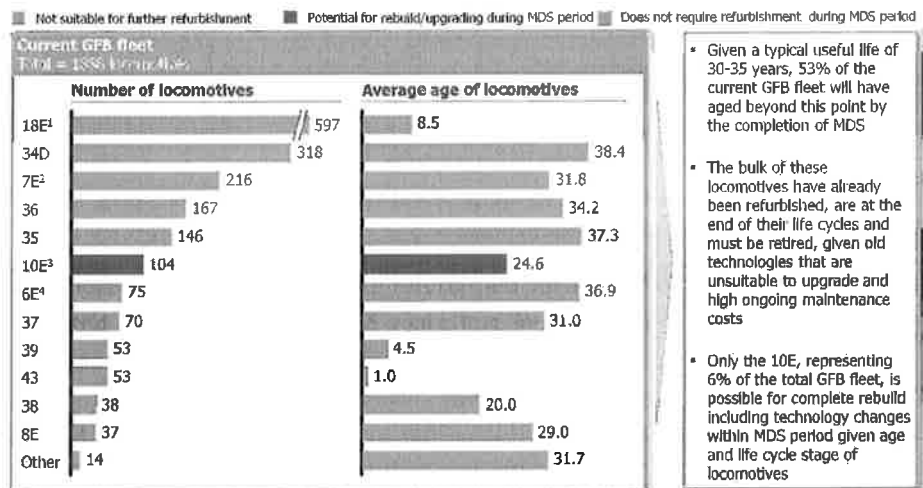
Through past refurbishment strategies, ***TFR has exhausted almost all meaningful rebuild opportunities.*** Thus, even if it were decided to extend the life of current assets once again (and suffer continued operational inefficiencies and lower ROA), TFR would not be able to do so. The next exhibit shows life extension options are limited to 6 percent of the fleet, as the aged locomotives have gone through extensive refurbishment over time to a point where they can no longer be refurbished. Even the

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“young” locomotives in the fleet are refurbished versions of older models. For example, although the 18E is listed at an average age of 8.5 years, it is, in reality, an upgraded version of the 6E, a locomotive that was purchased in the 1970s.

**EXHIBIT 7**

**The current GFB fleet is aged – life extending options have been exhausted - only 6% targeted for a complete rebuild**



- Given a typical useful life of 30-35 years, 53% of the current GFB fleet will have aged beyond this point by the completion of MDS
- The bulk of these locomotives have already been refurbished, are at the end of their life cycles and must be retired, given old technologies that are unsuitable to upgrade and high ongoing maintenance costs
- Only the 10E, representing 6% of the total GFB fleet, is possible for complete rebuild including technology changes within MDS period given age and life cycle stage of locomotives

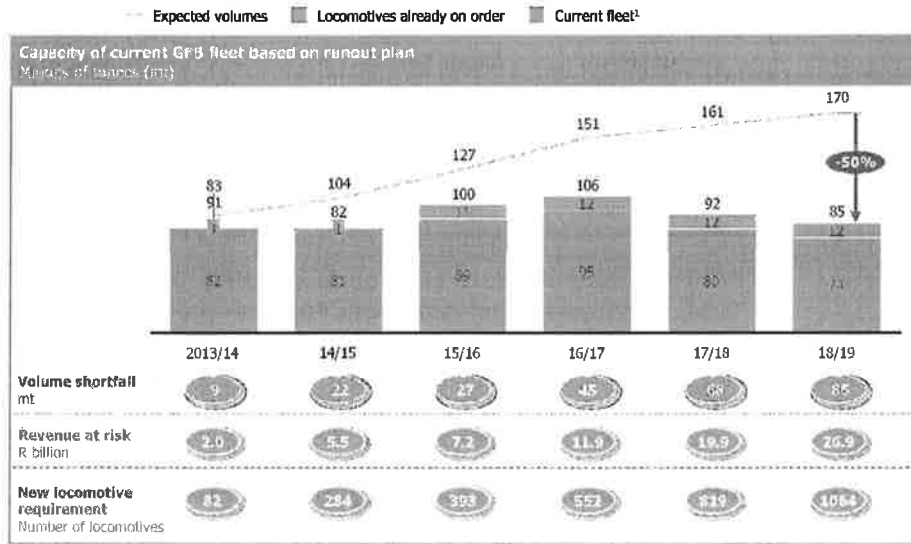
<sup>1</sup> 18Es show "young age" however are an upgraded version of 6E, which was purchased in the 1970s  
<sup>2</sup> Includes 7E, 7E1, 7E2, and 7E3  
<sup>3</sup> 10E is included in fleet plan estimate  
<sup>4</sup> Includes 6E, 6E1

**Conclusion: TFR will experience a R73 billion revenue shortfall if the procurement option is not exercised.** The next exhibit shows that, unless new locomotives are purchased, the fleet will lose 85million tonnes per annum in capacity by 2018/19.



EXHIBIT 8

**Given the current trajectory of TFR’s fleet runout plan, cumulative revenues of R73bn will be at risk by the end of MDS in 2019, with further revenue at risk thereafter**



1. Includes cascading from Export Ore and Export Coal lines to GFB

### 3. Proposed solution

#### 3.1 Overview

To meet the fleet requirements necessary to support the MDS volumes, TFR needs to procure 1064 new locomotives. However, flexibility must be built into procurement to account for two factors – demand fluctuations and operational efficiencies captured – that will ultimately affect the timing of locomotive requirements.

#### 3.2 Locomotives required to service market demand

TFR’s Locomotive Fleet Plan was presented to the Transnet Board in April 2011 and was approved. This plan provided details on the fleet’s composition; how it would run-out subject to the availability of funding; the locomotive upgrades; and the new locomotives required to achieve volumes of 110 million tonnes per annum. Since then, the plan has been updated to reflect the fleet GFB requires to meet the revised MDS volumes, which ramp up from 82.6 million tonnes in 2012/2013, to 127 million tonnes in 2015/16, to 170 million tonnes in 2018/19.

The plan’s key objectives are to:

- Maintain and expand current capacity to meet the increasing demand:
  - New locomotives required to sustain the current fleet.
  - New locomotives required to deliver the increase in volumes.

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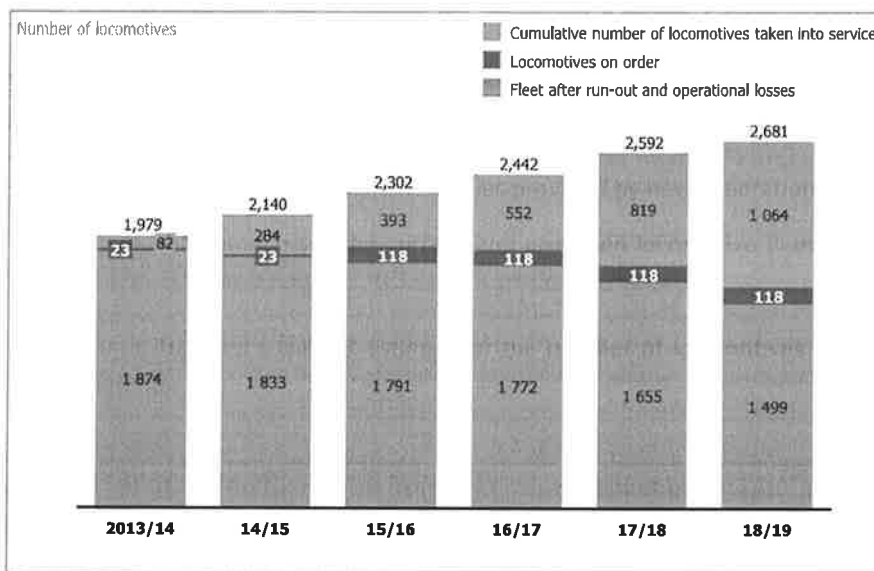
- Standardise the fleet to resolve both operational and maintenance difficulties – such as training drivers, planning route designs, and maintaining locomotives – that arise with a diverse fleet of multiple locomotive types.
- Capture improved operational efficiencies provided by new generation locomotives.

The following exhibit summarises the current and proposed locomotive fleet for general freight up to 2018/19.

The Fleet Plan is Transnet’s current estimate of the number of locomotives it will require to meet its MDS commitments.

**EXHIBIT 9**

**Locomotives required according to fleet plan**

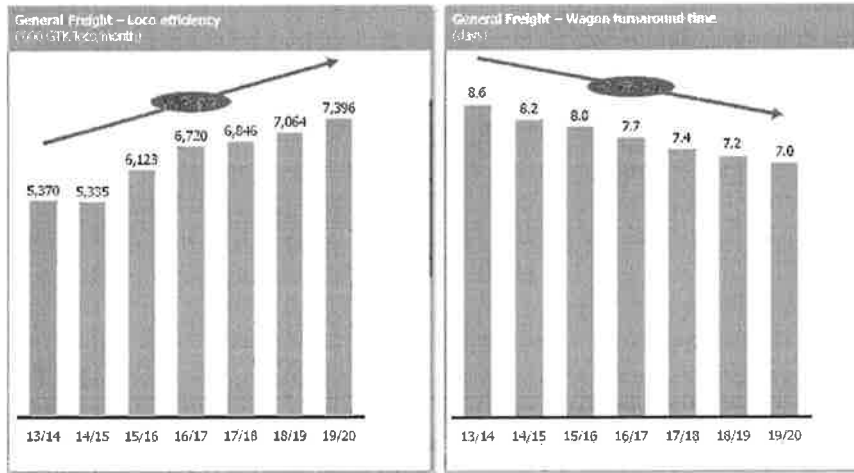


New locomotive procurement is a catalyst to unlock this demand through standardisation which increases flexibility to deliver increased operational efficiencies. This will increase customer satisfaction and enable the shift from road to rail. For example, the exhibit below shows how locomotive efficiency and wagon turnaround times would improve with a renewed fleet. Refer note below.

However, the ultimate number of locomotives needed could change over time depending on the operational efficiencies captured and volumes realised.

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**Improved operational performance and increased customer satisfaction from the upgraded fleet**



SOURCE: 2013/2014 Transnet Corporate Plan

The increase in locomotive efficiency is based on three factors; firstly, an inherent improvement in utilisation of the current fleet; secondly, in greater tractive effort per locomotive of the proposed procurements; and thirdly, operational flexibility.

**Volumes**

Increasing volumes during the MDS period are a primary driver of locomotive requirements. However, Transnet’s ability to meet the targets set out in the MDS will depend on external market conditions, including the growth of the South African economy and changes in the demand for commodities shipped. Should conditions change (e.g., modifications to Eskom’s new build timelines would have a significant impact on domestic coal requirements, and a slowdown in GDP growth would result in fewer containers shipped), locomotive demand will change. As a result, locomotive procurement timelines must be flexible enough to adapt to potential changes in volumes based on macroeconomic and demand conditions.

**Operational efficiencies**

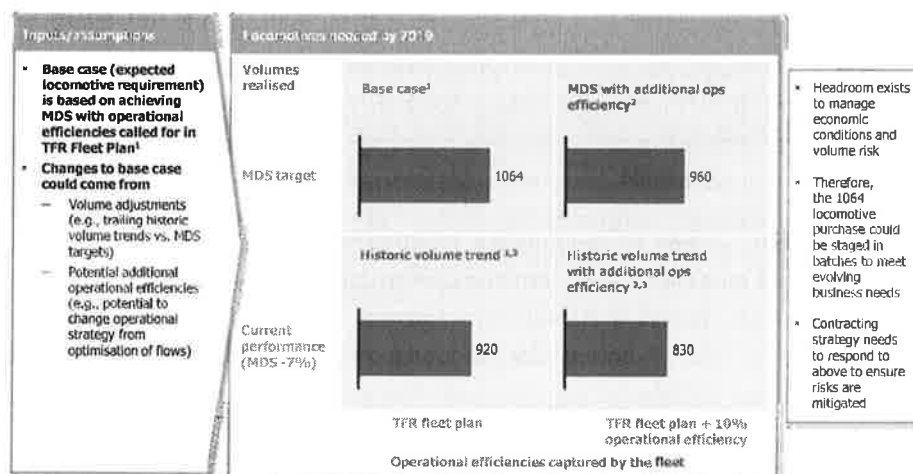
The Fleet Plan will be affected by the operational efficiencies captured from new locomotive technology. The plan takes the position that new locomotives’ improved performance will enable operational efficiencies to be captured (e.g., increased availability, reliability and operational flexibility and lower maintenance). Rightly – and conservatively – the Fleet Plan does not estimate unproven potential additional operational efficiencies that could be achieved from optimisation of flows based on the new technologies (e.g., running dual-electric locomotives across routes that previously required multiple changeovers from AC to DC technologies).

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The following exhibit shows how different assumptions of volume and operational efficiency could ultimately lead to different locomotive requirements. Thus, to account for factors that could affect how quickly locomotives are needed, Transnet must pursue a flexible procurement schedule, building in trigger points that will be staged throughout the MDS period.

## EXHIBIT 11

### The need for 1064 locomotives is determined by the realisation of volumes and operational efficiencies – which informs the procurement strategy



1 This incorporates benefits from increased availability and reliability, standardisation of the fleet and lower maintenance costs

2 Assumes potential additional 10% increase in operational efficiency as a result of a flexible new operating strategy

3 Based on 2011-2013 shortfall vs. MDS of 7.37%

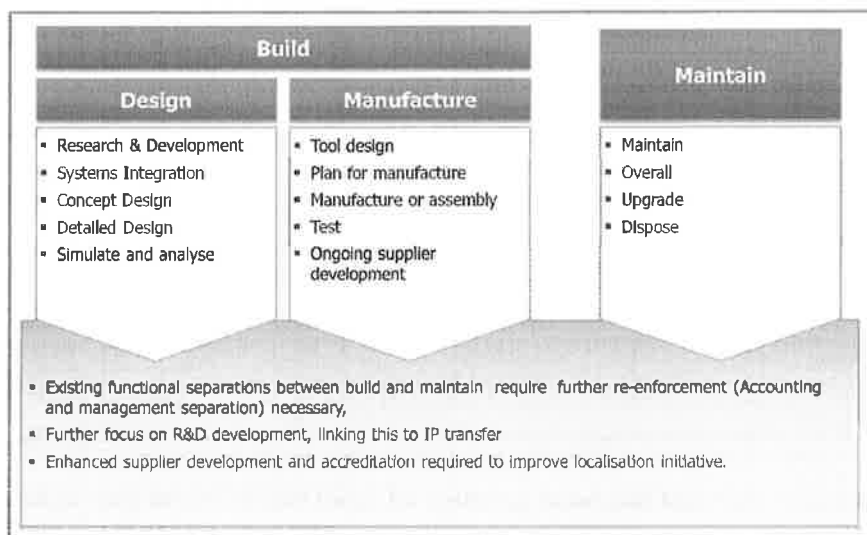
### 3.3 Role of Transnet Engineering (TE)

TE maintains the TFR fleet and in the past it has partnered with OEMs to provide local content. TE will be significantly impacted by the procurement of the 1064 locomotives – shifting from a maintenance-oriented organisation with relatively smaller builds to a manufacturing-oriented organisation. See the impact on maintenance in the section Impact of the new Deployment Plan, below.

The procurement of the 1064 is a TFR strategy to support MDS. The positioning of TE as a manufacturing entity with one or more OEMs will be influenced by the procurement as articulated in the RFP. The extent of TE's involvement with regards to its strategy will be determined by TE during its negotiation the relevant OEMs appointed as an outcome of the bidder evaluation and negotiations.

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**Greater specialisation and focus by splitting Build and Maintain functions within Transnet Engineering**



**Impact of the new deployment plan**

Locomotive deployment is never static and changes dynamically in accordance with commodity and market requirements. It is also influenced by standardisation of maintenance facilities and crew trained in operating a particular type of locomotive. The proposed new locomotives are however specified to enhance standardisation and be deployed over the entire core network with the exception of diesels going through long tunnels.

The new deployment plan will also significantly alter the way TE operates. It will have an impact on:

- **Locomotive maintenance strategy and practices.** The new locomotives will have added features that will reduce maintenance and increase reliability, requiring a contemporary maintenance regime to exploit these features. For example, the Class 34 diesels generally have a 28-day intervention where the locomotive travels to a depot, with major interventions taking place at specific depots. The new Class 43 diesels, however, have a service interval of 90 days that can possibly be extended to 180 days. Where an intervention may be required between service intervals, this would entail the technician coming to the locomotive rather than the locomotive going to the depot. As TFR improves its efficiencies, it will result in lower downtime and increased availability of locomotives.
- **Maintenance technologies.** New maintenance technologies are anticipated, include:
  - LCMS. A Locomotive Control Monitoring System continuously reports the locomotive status to a central Locomotive Control, helping achieve optimum locomotive utilisation.
  - Acoustic Bearing Monitor. This wayside equipment acoustically monitors the rolling stock bearings as they pass the wayside station, analysing the bearing “noise signature” for signs of failure. The signature provides sufficient warning that the locomotive can be

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diverted to a depot for bearing replacement in a timely fashion. This extracts the maximum possible life out of the bearing as opposed to the conservative time-centred replacement that is the current practice.

- **Skills and staffing.** The skills needed will change from a mechanical maintenance paradigm (electrical and diesel fitter) to one of an electronic diagnostician. Should this change not be contextualised and internalised and old maintenance practices continue, reliability and availability will be compromised and locomotive life will be lessened. Although maintenance staffing requirements will be reduced, potential exists to reallocate these resources to build-based activities.
- **Depot evaluation.** Current, older locomotives must be serviced for several weeks at a time. Even for some of the heaviest maintenance, a new locomotive is expected to be in a workshop for no more than 72 to 96 hours. This will bring about a shift in the way TE conducts maintenance operations. Today, Transnet has over 130 locations throughout the country. In the future, TE will require a smaller number of very large super-depots that can handle a range of activities, including all types of major component exchange for both diesel and electric locomotives. Additional smaller facilities will still be required for servicing, fuelling, preparation, and vehicle recovery in case of breakdown.

See the Supporting Documentation section E5 (Deployment Plan) for more detail on TE’s new maintenance philosophy and proposed changes.

### 3.4 Other benefits to South Africa

#### Lower costs of transportation

As described in the Business Needs Section, a more efficient and reliable fleet will support the transition from road to rail, which is typically more cost-effective for transporting goods more than 300 kilometres. This shift will lower infrastructure repair costs (given the damage to roads from the current trucking of commodities like coal) and contribute towards a reduction in road traffic fatalities.

#### Lower costs of emissions per tonne

Modern locomotive technologies will also result in energy savings – (8- 10% lower consumption for diesels and 18% energy savings for electrics). Therefore, this will result in savings of over 31,000<sup>4</sup> tonnes of CO<sub>2</sub> and R5<sup>5</sup> million per year by 2018/19 for diesel locomotives and potential additional savings in electrics. Today’s diesel fleet is more than 30 years old and therefore not emission-efficient. The electric locomotives, which haul approximately 86 percent of the total gross tonne kilometres moved per annum, are not considered heavy polluters. However, given the coal pollution from Eskom electricity generation, total emissions attributable to the locomotives are higher. The new electricity-increased energy efficiency would lessen their environmental impact, as well as the demand on the power grid.

Although meeting Transnet’s MDS targets would naturally entail increased locomotive use – and thus increased emissions – the new locomotives’ greater energy efficiency will help offset this. The new diesels and electrics would, at a minimum, meet United States Environmental Protection Agency Tier 3 and Tier 4 standards when they come into effect. For diesels, the new locomotives are expected to be

<sup>4</sup> Savings over the current locomotive emissions per MGTK

<sup>5</sup> Given the expected tariff structure from 2015

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10 percent more efficient in energy conversion than current diesels. In electrics, the Ore Line 9E and the new 15E series are at least 18 percent more efficient in energy conversion. A similar improvement is expected in the new general freight electric workhorse with AC traction motors that will replace the 18E series with DC traction motors.

## 4. Detailed analysis of recommended option

### 4.1 Financial analysis overview

#### 4.1.1 Overview

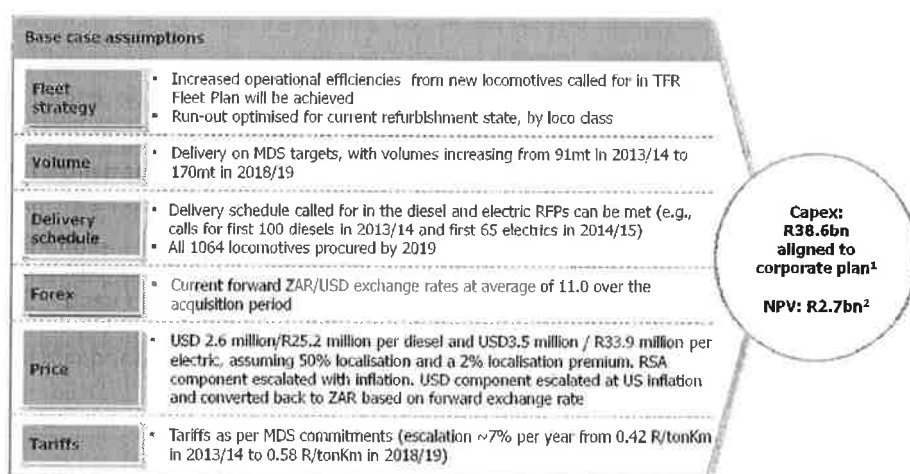
The capital expenditure for the 1064 locomotive procurement transaction is expected to be R38.6 billion, assuming current exchange rate assumptions hold. Using TFR's hurdle rate of 18.56 percent, the NPV of the transaction is R2.7 billion; applying TFR's WACC of 12.56%, would increase the NPV to R34.1 billion. The following sections describe the approach used to calculate the NPV and expected capital expenditure.

#### 4.1.2 Base case NPV

Key assumptions into this base case NPV calculation are in the exhibit below.

#### EXHIBIT 13

**The NPV of the 1064 locomotives transaction is R2.7bn (hurdle rate) or R34.1bn (WACC)**



<sup>1</sup> Escalated capex for the acquisition of 1064 locomotives in 2013/14 - 2018/19

<sup>2</sup> Calculated using hurdle rate of 18.56%; NPV would be R34.1bn if TFR's WACC of 12.56% is used

#### 4.1.3 Fleet plan versus RFP delivery timelines

The number of locomotives required to deliver MDS is based on TFR's Fleet Plan and planned run-out strategy. It is based on the assumption that TFR will capture operational efficiencies from new

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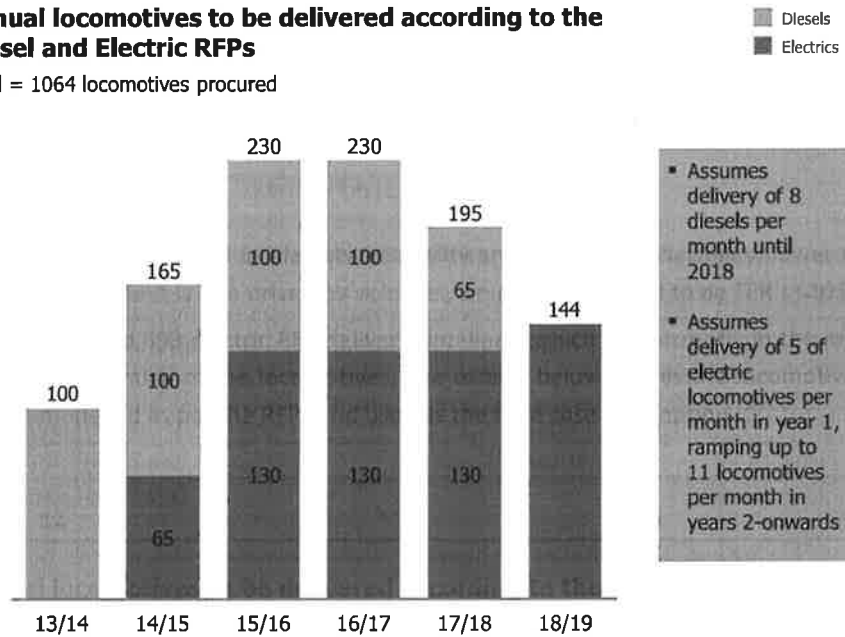
locomotives (e.g., increased availability, reliability and operational flexibility, lower maintenance costs). This fleet requirement is also driven by volumes, which are assumed to be TFR's MDS targets for GFB.

The 465 diesel and 599 electric RFP delivery timelines, which are currently in the market, were used to understand the timing of the locomotives. The exhibit below details the locomotive delivery timelines that were modelled as per the RFPs and used as the base case assumption.

**EXHIBIT 14**

**Annual locomotives to be delivered according to the Diesel and Electric RFPs**

Total = 1064 locomotives procured



- Assumes delivery of 8 diesels per month until 2018
- Assumes delivery of 5 of electric locomotives per month in year 1, ramping up to 11 locomotives per month in years 2-onwards

**4.2 Approach to revenue calculations**

Revenues were calculated based on the incremental volumes attributed to the 1064 procured locomotives and the average forecasted GFB tariffs from the MDS 2012/13. Volumes to be attributed to the 1064 locomotives were calculated using a bottom-up approach, which used historical GFB productivity (million gross tonne kilometres, MGTK) for each of the locomotive types and the number of locomotives within each type aggregated to a fleet level productivity capacity. The incremental volumes for the 1064 procured locomotives were calculated on the difference between the capacity required to achieve the MDS and the existing fleet capacity, subject to the maximum capacity of the procured locomotives.

**Bottom-up volume calculations based on locomotive productivity**

The total MGTK was transformed into net tonnes volumes using a historical GTK/NTK ratio and forecasted average distance using the MDS forecasts. Locomotive productivity assumptions for locomotives without an applicable historical productivity were based on similar locomotive types within the fleet. The productivity estimates for the new procured locomotives were based on the historical

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average productivity levels achieved by the TFR fleet. The existing fleet breakdown and productivity for 2013/14 is detailed in the exhibit below.

EXHIBIT 15

Existing fleet GFB at 2013/14			
Fleet type	Number of locos	GTKm per loco	Cumulative GTKM
6E	75	33	2 507
7E	58	130	7 520
7E1	48	107	5 137
7E2	45	94	4 217
7E3	65	98	6 351
8E	37	1	19
10E	104	133	13 795
14E	8	41	330
18E	597	57	34 026
33D	5	8	38
34D	318	24	7 689
35D	146	7	1 006
36D	167	1	244
37D	70	20	1 372
38D	38	22	827
39D	53	54	2 852
43D	55	80	4 395
<b>Total</b>	<b>1 889</b>	<b>49</b>	<b>92 324</b>

Volume capacity was calculated and split across three different categories:

- TFR fleet requirement capacity (based on TFR fleet requirements, Supporting Documentation Section E4-7-Year Locomotive Requirement).
- Existing TFR fleet capacity (based on the TFR fleet run-out schedule and expected locomotives on order, Supporting Documentation Section E2 -General Fleet Runout).
- 1064 procured locomotives capacity (based on the procurement assumptions above).

The incremental volumes for the 1064 procured locomotives were calculated on the difference between the capacity required to achieve the MDS and the existing fleet capacity, subject to the maximum capacity of the procured locomotives. The existing fleet capacity also accounts for lost capacity due to locomotive write-offs due to incidents, with 7 diesels and 8 electric locomotives assumed to be written off each year. The productivity lost was based on average locomotive productivity for diesel and electric locomotives.

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EXHIBIT 16

Productivity MGTK (2013/14 to 2018/19)						
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>MDS required capacity</b>	<b>86,401</b>	<b>98,479</b>	<b>120,811</b>	<b>138,409</b>	<b>148,467</b>	<b>158,434</b>
Existing fleet capacity	79,403	79,697	98,478	101,730	90,848	86,130
Written-off (lost) capacity	1,101	2,201	3,302	4,446	5,591	6,736
<b>Required capacity</b>	<b>8,099</b>	<b>20,983</b>	<b>25,634</b>	<b>41,126</b>	<b>63,211</b>	<b>79,040</b>

**Translation into volumes required**

The aforementioned required capacity amount is converted into required net tonnes based on the average distance travelled for GFB traffic and the historical ratio of GTK to NTK.

The table below represents the incremental volumes attributed to the 1064 locomotives. TFR experience a large volume shortfall in the first 3 years due to DC locomotive shortfalls. Without planned mitigation strategies, this shortfall will persist till 2018/19 given that TFR fleet requirements are assessed as of the beginning of the fiscal year but locomotives would be delivered throughout the year (e.g., in 2018/19, 1064 locomotives are required at the start of the year, but the 1064<sup>th</sup> locomotive will only be expected later that year). Refer to Section 5 on Risks for a description of TFR's planned mitigation strategy.

These volumes can be combined with the expected tariffs for GFB during the MDS period, as per the exhibit below:

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**EXHIBIT 17**

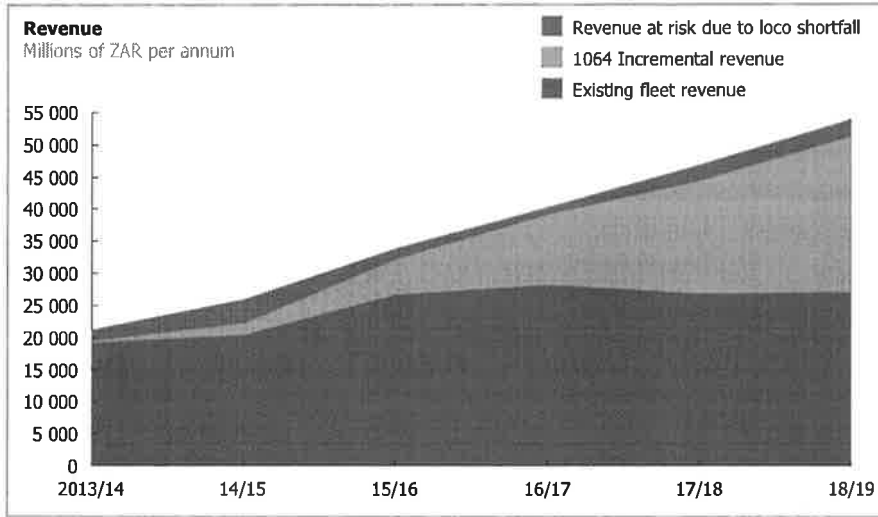
<b>Volumes (net tonnes)</b>						
	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
<b>MDS target</b>	<b>91</b>	<b>104</b>	<b>127</b>	<b>151</b>	<b>161</b>	<b>170</b>
Existing fleet	83	82	100	106	92	85
<b>1064 locomotives</b>	<b>1</b>	<b>7</b>	<b>21</b>	<b>41</b>	<b>60</b>	<b>77</b>
Volume shortfall	7	15	6	4	9	8

As per the exhibit below, putting volumes and tariffs together yields a view of revenues – MDS targets, revenues allocated to the existing fleet, revenues derived from the new locomotives, and potential shortfalls.

**EXHIBIT 18**

<b>GFB tariff average (R/Net tonKm)</b>					
<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
0.42	0.45	0.48	0.50	0.54	0.58

**The 1064 locomotives are instrumental in capturing MDS target revenues, but a revenue shortfall will persist due to procurement timelines lagging target demand**



**4.3 Approach to cost calculations**

Cost schedules were calculated for the entire life cycle of the 1064 fleet split into the categories listed below, including: a) Total cost of ownership (TCO); and b) capital and other costs, including wagon cost, infrastructure cost, overheads, and tax.

**4.3.1 Total cost of ownership of new locomotives**

The TCO of locomotives was calculated using bottom up analysis and expert input and has the following components:

- Purchase price.** As mentioned above, the purchase price is assumed to be R25 million (US \$2.6 million) for a diesel locomotive and R34 million (US \$3.5 million) for an electric locomotive in 2013/14. The purchase price of both diesel and electric locomotives assumes a conservative 50 percent localisation component with a 2 percent localisation premium applied. The localisation component ramps up over time. The USD price component was forecasted by escalating at USD inflation and converting back to ZAR using forward ZAR/USD hedge rates. The local price component was escalated at South African PPI. Refer to Exhibit 20 for the TCO breakdown and Exhibit 21 for the purchase price cost breakdown. An important consideration in the negotiation of the purchase price is the amortisation of the development costs over the quantity ordered demonstrated in Exhibit 22. The analysis indicates that the procurement order quantity for the 1064 locomotives will significantly reduce the development costs component of the locomotive price and has been factored into determine the price estimates.

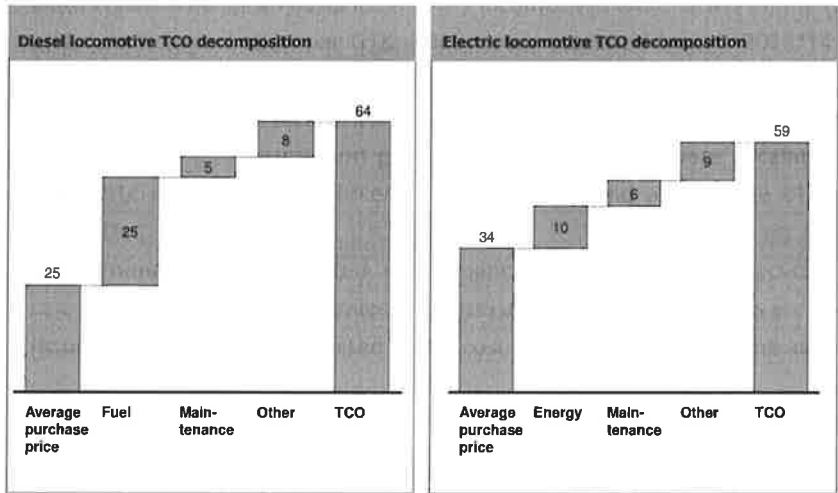
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- **Diesel costs.** The diesel costs for the 465 locomotives were based on the GTK of the locomotives and diesel consumption per GTK. Prices were escalated from a 2013/14 price of R11 per litre escalated at R/USD forward rate percentage change and US inflation.
- **Electricity costs.** The electricity costs for the 599 locomotives were based on the GTK of the locomotives and consumption per GTK. Electricity costs were escalated at forecasted Eskom tariff rate increases of 8 percent up to 2017/18 and an average of forecasted CPI and PPI thereafter.
- **Maintenance costs.** Expected maintenance cycles over the lifecycle of locomotives were calculated. The cash flow profiles for diesel and electric locomotives are presented in Exhibit 23.
- **Insurance.** Assumes an expected wreck cost per year escalated at the average of CPI and PPI.

EXHIBIT 20

**Electric locomotives have a lower TCO than diesels, but their upfront cost is higher than diesel locos**

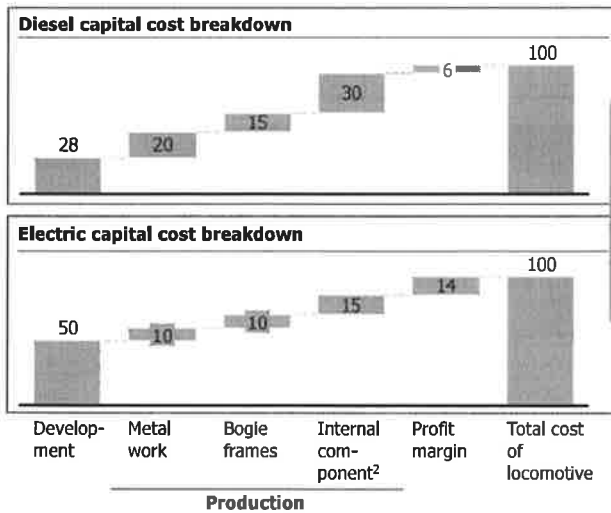
ZAR, millions



SOURCE: Transnet 1064 Loco Business Case, Expert Interviews

EXHIBIT 21

**Development costs are the largest components of total capital cost of both diesel and electric locomotives**



PRELIMINARY

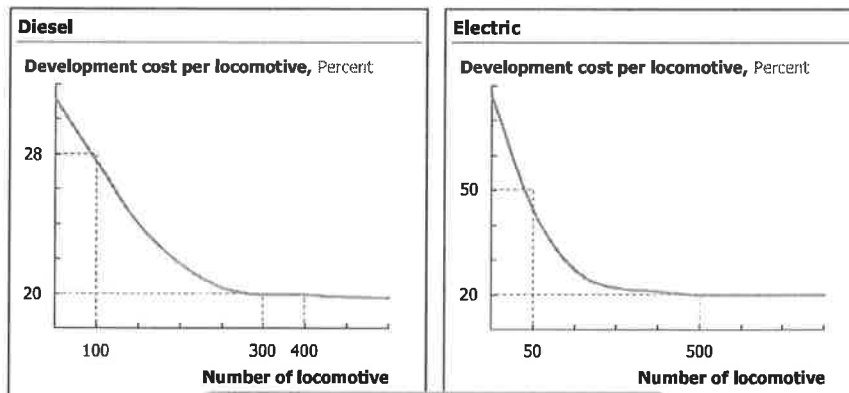
- Majority of savings on purchase price are from development (i.e., design, type testing and other one off costs)
- Electric locomotives will have a higher proportion of development cost due to greater customization

<sup>1</sup> Based on standard locomotives with an order of 100 locomotives delivered  
<sup>2</sup> Traction motor, wiring, alternator, control system, etc.

EXHIBIT 22

**Electric locomotive price is more sensitive to order size than diesel locomotives**

PRELIMINARY



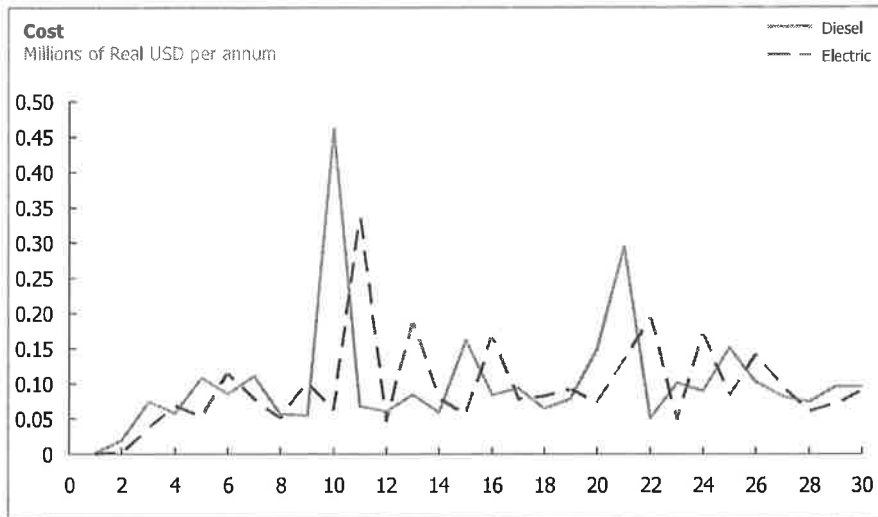
- Development costs are greater proportion of total cost of a locomotive in electric vs. diesel
- Development costs are fixed and thus decline on a per locomotive basis as the order size increases
- Therefore, order size will be a bigger driver of electric locomotive price compared to diesel

SOURCE: Source

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EXHIBIT 23

**Maintenance TCO for Diesel and Electric locomotives for a 30 year lifecycle**



**4.3.2 Capital and other costs**

Capital cost outflows for the procured locomotives have been structured with an aggressive payment strategy of 90 percent of the locomotive purchase is paid on delivery of the locomotive and 10 percent on acceptance. Upfront costs of R250 million for diesel locomotives and R300 million for electric locomotives will be paid on signing the supplier contract and will offset against the cost of the first batch purchased. The purchase price of both diesel and electric locomotives assumes a 50 percent localisation component, with a 2 percent localisation premium applied.

In addition to modelling the capital costs for locomotives to be procured for the 1064, associated wagon and infrastructure costs have been allocated as per the 2013 Transnet Corporate Plan – the exhibit below shows the capital costs for diesel and electric locomotives, wagons, and infrastructure.

EXHIBIT 24

	Capital expenditure schedule							
Rm Cashflow	PV	13/14	14/15	15/16	16/17	17/18	18/19	19/20
Diesels	8 314	2 433	2 552	2 709	2 881	2 064	0	0
Electrics	12 252	300	1 860	4 665	5 042	5 360	6 284	217
Wagon capex	10 017	3 022	3 417	3 462	3 228	2 559	649	0
Wagon copex	1 583	3	23	70	151	242	339	420
Infra capex	9 513	1 026	2 787	3 379	3 023	3 092	4 967	0
Infra copex	8 978	60	384	795	1 249	1 627	1 837	2 253
<b>Total</b>	<b>50 656</b>	<b>6 844</b>	<b>11 023</b>	<b>15 079</b>	<b>15 575</b>	<b>14 944</b>	<b>14 075</b>	<b>2 890</b>

- **Wagon costs:** Costs were calculated based on the expansionary number of wagons required to achieve 170 million tonnes (16,459 wagons) based on the proposed capex budget in the Supporting Documentation Section E12 (Wagon Requirements). Opex and copex costs are incurred according to incremental volumes moved.
- **Infrastructure costs.** Costs were calculated using the total required expansionary GFB infrastructure to deliver 170 million tonnes based on the latest corporate plan. Infrastructure copex costs are incurred according to incremental volumes moved.
- **Overhead costs.** GFB overhead costs were calculated using actual 2011/12 TFR overhead costs allocated according to the ratio of GFB personnel to total TFR personnel. Procured 1064 overhead costs were allocated from the GFB overhead costs on the ratio of 1064 incremental volumes to GFB volume required.
- **Tax costs.** Tax costs were based on an assumed tax rate of 28 percent and calculated against net cash flows (revenues – costs) and adjusted for capital cost distributions of locomotive, wagons, and infrastructure expansion. The capital costs for locomotives and wagons were depreciated over 5 years since the purchase date and infrastructure has been depreciated over 30 years. Tax credit income has been included as a cash inflow in the following year of accrual.

#### 4.4 Breakeven points for NPV: volumes and tariffs

The business case proves to be neutral at the following volumes and tariffs:

- Volume (everything else fixed). CAGR of 11.7 percent from 2013/14 to 2018/19(160 mt p.a. realised in 2018/19 vs. 170 mt p.a. as per MDS), which is below the MDS target of 13.3 percent.
- Tariffs (everything else fixed). CAGR of 6.1 percent from 2013/14 to 2018/19, which falls directly between CPI (5.6 percent) and the MDS target (6.6 percent).


### 5. Treasury Considerations

The acquisition of 1064 locomotives will cost R38.6 billion and has been included in the overall MDS funding amount of R86.5 billion over the next 6 years. Consequently, the funding options will include those in the borrowing plan as contained in the approved Transnet Corporate Plan 2013/2014. A mixture of cash generated by operations and external borrowing will be used to fund the acquisition. Two-thirds are assumed to be financed using cash generated by operations, and about R13 billion will need to be raised externally. The external funding will be raised utilising both the Global Medium Term Note programme for dollar funding and established domestic sources for Rand funding – e.g., the Domestic Medium Term Note programme. In addition, options like development finance institutions (DFIs) and export credit agencies (ECAs) will be considered to lower the cost of funding.

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Funding plan



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**Objectives of Funding Plan**

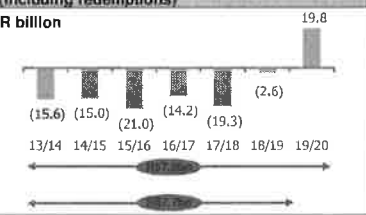
- Ensure sufficient cash is available to meet operational and capital requirements;
- Diversify funding sources;
- Raise cost effective funding;
- Manage interest rate, foreign exchange and refinancing risk;
- Manage liquidity risk; and
- Reduce WACD.

**Focus for 2013/14**

- Continue to use the domestic capital markets as a primary funding source with emphasis on the following:
  - Issue new long term fixed bonds;
  - Issue medium term floating rate note bonds;
  - Use commercial paper for working capital needs.
- Continue utilising Export Credit Agency and DFI funding;
- Upsize the GMTN Programme to \$6bn and issue a Global ZAR bond under the Programme;
- Implement a Debt Redemption Fund;
- Explore Project Finance for MDS mega projects;
- Explore opportunistic bank and private placement funding.

**Seven Year Funding Requirement (including redemptions)**

R billion



Year	Funding Requirement (R billion)
13/14	(15.6)
14/15	(15.0)
15/16	(21.0)
16/17	(14.2)
17/18	(19.3)
18/19	(2.6)
19/20	19.8

← R122.8 billion (13/14 to 18/19) →

The planned new fleet is estimated to cost R38.6 billion using escalated calendar year 2013 prices. The acquisition of the 1064 locomotives will be funded using a mixture of cash generated by operations and external borrowings. Assuming that two-thirds will be financed using cash generated by operations, about R13 billion will need to be raised externally.

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## 5.1 Funding options

### EXHIBIT 26: POTENTIAL FUNDING SOURCES FOR MDS

Potential funding sources		
	Available facilities	Expected drawdowns 2013/14
<b>Development Finance Institutions (DFIs)</b>		
African Development Bank A loan	R1,7 billion	R1,7 billion
<b>Export Credit Agency (ECAs)</b>		
US Exim Tranche 2	R1,3 billion	R1,3 billion
<b>Global Medium-term Note (GMTN)</b>		
Available under the GMTN Programme <sup>1</sup> US\$250 million	(R2 billion)	R2 billion
<b>Domestic Medium-term Note (DMTN)</b>		
Available under the DMTN Programme (Commercial Paper (CP) and Bonds)	±R22,5 billion	
• Available for bond issuance		R1,4 billion
• Available for CP issuance		R3,3 billion
Bank loans (Domestic banks)		R1,9 billion
DFIs/ECAs		R1,0 billion
Committed facilities available within 24 hour notice	R5,0 billion	
<b>Total</b>	<b>R33,0 billion</b>	<b>R15,6 billion</b>

1. The GMTN will be updated to US\$6 billion in 2013/14, catering for more issuance under the Programme.

Transnet will further explore new funding solutions, investors and markets such as:

- Issuing bonds in other markets (Yen, US Dollar, Euro, Australian Dollar, Swiss Franc, Sukuk markets). The cost of the possible funding to be raised will be evaluated relative to Rand funding
- Issuing a Global ZAR Bond in the international debt capital markets;
- Project bonds and project finance;
- Extending the duration of Transnet's existing domestic bonds, as well as the issuance of new types of bonds for purposes of building Transnet's yield curve; and
- Expand Development Finance Institution (DFIs) and Export Credit Agency (ECA) financing, thereby further diversifying Transnet's funding sources

Based on the above, Transnet's ability to meet its short and long-term funding requirements is adequate and will not impact the going concern financial position of the Company.

PAGE 2

### EXHIBIT 27

Amount in R billions	13/14	14/15	15/16	16/17	17/18	18/19	19/20	Total expenditure
Diesel locomotives - 465	2.43	2.55	2.71	2.88	2.06	-	-	12.63
Electric locomotives - 599	0.30	1.86	4.67	5.04	5.36	6.28	0.22	23.73
Locomotive contingency	0.17	0.27	0.45	0.49	0.46	0.39	0.01	2.24
<b>Total</b>	<b>2.90</b>	<b>4.68</b>	<b>7.83</b>	<b>8.41</b>	<b>7.88</b>	<b>6.67</b>	<b>0.23</b>	<b>38.60</b>

#### 5.1.1 Funding risks

The fleet cost is based on a set of assumptions including the timing of contracting, ZAR/USD exchange rate, and the mix between local and foreign content, interest rate, volume growth, revenue growth, inflation, operational efficiencies, and steel prices. Any negative movement on the base assumptions exposes TFR to a potential risk. In addition to the abovementioned risks and sensitivities (see Section 7), the following risks and implications need to be closely monitored:

- Implications to funding of actual versus planned cash flows.
- The implications of Basel III on swap costs, terms and conditions of derivative transactions, and availability and quantum of credit lines, monitor ETC and impacts on cash interest cover, gearing and S&P liquidity ratio.

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## 5.2 Forex risk mitigation

Forex risk mitigation will be imperative for a transaction of this size. A change in the Rand to US dollar exchange rate of 10 percent would represent a R1.2 billion impact based on the amount of localization assumed. Given 15 percent devaluation of the rand against the US dollar over the past year alone, such volatility is not unrealistic. Forward exchange rate projections suggest a devaluation of the Rand versus the US dollar over the next few years.

### Transnet's hedging approach

Transnet's preferred option is to enter into Rand based supplier agreements with OEMs, with the hedges undertaken by the OEMs themselves. However, even when hedging is conducted by the OEM, Transnet ultimately pays for the cost of hedging, which is factored into the purchase price. The main advantage of a Rand based supplier agreement is the elimination of volatility in the Group's financials and the non-utilisation of bank credit lines for hedging purposes.

Should Transnet not be in a position to enter into a Rand based agreement, all foreign exchange exposures will have to be hedged as per the Board approved Financial Risk Management Framework (FRMF). It is anticipated that Transnet should be in a position to obtain the necessary credit lines to hedge the FX risk exposures. However, this cannot be guaranteed, as a number of banks will have to be approached to diversify their risk exposures and the banks will have to obtain approval from their respective credit committees. However, there is a risk that the magnitude of this transaction will add pressure to the availability of hedging lines for future MDS requirements.

Long dated hedges as anticipated in this transaction are expensive due to banks' capital requirements. The exhibit below shows Transnet Treasury's view of a ZAR/USD forward curve including the cost of hedging, used in the business case.

#### EXHIBIT 28

Spot	1 Year	2 Year	3 Year	4 Year	5 Year	6 year	7 year
\$R9.13	\$R9.59	\$R10.04	\$R10.52	\$R11.00	\$R11.48	\$R11.98	\$R12.55

### Impact of localisation

Localisation of production is a natural hedge. Exposure would increase with lower a lower level of localisation (and, by extension, decrease with a higher level of localisation). The exhibit below shows foreign currency exposure for a 10 percent devaluation scenario to be ~R1.2 billion given 70% localisation of component manufacture. Without any localisation, exposure under this scenario would be ~R4 billion, suggesting a localisation benefit of ~R2.8 billion.

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EXHIBIT 29

	Forward Rand value of imported component at current market rates	Impact of a 5% weakening of Rand against USD	Impact of a 10% weakening of Rand against USD
Assuming a 60% localisation	R15.4 bn	R0.8 bn	R1.5 bn
Assuming a 70% localisation	R11.6 bn	R0.6 bn	R1.2 bn
Assuming a 80% localisation	R7.7 bn	R0.4 bn	R0.8 bn

Thus, hedge accounting will be used to minimise exchange rate volatility on the Group income statement, but localisation is a critical lever to reduce the ultimate cost of the hedge.

## 6. Operational readiness

### 6.1 HR plan

A procurement event of this magnitude will require a significant increase in in GFB's workforce. GFB's 7-year human resource requirements are part of a TFR-wide workforce plan as train drivers and assistants are often interchangeable across TFR's businesses. All train personnel are sourced from Transnet's School of Rail.

According to TFR's 7-Year Man Plan (see Section E10)2012 figures, TFR has a driver shortfall of 529. It is also estimated that over the life of MDS, TFR will require an additional 3 065 drivers from current levels. However, TFR only has capacity to train on average 500 drivers per year and, at its peak in 2015-2016, TFR will require an additional 791 drivers, resulting in shortages.

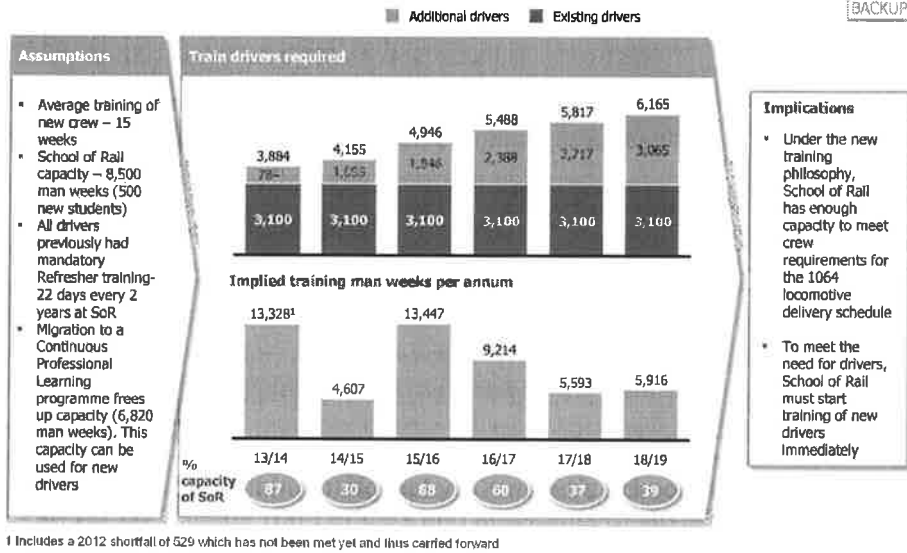
TFR has transitioned from a mandatory Refresher Training every 2 years to a Continuous Professional Learning programme, cutting training time from 22 days every 2 years at the School of Rail to 6 days every 2 years on site. This will effectively free up capacity at the School for additional training of new recruits.

The exhibit above shows the drivers required every year over the MDS period, highlighting how many additional drivers need to be trained. It also shows the School's capacity requirements over the period. The new training philosophy will give an additional 6,820 man weeks (80 percent increase) of capacity to the facility, allowing it to meet TFR requirements. However, TFR will need to start training new drivers immediately to close the driver shortfall before the peak demand period in 2015/16.

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EXHIBIT 30

**Under the new training philosophy, Transnet's School of Rail can supply enough train drivers and assistants to sustain the 1064 delivery schedule**



**6.2 Infrastructure dependencies**

To deliver against MDS volumes, the 1064 locomotives must perform as part of a railway system well equipped to move such volumes. Therefore, sustaining and expanding investment in infrastructure and other key projects within the system will be critical to support MDS delivery.

**Infrastructure dependencies**

Locomotive deployment is tightly mapped to the railway infrastructure and routes. Route characteristics (e.g., power source on route, axle loading capacity, and the presence of long tunnels or tight bends) largely determine the type of locomotive that can be used on a particular route.

As part of the MDS' planned R308 billion spend, TFR will also invest in projects to sustain and expand rail network capacity and footprint. The strategy pursued by the Rail Network over the 9-year planning horizon covers two key strategic focus areas to enable volume growth and systemically improve the safety of operations. Programmes aim to:

- Expand infrastructure**, creating capacity ahead of demand. Supporting Information Section E12 (Infrastructure Plans) depicts the current status of the network in terms of axle loading and electrification, respectively, and Section F11 depicts the future status of the network in terms of axle loading and electrification are also depicted in Section E11.
- Sustain existing infrastructure** through accelerated maintenance programmes. In addition to the railway network, there are also programmes for the sustenance and expansion of supporting

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infrastructure. The tables in the Supporting documentation Section E11 are extracted from the TFR Business Plan 2013/14 – 2018/19 and detail both the expansion and the sustaining maintenance programmes for Perway, Electrical, Signalling, and Telecommunications.

The exhibit below shows key strategic projects planned over the 7-year period involving both the extension of the electrified network and the axle loading of specific routes.

EXHIBIT 31

**Key infrastructure programmes will enable the 1064 locomotives' delivery of expected volumes**

ZAR, billions

Rail line section	Total seven year spend (ZAR bn)	Timeline
Eskom and coal line to 91mtpa+	8	2012-2019
Waterberg	5	2012-2020
Ore line to 90mtpa	6	2012-2019
Swazi rail link (SA Portion only)	0	2012-2015
Manganese General Freight 16mtpa	11	2012-2019
Gauteng Freight ring	0	2018-2019
Terminals	0	2012-2018
Maputo link	1	2012-2016
Natcor	0	2013-2017
<b>Grand total</b>	<b>31</b>	

### Expansionary infrastructure expenditure timeline

**Bold text** = interdependencies with GFB volume expansion

BACKUP

Business focus	Preparation for growth (zero to two years)	Sustained growth (two to five years)	Consolidate (five to seven years)
Infrastructure expansion: Perway/axle loading	<ul style="list-style-type: none"> <li><b>Increase axle loading</b></li> <li>Increase coal line capacity to 81mt</li> <li><b>Eskom 32mt project</b></li> <li><b>Partial doubling of RCB-Nsezi line</b></li> <li><b>Waterberg – Phases 2-5 additional passing loops</b></li> <li><b>Manganese 16mtpa (Hotazel – Coega)</b></li> <li>Swazi rail link 15mt</li> <li><b>Increase axle loading on Groenbult– Hoedspruit</b></li> </ul>	<ul style="list-style-type: none"> <li>Increase axle loading</li> <li>Increase coal line capacity to 81mt</li> <li>Coal 91mt project (including Overall tunnel doubling)</li> <li><b>Eskom 32mt project</b></li> <li><b>Geluksplaas grade separation</b></li> <li><b>Line tripling Broodsniersplaas-Ermelo</b></li> <li><b>Waterberg – Phases 2-5 additional passing loops</b></li> <li><b>Manganese 16mtpa (Hotazel – Coega)</b></li> <li><b>Ore line Phase 2A to 82.5mtpa</b></li> <li>Swazi rail link 15mt</li> </ul>	<ul style="list-style-type: none"> <li><b>Increase axle loading</b></li> <li><b>Overall tunnel doubling</b></li> <li>Coal 91mt project (including Overvaal tunnel doubling)</li> <li><b>Eskom 32mt project</b></li> <li><b>Line tripling Broodsniersplaas-Ermelo</b></li> <li>Swazi rail link 15mt</li> <li>Doubling of all critical deviations</li> </ul>
Infrastructure expansion: Electrical	<ul style="list-style-type: none"> <li>Increase electrical capacity on the AC section on the coal line</li> <li><b>Upgrade section Rooikop-Newcastle, Manganese 16mtpa New and Upgraded sub-stations and OHTE</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Manganese 16mtpa New and Upgraded substations</b></li> <li>Ore line Phase 2A to 82.5mtpa power upgrade (Including of OHTE)</li> <li>Increase electrical capacity on the AC section on the coal line</li> <li>Coal 91mt project</li> <li><b>Upgrade substations and electrical equipment</b></li> <li><b>Commence with the conversion of 3kV DC to 25kVAC Ermelo-Pyramid South</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Completion of the conversion of 3kVDC to 25kVAC Ermelo-Pyramid South</b></li> <li>Coal 91mt project</li> <li><b>Eskom 32mt project</b></li> <li><b>Upgrade substations and electrical equipment</b></li> <li><b>Waterberg – Phase 6 (23mtpa) commence with the electrification of Thabazimbi-Lephalale</b></li> <li><b>Conversion of 3kVDC to 25kVAC on Ermelo-Pyramid South</b></li> </ul>
Infrastructure expansion: Signaling	<ul style="list-style-type: none"> <li><b>Manganese 16mtpa</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Pyramid South – Lephalale: Communication based authorisation (CBA) pilot installation</b></li> <li><b>Manganese 16mtpa</b></li> </ul>	<ul style="list-style-type: none"> <li>Commence with the re-signalling of the coal line (CBA)</li> </ul>

Considering the existing network capacity and the expectation that these projects will be completed according to plan, network capacity is not seen as a constraint to achieving the MDS targets.

### 6.3 Wagons

Transporting the volumes envisaged in the MDS requires sufficient an appropriate rolling stock in wagons and locomotives. TFR has three distinct operations; General Freight Business, and the heavy haul operations of the Coal Export and Iron Ore Export Lines. Each of these has their own unique set of wagons and locomotives. This business case addresses the General Freight locomotive requirements only though they are lightly interlinked with the other operations.

The MDS predicates growth over a number of flows and which extend over a number of operating areas where locomotives are changed because of traction changes dictated by the rail network infrastructure. Wagons are tightly linked to the commodities they transport while locomotives relate to the mass but not the commodity itself; accordingly locomotives are allocated according to the tons transported over the particular operating section.

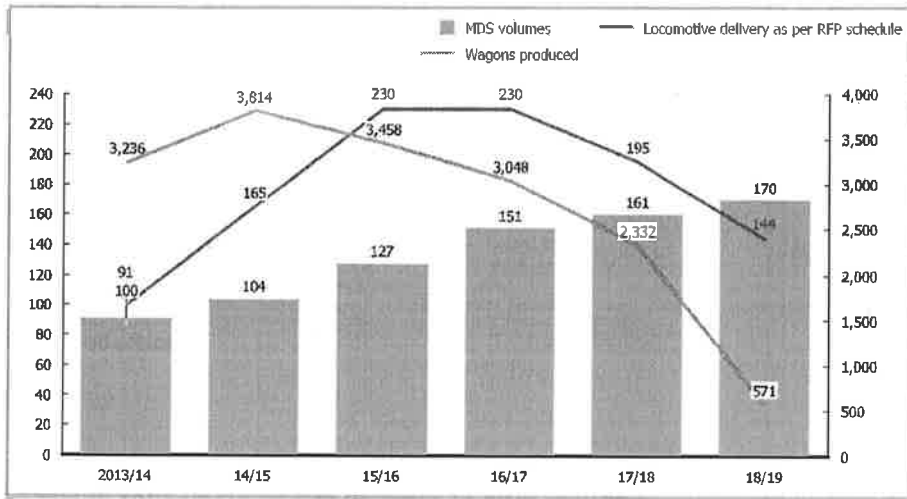
To meet MDS volumes, wagon capacity needs to expand for all TFR businesses. In addition to producing new wagons through TE, there are various life extension strategies are in place to sustain capacity within the business.

## Wagon production

### EXHIBIT 33

#### The wagon build programme will deliver wagons in advance of demand thus enabling the delivery of MDS volumes

Millions of tonnes (mt)



The exhibit above shows that wagon production will peak well in advance of MDS volumes and locomotive delivery. Therefore, wagon capacity will likely not be a constraint in the delivery of MDS volumes.

## 7. Risk management

### 7.1 Risk overview

A transaction of this magnitude in the public sector has inherent risks that should be addressed. Some of the main categories of risks are planning risk, market risk, exchange rate risk, operational readiness risk, transaction governance, legal risk, and exogenous risk. Transnet uses a CURA framework to categorise and assess risks, as per the exhibit below.

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High medium likelihood, high impact
  Medium likelihood, medium impact
  High medium likelihood, medium impact/ Medium likelihood, high impact
  Low likelihood, low impact

**Risk assessment and rating**

Risk	Risk ranking	Mitigation action
Planning	I	<ul style="list-style-type: none"> <li>Specialized procurement and planning team</li> <li>Conservative payment regimes to incentivize delivery</li> <li>Optimize number of OEMs for planning required and benefit realized</li> </ul>
Market	I	<ul style="list-style-type: none"> <li>Staged procurement strategy to maintain flexibility in delivery schedule and continuous monitoring of performance against MDS estimates</li> <li>Execute against Market Development Strategy</li> <li>Clean sheet costing to unpack key locomotive cost components</li> </ul>
Exchange rate	I	<ul style="list-style-type: none"> <li>Hedge all foreseeable foreign currency-based expenditure as per Transnet policy</li> </ul>
Operational readiness	Skills	<ul style="list-style-type: none"> <li>Develop people infrastructure plan</li> <li>Upgrade training modules in line with new locomotives</li> <li>Include maintenance staff training in supplier contract</li> </ul>
	Maintenance	<ul style="list-style-type: none"> <li>Implementation of 7 year maintenance plan</li> <li>Increase capacity by increasing production lines and shifts</li> <li>Regular review of build programme that aligns TRE factories</li> </ul>
	Infrastructure	<ul style="list-style-type: none"> <li>Develop infrastructure expansion business plan</li> <li>Implement infrastructure maintenance plan</li> </ul>
	Technology	<ul style="list-style-type: none"> <li>The IATS<sup>1</sup> technologies as part of the new locomotives specifications</li> <li>School of Rail to provide appropriate IATS training</li> </ul>
Transaction governance	II	<ul style="list-style-type: none"> <li>Minimize size of working team and minimize dissemination information where possible while enforcing strictest confidentiality</li> <li>Enforce protocol on document sharing and data rooms</li> </ul>
Legal	I	<ul style="list-style-type: none"> <li>Ensure transparent procurement process with accountability</li> <li>Contract with multiple OEMs</li> </ul>
Exogenous	II	<ul style="list-style-type: none"> <li>Explore long term supplier agreements with Eskom while also taking advantage of electric locomotive regenerative powers</li> </ul>

<sup>1</sup> Information and Administrative Technology Services

## 7.2 Planning and delivery risk

There are three elements of delivery risk: approval delays, procurement process delays, and production delays. First, a lack of the appropriate approvals at the required time could result in delays in the transaction process. A major risk is TFR’s current PPPFA exemption status that has lapsed. TFR is currently awaiting a PPPFA exemption for the 1064 locomotive procurement that will allow it to procure using the 60:20:20<sup>6</sup> criteria as planned. Second, procurement delays during the tender and negotiation processes may also cause delivery risk and will be managed by the TFR procurement team with a robust procurement strategy, processes, and contingency plans. Third, production risk may arise if a supplier is unable to meet its delivery targets for the 1064 locomotives. Delays of the delivery schedule are a critical risk to Transnet’s ability to meet its MDS commitments and the sensitivities are modelled below..

### 7.2.1 Delivery schedule sensitivities

Given expected production and procurement timelines, it is unclear whether the quantities demanded by the RFP (100 diesel locos in 2013/14) are achievable.

Even assuming that the RFP procurement schedules are achieved, as per the base case in Exhibit 35, TFR would experience locomotive shortfalls from 2014 to 2019, peaking at approximately 150 locomotives in 2014-2015, because of the procurement delivery lagging the required fleet demand. This results in a cumulative volume shortfall of 49 million tonnes for the MDS period.

<sup>6</sup> Breakdown of bid evaluation criteria: 60 percent price, 20 percent local supplier development , and 20 percent B-BBEE.

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Delivery schedule sensitivity 1 and 2, which factor in delays in procurement and production, show significant impact on volume shortfalls (110 million tonnes and 155 million tonnes respectively), highlighting the importance of expediting delivery schedule to meet MDS targets.

Delivery schedules impact the cash interest cover CIC ratio significantly, decreasing the ratio for 3.6X to 3.0X.

To mitigate the risk of delays, TFR will pursue a number of strategies simultaneously, including contracting multiple suppliers; staging procurement by using international suppliers for initial batches as local supplier development ramps up; and pursuing a conservative payment strategy<sup>7</sup> to incentivise delivery. TFR will also examine mitigation strategies to address the immediate locomotive shortfalls, including leveraging existing contracts, front-loading orders with international suppliers, exploring leasing options, and revising the fleet run-out strategy.

### 7.3 Market risk

The inherent risk is that the commercial sectors that the wagons and locomotives are built for will not achieve the anticipated market growth. This is dependent on South Africa's economic growth and the growth of its trading partners. Realisation of this risk could result in underutilised assets and diminished financial performance given the high-fixed-cost nature of the business. In addition, given that tariffs are projected to grow at a faster rate than CPI under the MDS plan, there is a risk that tariff increases are not fully realised. Other key business risks include inflated purchase prices (not related to forex changes) and cost increases exceeding forecasts.

#### 7.3.1 Volume

Purchasing 1064 locomotives without matched volume demand will lead to a significant loss of value on the transaction. Sensitivities 1 and 2 in Exhibit 35 indicate the large swings in NPV due to MDS volumes not materialising with NPV dropping to R1.0 billion and –R20 billion, respectively. Volume sensitivities have the biggest impact on CIC, with Sensitivity 1 decreasing the cash interest cover ratio (CIC) from 3.3X to 3.1X in 2013/14 and Sensitivity 2 decreasing the CIC from 4.1X to 2.7X from 2015/16 onwards. To mitigate this risk, as mentioned in Section 3, Proposed Solution, TFR should stage procurement to maintain flexibility.

#### 7.3.2 Tariffs

Exhibit 35 demonstrates that tariff growth impacts the NPV value significantly, with CPI-related growth 1 percent lower than the MDS base case of 7 percent, results in an NPV of –R1.5 billion. Accelerated tariff growth 1 percent above MDS results in a positive NPV of R7.8 billion. Tariffs have a marginal impact on CIC with the biggest impact in 2015/16, dropping from 4.0X to 3.9X. To mitigate the value at risk, TFR will execute against its Market Development Strategy, building strong customer satisfaction that will enable it to deliver target volumes.

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<sup>7</sup> Bulk of payment made on delivery and acceptance.

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**Demand, tariffs, and delivery schedule risks must be managed (1/2)**

Greatest Impact on NPV

	Sensitivities			Impact		
	Base case	Sensitivity 1	Sensitivity 2	Base case	Sensitivity 1	Sensitivity 2
<b>1 Delivery schedule</b>	<ul style="list-style-type: none"> <li>Delivery as per RFP; first 100 diesels in 2013-2014; first 65 electrics in 2014/15</li> </ul>	<ul style="list-style-type: none"> <li>6 months to complete procurement process</li> <li>12-month diesel production</li> <li>22-month electric production</li> <li>~120 diesels per year</li> <li>~125 electrics per year</li> </ul>	<ul style="list-style-type: none"> <li>8 months to complete procurement process</li> <li>18-month diesel production</li> <li>28-month electric production</li> <li>~120 diesels per year</li> <li>~125 electrics per year</li> </ul>	<ul style="list-style-type: none"> <li>Volume Impact: -49mt</li> <li>Revenue Impact: -R13.3bn</li> <li>NPV: R2.7bn</li> <li>CIC: 3.3x to 3.1x (2013/14)</li> </ul>	<ul style="list-style-type: none"> <li>Volume Impact: -110mt</li> <li>Revenue Impact: -R30.2bn</li> <li>NPV: R2.2bn</li> <li>CIC: 3.6x to 3.0x (2014/15)</li> </ul>	<ul style="list-style-type: none"> <li>Volume Impact: -155mt</li> <li>Revenue Impact: -R43.1bn</li> <li>NPV: R1.5bn</li> <li>CIC: 3.6x to 3.0x (2014/15)</li> </ul>
<b>2 Volume</b>	<ul style="list-style-type: none"> <li>MDS volumes achieved</li> </ul>	<ul style="list-style-type: none"> <li>Current performance vs. MDS (~7% below)</li> </ul>	<ul style="list-style-type: none"> <li>Volumes grow with projected GDP</li> </ul>	<ul style="list-style-type: none"> <li>NPV: R2.7bn</li> </ul>	<ul style="list-style-type: none"> <li>Volume Impact: -59mt</li> <li>Revenue Impact: -R16.4bn</li> <li>NPV: R1.0bn</li> <li>CIC: 3.3x to 3.1x (2013/14)</li> </ul>	<ul style="list-style-type: none"> <li>Volume Impact: -239mt</li> <li>Revenue Impact: -R67.9bn</li> <li>NPV: -R20bn</li> <li>CIC: 4.1x to 2.7x (2016/17)</li> </ul>
<b>3 Tariffs</b>	<ul style="list-style-type: none"> <li>~7% annual escalation to 2019 and CPI thereafter</li> </ul>	<ul style="list-style-type: none"> <li>Escalation with CPI (~6%)</li> </ul>	<ul style="list-style-type: none"> <li>Escalation at more than MDS (8%) to 2019; CPI thereafter</li> </ul>	<ul style="list-style-type: none"> <li>NPV: R2.7bn</li> </ul>	<ul style="list-style-type: none"> <li>Revenue Impact: -R5.4bn</li> <li>NPV: -R1.5bn</li> <li>CIC: 4.0x to 3.9x (2015/16)</li> </ul>	<ul style="list-style-type: none"> <li>Revenue Impact: +R9.7bn</li> <li>NPV: R7.8bn</li> </ul>

**7.3.3 Purchase price**

Purchase price sensitivities detailed in Exhibit 36 indicate a moderate impact on NPV with a 10 percent increase in base price resulting in a -R1.5 billion movement in NPV. To mitigate the risk of inflated purchase prices, clean sheet costing should be performed to unpack components of the locomotive price and support effective commercial negotiations.

**7.3.4 Costs**

Exhibit 36 indicates that cost base movements will have a moderate impact on NPV, decreasing it by R3.5 billion for a 5 percent increase in base costs. Costs have been budgeted according to Transnet's Corporate Plan.

**7.4 Forex risk**

Forex movement sensitivities in Exhibit 35 indicate a moderate impact on NPV with a 10 percent devaluation in Rand versus USD resulting in a -R2.4 billion movement in NPV. To mitigate the risk of exchange rate fluctuations, the project will be hedged according to the Group policy.

**Demand, tariffs, and delivery schedule risks must be managed (2/2)**

	Sensitivities			Impact		
	Base case	Sensitivity 1	Sensitivity 2	Base case	Sensitivity 1	Sensitivity 2
<b>4 Fleet strategy</b>	TFR Fleet Plan	TFR fleet plan with 5% additional efficiencies	TFR Fleet Plan with 10% additional efficiencies	NPV: R2.7bn	NPV: R5.2bn	NPV: R7.6bn
<b>5 Forex</b>	Hedging at current forward rate	10% devaluation of ZAR vs. USD	10% appreciation of ZAR vs. USD	NPV: R2.7bn	NPV: R0.3bn	NPV: R5.2bn
<b>6 Price</b>	USD2.6m (diesel), USD3.5m (electric) before escalation	Price increase by 10% over base case	Price decrease by 10% from base case	NPV: R2.7bn	NPV: R1.2bn	NPV: R4.3bn
<b>7 Costs</b>	Costs classified as locomotives, wagons and infrastructure with an allocation of GPE overheads	5% increase on base costs	5% decrease in base costs	NPV: R2.7bn	NPV: -R0.8bn	NPV: R6.3bn

**7.5 Transaction governance risk**

For a transaction such as this, confidentiality is of the utmost importance to maintain the integrity of the procurement process and prevent unwanted media interest. Failure to uphold strict confidentiality may result in procurement delays or even compromise the entire transaction. This risk has been mitigated by ensuring a minimise size of the working team and minimizing the dissemination of information where possible while enforcing strictest confidentiality.

**7.6 Operational readiness risk**

Operational readiness risk refers to TFR’s potential inability to integrate the new fleet into its operations because of a lack of skills, infrastructure capacity, long-term maintenance strategy, and poor technology integration in the fleet. Operational readiness, as well as Transnet’s preparations, are detailed in the operational readiness section below.

**7.7 Exogenous risks**

**7.7.1 Energy security**

Eskom supply remains constrained as South Africa’s reserve margins have dropped to as low as just over 1 percent in the past 6 months compared to best practice of 15 percent. It is almost certain that South Africa will experience electricity shortages in the next few years. The resulting power outages will likely have knock-on effects on industry and slow down economic growth in the medium term as electricity

supply continues to lag demand. Transnet faces at least four inter-related major risks related to energy security that must be appropriately mitigated:

- Delays could occur in Eskom’s IRP build programme, resulting in a shortage of electricity for South Africa. South Africa hopes to meet forecasted demand by adding 21 GW of new capacity by 2030 through the IRP build programme. However, the programme is running behind schedule. Strike action and equipment failure earlier this year has made it likely that the Medupi plant will miss its deadline of coming online at the end of 2013. IPPs and nuclear power plants will most likely not have the capacity to have any meaningful impact on the supply shortfall in the medium term given the current lack of regulatory frameworks and procurement delays. Furthermore, Eskom has only been granted about 50 percent of the tariff increases it requires to finance infrastructure investment, which may also have long-term implications for Eskom’s ability to meet demand.
- Energy costs could increase should the IRP’s planned capacity be commissioned on schedule but at a cost much higher than in the initial plan. The cost of electricity is expected to rise at 8 percent per annum in the next 5 years to finance the required infrastructure investment. The planned migration to relatively more expensive clean energy will cause energy costs to rise even further.
- Timely decisions may not be made for electricity supply beyond Kusile capacity, resulting in a shortage of power beyond 2017.
- Electrification infrastructure may not be installed in the appropriate geographies to enable Transnet to capture volumes from new regions as planned.

#### 7.7.2 Potential strike action

Given recent history, there is some risk of strike action along the local supply chain over the life of the transaction (i.e., at locomotive assembly factories, TFR, coal mines, and Eskom). Strike action at any point in the supply chain could delay delivery of locomotives, increase costs, and compromise operations of the fleet, resulting in lower volumes moved.

## 8. Governance

To ensure effective governance of the 1064 locomotives transaction, a number of structures have been implemented:

- A Steering Committee with the primary purpose of providing oversight of the transaction, including developing a business case, submitting this business case to the appropriate governing bodies, and overseeing the procurement process.
- A high-value tender process managed in conjunction with Transnet Internal Audit (TIA) with the mandate to protect against fraud and corruption.
- A Project Management Office (PAO) to manage processes and timelines related to the transaction, including a confidential data room and the management of non-disclosure agreements (NDAs) and access to information.

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## 8.1 Steering Committee

The 1064 Locomotives Steering Committee, which is chaired by the Transnet Group Chief Executive, has taken overall ownership of the final draft business case for locomotive investment and the procurement process. Key activities that have been overseen by the Steering Committee include:

- Developing the business case and approval for submission to Transnet's governing bodies.
- Submission of the business case to the Department of Public Enterprise (DPE)
- Appointment of working team members and accountabilities.
- Understanding operational requirements and alignment to business case
- Recommending a procurement strategy, including goals related to environmental issues, supplier development and localisation.
- Understanding and recommending strategies to address all legal ramifications of the locomotive procurement process.
- Ensuring procurement process transparency.

## 8.2 High-Value Tender Process (HVT)

### Objective of the HVT

- A key objective of the High-Value Tender (HVT) Gateway Review Process is to provide real-time guidance, support and assurance against the PPM, tender management control framework, and procurement best practice at each gateway on tenders above R50 million.
- The purpose of the HVT Gateway Review Process is to increase the likelihood that the processes undertaken for these tenders are fair, transparent, equitable, competitive and cost-effective.
- The High-Value Tender (HVT) Gateway Review Process provides a platform for:
  - Providing assurance to BAC and other key stakeholders within Transnet on the effectiveness of the processes followed for high-value tenders.
  - Providing input into updating of procurement procedures and supporting controls, thereby strengthening the overall control environment for high-value tenders over time.
  - Fewer queries/challenges raised by DACs and/or bidders during high-value tenders
  - Reduction in timelines due to reduction in number of re-tenders resulting in faster capacity creation.
  - Rolling out and sharing of best practice across all ODs to improve the efficiency of procurement processes.
  - Long term up-skilling of procurement staff.

### Design principles of the HVT

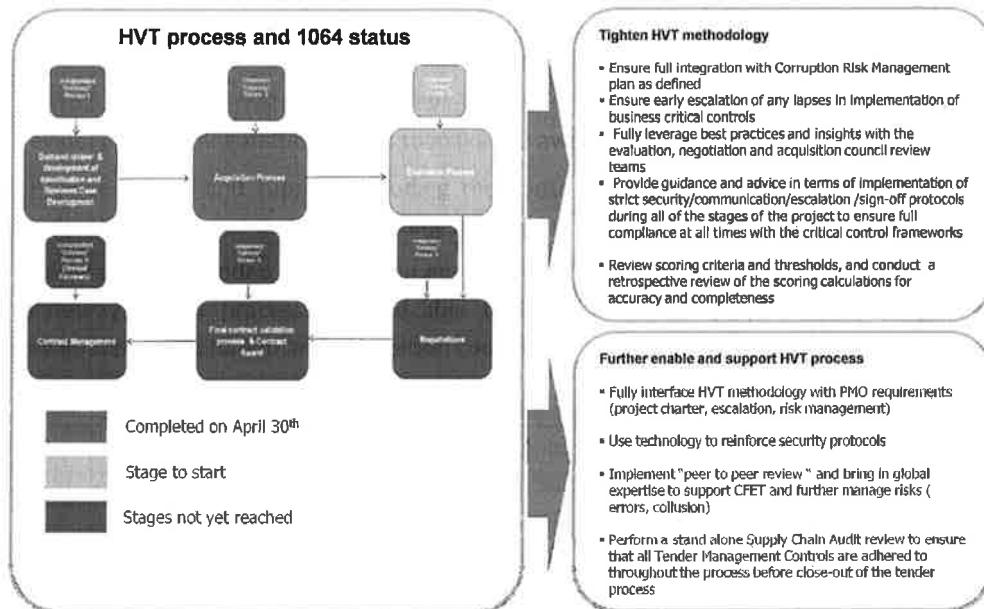
- Drawing on recent lessons learnt from 85 electric and 43 diesel locomotives tenders, enhance the overall tender process for improved efficiency, effectiveness and enhanced control.
- Play a greater role in the planning and coordinating activities to support the PMO.

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- Ensure full integration with the Corruption Risk (Forensic) management plan developed for the 1064 locomotive acquisition.
- Introduce an international peer-review mechanism to bolster the team structure in the evaluation and negotiation stages to make the award “bullet-proof”.
- Provide end-to-end support including the contracting stage to ensure there is no “leakage” between negotiations and contracting stages.
- Generally place added emphasis on ensuring that TIA is proactively involved at all stages of the gateway review process and are able to fully share best practices and insights with the evaluation, negotiation and acquisition council review teams.

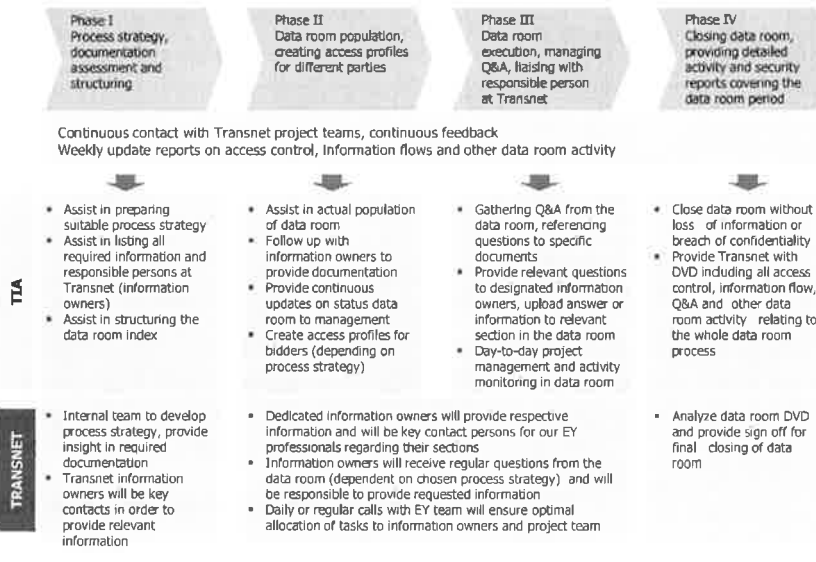
EXHIBIT 37

**Approach to the 1064 Locos HVT**



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### Data Room Project Management Process



### 8.3 Project Management Office (PMO)

A PMO has been established to monitor process and timelines related to the 1064 locomotives transaction, including the following items:

- Tracking project milestones and critical path and ensuring that progress is on-track against key deliverables.
- Scheduling Steering Committee meetings at the request of the Chair (GCE).
- Following up on action items emerging from SteerCo meetings.
- Ensure implementation of key confidentiality protocols/requirements (e.g., NDAs signed by all parties, data room access is restricted to a small group, etc.).

The PMO is also responsible for owning and managing the transaction’s central data repository (“data room”). This includes:

- Maintaining and regularly work with content owners to ensure availability of latest final deliverables (e.g., RFP, Business Case, etc.) and working documents (industry analyses, cost build ups, etc.).
- Categorising and standardising file names to enable easy tracking.
- Most critically, the data room will also provide transparency (as needed) to enable tracking of downloads (who, when, frequency) and assist in internal auditing.

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## 9. Conclusion

Having explored all options, Transnet's purchase of 1064 locomotives is a critical procurement event that will transform the business, increase operational efficiencies, support local supplier development, and enable Transnet to meet its MDS targets.

Key risks are being mitigated: volume volatility will be addressed through flexible procurement, foreign exchange risks are being mitigated through hedging and potential shortfalls are being mitigated through efficient procurement and accelerated locomotive orders. The business will be operationally ready to take on new locomotives and interdependencies are being planned for.

Therefore, Transnet recommends the purchase of 1064 new locomotives (465 diesel, 599 electric) at an estimated purchase price of R38.6 billion.

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## D. PROCUREMENT STRATEGY

The benefits in this section are contingent on:

- Responses from bidders
- PPPFA exemption
- Post-tender negotiations

### 1. Procurement overview

In accordance with Transnet's Board approved Supply Chain Policy Transnet shall apply Section 217 of the Constitution of the Republic of South Africa, (Act No 108 of 1996, as amended) by contracting for goods and services in accordance with a system which is fair, equitable, transparent, competitive and cost effective.

Transnet shall reform all its procurement activities in order to align them in an integrated manner with national developmental goals, relevant legislation that enforces the goals and relevant governmental supply chain management approaches that are cost-effective.

Transnet has been mandated by government to assist in lowering the cost of doing business in South Africa, enabling economic growth and security of supply through appropriate ports, rail and pipeline infrastructure as well as operations in a cost effective and efficient manner within acceptable benchmark standards.

The aim of the Supply Chain Policy is to ensure that Transnet gets value for money in the procurement of goods and services in order to fulfil its mandate while redressing the economic imbalances that have been caused by unfair discrimination in the past.

The focus for Transnet with respect to its SD activities will involve, among others, the leveraging of its procurement to increase local content through the development of skills, job creation and technology transfer. This will lead to decreased costs in its supply chain and an overall increase in its competitiveness. Transnet's aim is to build stronger and more meaningful relationships with its suppliers, to find mutually beneficial mechanisms to extract maximum value.

Transnet's procurement of rolling stock and in particular the 1064 locomotives provides a unique opportunity for both localised assembly and localised manufacture of component parts, but in addition an opportunity to strategically re-position the rolling stock industry. This is particularly true of the role and function of the largest incumbent rolling stock manufacturer in South Africa, Transnet Engineering as well as players in the private sector.

There is a drive by Government to increase the localisation of rolling stock. Government has strong leverage over the procurement of these assets as they reside almost completely within state owned companies, predominantly in Transnet and PRASA. Other sectors such as mining and the power sector bear close similarities in the production processes and heavy engineering requirements associated with rolling stock and thus the manufacturing sector would benefit substantially through the additional manufacturing capability and demand that this order would provide.

The Department of Trade and Industry (DTI) have identified the localisation opportunities in rolling stock as part of a number of key sectors within the industrialisation programme of South Africa as contained within the Industrial Policy Action Plan (2011/12). Transnet has identified the same opportunities as part

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of its MDS and through its Supplier Development Plan seeks to develop and empower local business providing goods and services to the parastatal.

## 2. Procurement strategy

Transnet promotes open competitive bidding as its default procurement mechanism since this is the best means of obtaining value for money. All Transnet procurement shall be done in a way that ensures that Transnet obtains quality goods and services at competitive prices. It was therefore decided to follow an open tender process for the locomotives acquisitions. In crafting the procurement strategy, which informed the RFPs, the following aspects were focussed on and considered.

### Transformation and Empowerment

In order to address economic imbalances that have been caused by unfair discrimination, government developed the black economic empowerment policy.

- Black economic empowerment is broad-based;
- Black economic empowerment is an inclusive process;
- Black economic empowerment is associated with good governance; and
- Black economic empowerment is part of the country's growth strategy.

Government uses a number of instruments to achieve black economic empowerment. It has developed a "balanced scorecard" to measure progress made in achieving B-BBEE objectives by enterprises and sectors. This has been included in the tender.

In evaluating and awarding the locomotive tenders, Transnet shall award preference points in regard to the contribution that a supplier makes towards the achievement of broad-based black economic empowerment objectives, namely.

- Ownership and Control;
- Management;
- Skills Development;
- Employment Equity;
- Preferential Procurement;
- Enterprise Development; and
- Socio-economic Development.

Additionally, Transnet will award further recognition points for B-BBEE based on the extent to which a supplier commits to improving its B-BBEE status over the contract period. This is referred to as Further Recognition Criteria (FRC).

B-BBEE has been set as 20 points in the overall scoring for the tenders assuming PPPFA exemption is given.

### Job creation

Transnet must be a major contributor to job creation. Therefore, Transnet's procurement shall focus consistently on areas that have the potential for creating employment on a large scale in order to

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contribute substantially to the national employment creation effort. As the main economic agent in the South African transport and logistics infrastructure, Transnet's planned capital expenditure forms the big bulk of Transnet's procurement spend. This is the single largest procurement spend of the MDS and as such has been planned on a programmatic basis so as to obtain maximum benefit to achieve industrialisation which will in turn create long- term sustainable job opportunities particularly among the previously disadvantaged members of the South African society.

**Local Content**

This procurement has been designed in a manner that builds industry capacity around its build programme. Transnet has identified this as its key programmatic procurement and consequently developed a long-term procurement and local content plan. Tender requirements include local procurement and supplier development (SD), which will also address the transformation agenda.

Transnet has included the local content percentages as detailed in the National Treasury Instruction Note issued on 16<sup>th</sup> July 2012 that highlights a local content percentage of 55 percent for diesel and 60 percent for electric locomotives. This is in line with the DTI's Industrial Policy Action Plan II in driving strategic fleets. Local content is included as a threshold.

Current local content for diesel locomotives and for electric locomotives has increased over the recent acquisitions due to the CSDP. The technology and competence in the production of locomotives occupy a different space in the challenge to localise in comparison to wagons. Globally, there are few large suppliers or OEMs of locomotives and their market dominance of the technology, the supply chain, and the know-how require nuanced and technology capture localisation strategies in order to create real sustainable local manufacturing benefits.

The approach adopted by Transnet has been to stipulate the following required minimum threshold requirements for locomotive localisation that are in line with those designated by National Treasury as highlighted above:

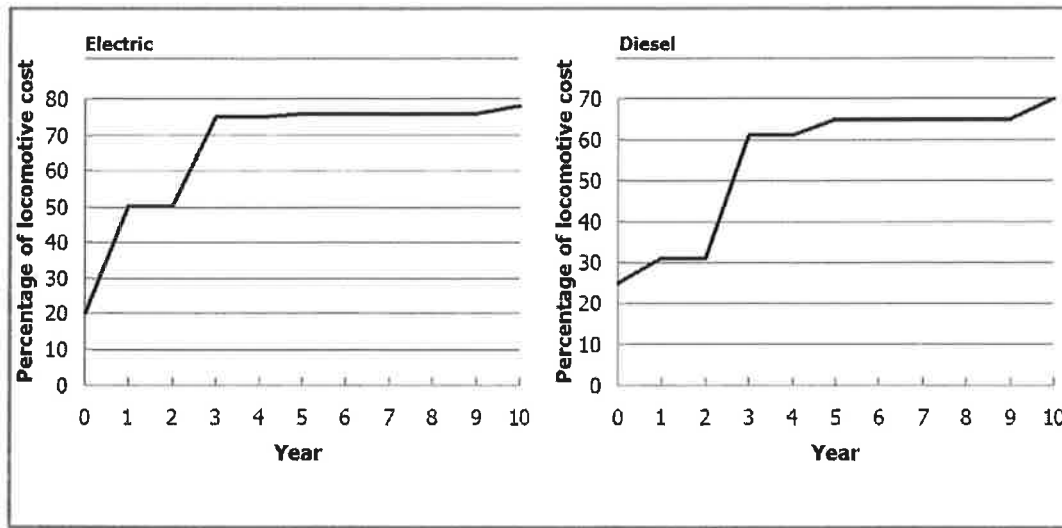
1. 55 percent for diesel locomotives; and
2. 60 percent for electric locomotives.

Transnet's assessment of this opportunity is that the economies of scale in purchasing 1064 locomotives are sufficiently large so as to create localisation opportunities that could elevate percentage localisation above these minimum thresholds at very little additional price premium to Transnet.

South African component suppliers are not yet able to produce the inputs and require build-up to reach substantial levels of localisation. Transnet estimates that this will take at least a full 3 years to complete, even though there may be certain components (particularly those used in electric locomotives) that can be localised much earlier.

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**Estimated time to localise localisable components across diesel and electric locomotive platforms**



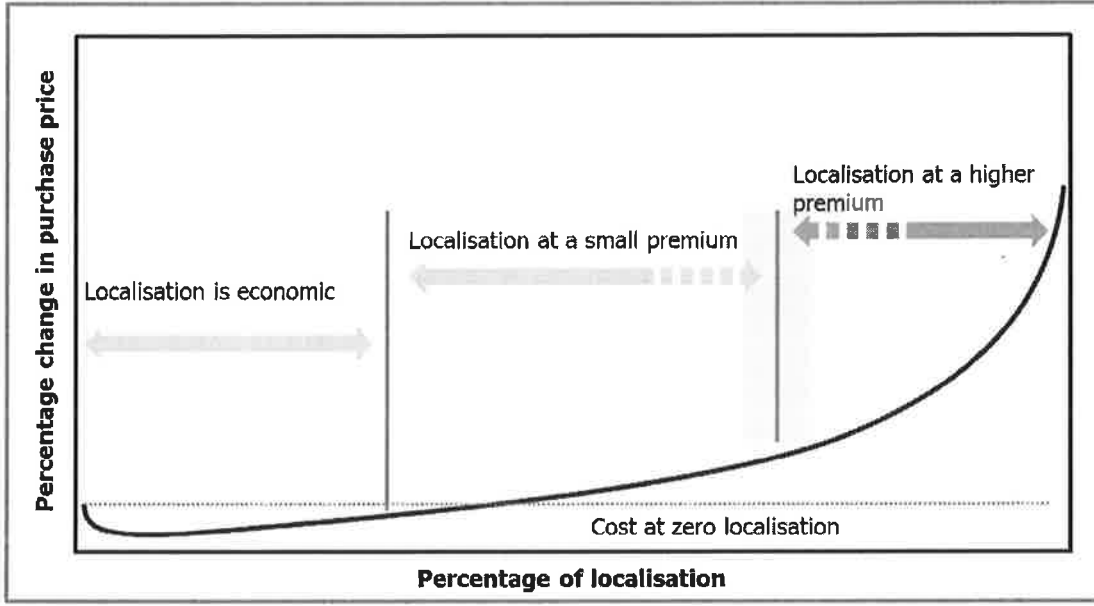
A detailed component analysis undertaken by Transnet demonstrates that price premium is not static across the percentage rise in local content, but rather is informed by the cost of production of the individual components making up a locomotive.

In certain areas, particularly in assembly and fabrication, South African localisation is economic especially given the order size of 465 diesels and 599 electric locomotives.

For other components, although not yet localised, a relatively small price premium is evident. In these cases similar industrial production capability is already available in South Africa and needs to be re-aligned to the production needs of locomotive components. The capital equipment setup cost is low for components such as under-frames, radiators, transformers, etc.

However, as localisation requirements increase, certain components begin to have substantial price premiums associated with their local production. Examples include engines, control systems, specialised braking equipment, etc.

**Cost to localise increases with increasing level of localisation**

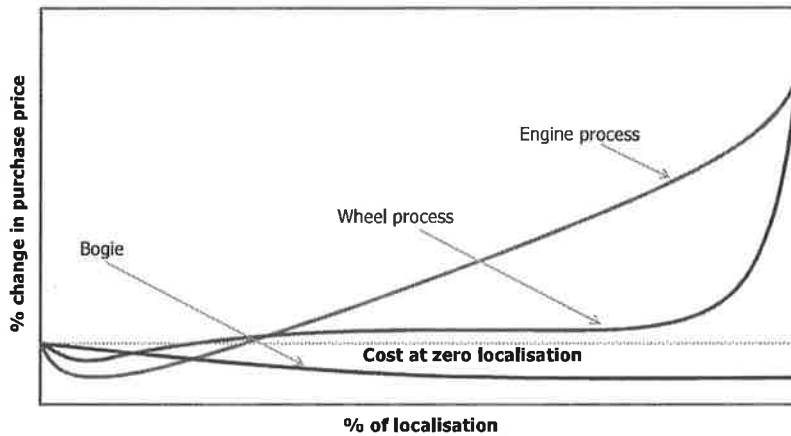


A grey zone exists where the limit of localisation is dependent on OEM investment in manufacturing in South Africa. Part of the way the Transnet RFP is structured is to attempt to capture as much localisation as possible within the grey zone without overly inflating the price premium paid.

As each component within a locomotive has its own price to localisation curve, Transnet could expect to pay different premiums for each sub-set of local component manufacture. By way of an example:

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**Each component within a locomotive has its own price verse localisation curve**



1. **Engine process.** Initial benefits are achieved through utilising cheaper skilled labour in assembly. Increased localisation comes at a high cost as specialised parts could only be manufactured locally in small production runs with insufficient economies of scale to bring down the unit costs of such parts.
2. **Wheel process.** Small benefits are achieved through some local assembly and a slight premium is paid as forging is undertaken locally. As the manufacture of a complete bearing moves locally, the costs increase steeply due to small, highly technical bearing production runs; and
3. **Bogie.** Benefits are achieved through utilising a competitive manufacturing process and reduced transport costs of not having to bring bulky items such as bogies to SA.

One of the characteristic of the curves for many component items analysed is that the price-premium grows rapidly at high levels of local content requirements (80 percent to 100 percent). By way of an example, for wheel assembly, much of the wheel could be localised at relatively low cost, including the bearings. However, the rollers within each bearing are parts that cannot be economically localised and are produced at just a few global sites. This is due to technological complexity in the production process, safety criticality of the item, and the need for high production volumes to make the production runs cost-efficient. By implication, forcing high localisation requirements on such components will result in uneconomic price premiums as well as possible compromises in safety critical items such as braking systems, wheel assemblies, etc.

Transnet’s detailed component analysis is summarised into 14 component groups for both diesel and electric locomotives. The cost structure is based on 18 separate bills of materials obtained from the current assembly and maintenance of locomotives and thus closely emulates current market pricing.

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Target localisation is based on a component by component assessment of localisation potential for each particular component within a component group. Because of the complexity and high cost to localise certain individual components (often small components), the analysis seldom reaches full 100 percent local content as is evident in the tables below. The cost to localise is based on an assessment of the capital cost to set up a production plant for the various components within each category. The time frame to localise is based on a similar approach. The findings demonstrate the potential to localise overall local content in excess of the Treasury Note requirements of 55 percent and 60 percent for a diesel and electric locomotive.

EXHIBIT 42

**Electric locomotive pricing per component set, current and target localisation, and estimated cost to localise**

Categories	Total cost %	Current local %	Target local %	Percentage of	
				Cost to local	Accum local
Locomotive assembly	21	19	20	0.29	20
Main transformer	16	0	13	1.33	33
Main power traction system incl. aux systems	15	0	8	0.87	41
Main power traction motors	14	0	11	6.33	53
Propulsion switch gear	9	0	6	1.53	58
Bogie	4	0	4	0.25	62
Cooling, ventilation, and filtration systems	4	0	3	0.80	65
Locomotive control systems	4	0	2	4.90	67
Drivers cab	3	1	3	0.15	70
Auxiliary supply	3	0	3	2.12	73
Wheel system	2	0	2	9.10	74
Pneumatic supply system	1	0	1	5.81	76
Braking system	1	0	0	3.94	76
Coupling system	1	0	1	1.00	77
Other	1	0	0		
<b>Grand total</b>	<b>100%</b>	<b>21%</b>	<b>77%</b>		



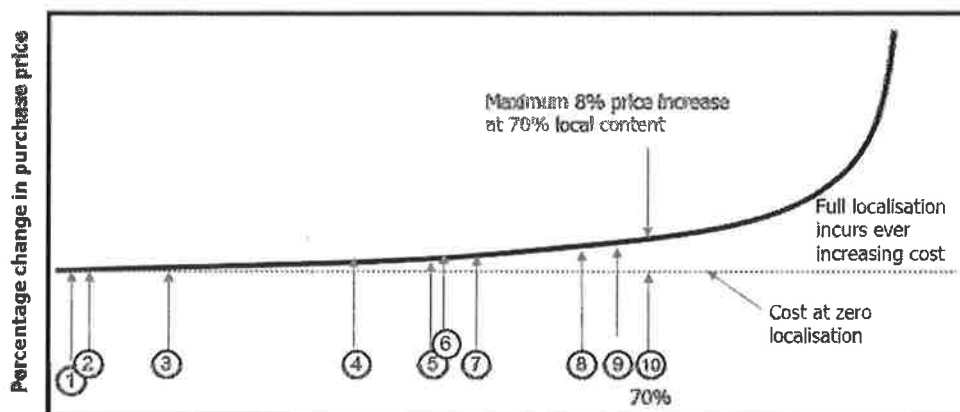
EXHIBIT 43

**Diesel locomotive pricing per component set, current and target localisation, and estimated cost to localise**

Categories	Total cost %	Current local %	Target local %	Percentage of	
				Cost to local	Accum local
Drivers cab	2	0	2	0.27	2
Bogle	4	3	4	0.27	6
Locomotive assembly	22	20	22	0.32	28
Cooling, ventilation, and filtration systems	5	0	4	0.68	32
Main power traction system incl. aux systems	23	0	10	0.82	42
Coupling system	1	0	1	1.03	43
Underframe (I-beams)	1	0	1	1.25	44
Locomotive control systems	6	0	3	3.44	47
Braking system	2	0	0	5.59	47
Main power traction motors	17	0	14	6.33	61
Wheel system	3	0	3	6.45	64
Pneumatic supply system	2	0	1	7.38	65
Engine system	13	0	5	8.07	70
Other	1	0	0		
<b>Grand total</b>	<b>100%</b>	<b>24%</b>	<b>70%</b>		

As is demonstrated in these tables, the difference between current and expected 3- to 5-year localisation requirements are significant. The relatively easy localisation opportunities have already largely been taken and further localisation will require not only additional capital investment but also the appropriate testing and quality control of both the production facility and the parts produced.

### Local content of 70 percent overall incurs up to an 8 percent increase in purchase price



Percentage of localisation					
Item #	Category	% increase	Item #	Category	% increase
1	Drivers cab	0.27	6	Aux supply	2.1
2	Bogie	0.27	7	Control system	3.4
3	Loco assembly	0.33	8	Traction motors	6.3
4	Main transformer	1.3	9	Wheel system	6.5
5	Propswitch gear	1.5	10	Engine system	8.0

A key finding of the analysis is that the nature of the price premium curve as shown above for a generic locomotive is such that Transnet could achieve a high level of localisation at relatively small price premiums. For diesel and electric locomotives, localisation of 70 percent and 77 percent respectively could be achieved at an average price premium of less than 2 percent. This percentage is calculated as the average price premium paid for a locomotive – i.e., including some items with no price premium and others such as engine assembly with an estimated 8 percent price premium.

This is provided that three conditions are met:

1. That components are localised up to a level that is economically viable (i.e., that price premiums for each set of component are economic);
2. That realistic time frame targets are set to reach full localisation potential. Shortening these time periods would in itself result in considerable uneconomic price premiums; and
3. That some minimum annual order size for locomotive production is guaranteed to the market over the life of the 1064 locomotive supply contracts. The analysis indicates that a guaranteed minimum order size of 50 diesel and 70 electric locomotives is required annually for the life of the contract.

#### The Benefits of Localisation

The benefits associated with localisation are considerable and, based on the estimates for 70 percent localisation for diesel locomotives and 77 percent for electric locomotives, the following benefits are evident:

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**Enterprise benefits to Transnet** are considerable and include the design and integration capabilities that would be passed to Transnet Engineering through a structured programme of localisation; an enhanced Research and Development base in conjunction with the selected OEMs to develop and refine technologies for both the South African and African locomotive market; and re-engineering capability to design and provide technologies aligned to the needs of the South African rail market.

**Benefits to the manufacturing sector** will include key industrial capability in:

- Traction motors and traction control equipment;
- Locomotive control system capability;
- Locomotive electrical systems; and
- Large diesel engine capability.

In addition, there will be considerable benefits in related industries such as: heavy engineering, component manufacture such as found in the auto sector; electromechanical, electrical machinery, and software systems and design.

**Benefits to the South African economy** include benefits to a number of related sectors that would enhance capability and export potential. There would be R68 billion in economic impact for South Africa at a small localisation premium of 2 percent, implying a cost of localisation of 2 percent given expected levels of local supplier development. The resulting benefit-to-cost ratio of localisation is thus 170 to 1 in favour of localisation. Multiplier benefits would be substantial and for each Rand of localised production there is an expected average multiplier of R2.74 across the economy.

**Procurement strategy summary**

- Issue open tenders for both locomotive types.
- Local content thresholds of 55 percent and 60 percent for diesel and electric locomotives respectively as per PPPFA and National Treasury Instruction Note.
- SD/BBBEE (40 percent) threshold.
- Technical threshold.
- Stage 2 will comprise price (60 percent), Supplier Development (20 percent), and B-BBEE (20 percent).
- B-BBEE included for scorecard (10 points) and FRC (10 points).

**Reasons for following an open tender programmatic process**

To ensure the bidding process is as fair and transparent as possible. As a long-term procurement event, open tender will identify suppliers with whom TFR can partner, to ensure value for money and compliance with Transnet’s support for the NGP and government objectives. The programmatic nature of this purchase requires TFR to find suppliers who can commit to delivering on governments industrialisation objectives, which include:

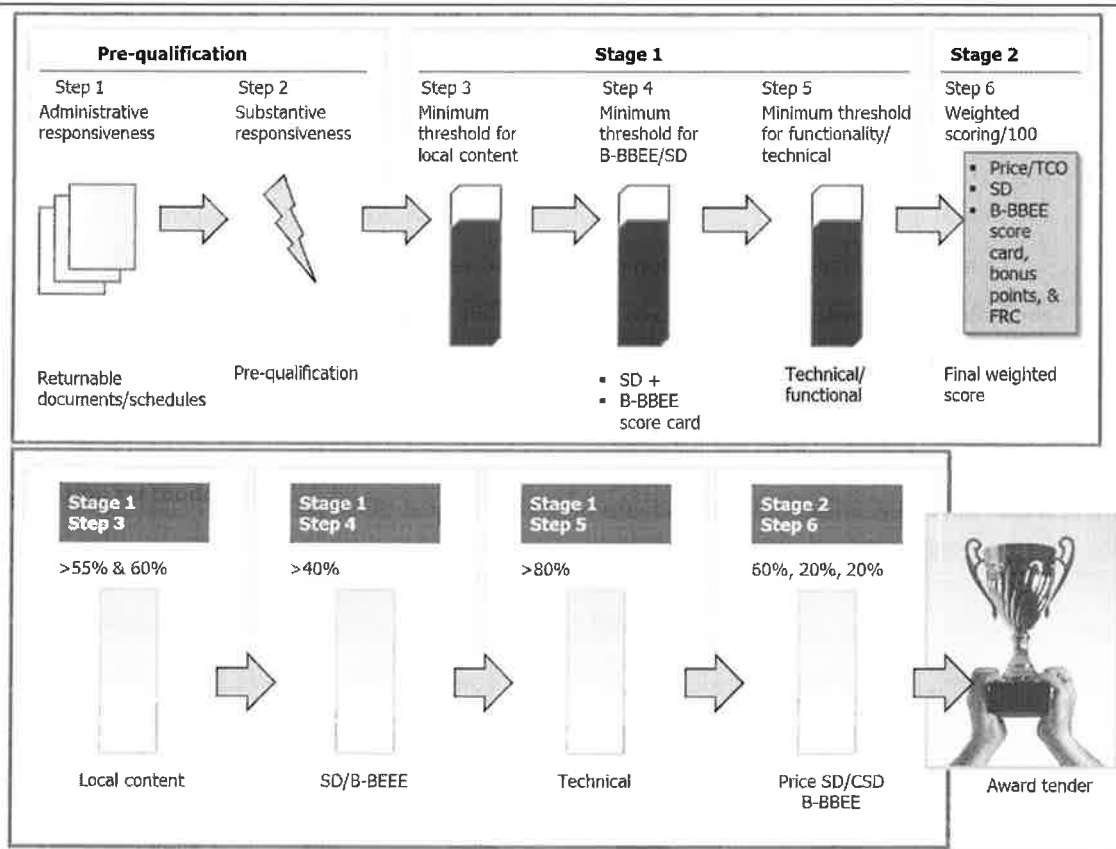
- Localisation and industrialisation
- The creation of jobs
- The transfer of technical skills, IP, and know-how to the South African industry

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- Increasing the capability and capacity of the South African rolling stock industry
- Reducing capital leakage
- Increasing South Africa's exports
- Integrating of South African suppliers into the locomotive OEMs' global supply chains
- Long-term security of demand will allow suppliers to commit to investing in SA operations
- Suppliers must commit to transferring skills to SA suppliers to allow for the long-term maintenance of the locomotives post warranty period.

**Evaluation methodology**

EXHIBIT 45



- Stage 1 with minimum disqualifying thresholds, will follow a three-step process, starting with the Local Content (Step 3), followed by the SD/B-BBEE (Step 4) evaluation, and finally the Technical (Step 5) evaluation. Stage 2 will comprise the commercial (Step 6) evaluation including price (60 percent) and supplier development (20 percent) and B-BBEE (20 percent)
- In line with categories for local content identified by the DTI, 55 percent and 60 percent minimum threshold of local content will be applicable to diesel and electric locomotives, respectively. These thresholds will need to be equalled or exceeded for the submission to qualify for SD/B-BBEE evaluation.

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- A minimum threshold of 40 percent will be set for the SD/B-BBEE criteria evaluation. This threshold needs to be equalled or exceeded for the submission to qualify for Step 5.
- A minimum threshold of 80 percent will be set for the technical criteria evaluation. This threshold needs to be equalled or exceeded for the submission to qualify for Step 6.
- Once the minimum criteria thresholds are both met or exceeded, the supplier's submissions will be evaluated against price, SD, and B-BBEE.

### 3. Localisation

Since 2010, there have been significant changes in the South African policy environment, as well as to Transnet's strategic objectives. The New Growth Path (NGP) was launched in 2010 and at the end of 2011, the National Development Plan (NDP). Transnet realised the need and opportunity to develop a more holistic approach to supplier development, incorporating changes to the policy environment, lessons learned from previous SD initiatives, and Transnet's development of a holistic Supply Chain Policy and Framework, as well as its new corporate strategy, the MDS.

The South African government has highlighted supplier development as one of the ways with which to improve the local economy. SD is achieved by "procuring in such a way as to increase the competitiveness, capacity and capability of the local supply base, where there are comparative advantages and potential competitive advantages of local supply" and is derived from the Competitive Supplier Development Programme (CSDP), which is a government initiative run by the Department of Public Enterprises. At Transnet, SD is driven through procurement with a focus on delivering transformation and empowerment as well as economic growth.

The transformation element ensures that procurement transactions bring historically disadvantaged individuals (HDIs) into the economic mainstream through the advancement of HDI ownership. It addresses economic disparities and entrenched social inequalities through the use of the B-BBEE scorecard and the seven pillars which make up the score card.

Growth of the local supply base is achieved through leveraging high-value procurement to achieve (where applicable) industrialisation, localisation, technology transfer, job creation and preservation, developing industry specific skills, enterprise development (ED), and rural integration.

The above has been factored into the locomotive tenders as has been highlighted in the Procurement Strategy Section and as is evidenced in the evaluation methodology.

Transnet has extracted SD value through some benchmark Competitive Supplier Development Programme (CSDP) locomotive acquisition contracts. These include:

- 100 X General Electric Locomotives – 54 percent SD commitment
- General Electric Long Term Parts Agreement – 12 percent SD commitment
- Electro-motive Diesel Long Term Parts Agreement – 41 percent SD commitment
- 32 X Mitsui/Venus Locomotives – 40 percent SD commitment
- 50 X Electro-motive Diesel Locomotives – 67 percent SD commitment
- 44 X Mitsui/Venus Locomotives – 39 percent SD commitment
- 43 X General Electric Locomotives – 65 percent SD commitment.

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These commitments have been achieved with purchases being made sporadically and on a transactional basis; therefore, we expect greater benefit to be achieved from a programmatic procurement of this nature given the size and stable pattern of demand it creates. The benefit will obviously be limited if PPPFA exemption is not obtained.

Government envisages SOC expenditure as one of the key levers to achieve transformation and growth. The 1064 locomotive procurement provides a great opportunity to fulfil government's SD aspirations.

This spend will be leveraged to extract SD value in a manner that increases employment and also facilitates diversification beyond South Africa's current reliance on traditional commodities and non-tradable services. It will address the shortfall in artisan and technical skills by increasing the education level and skills capability. An equitable socio-economic society will be promoted through the integration of HDIs into the mainstream economy within the rail industry. Small businesses will be enabled in a manner that allows them to successfully compete in the South African economy. There will also be rural development throughout the country ensuring the sustainability of these communities.

Transnet's main focus with regards to these two tenders will be around the industrialisation of the rail industry. This spend can be leveraged in order to industrialise this sector and create sustainability. A large number of jobs will be created while ensuring that the local industry produces world-class products that can be exported. There will also be a large portion of spend on maintenance and upgrading of new and existing locomotives and wagons, which will ensure sustainability.

Our intention is to take the rail industry as it stands and fundamentally shift it within 7 years. This shift is illustrated in below.

**EXHIBIT 46**

**Fundamental shift of the Rail industry over the next 7 years**

The rail industry looks as follows...	...however in 7 years it would have changed to...
<p><b>Local content</b></p> <ul style="list-style-type: none"> <li>Rail industry components are made up of a high percentage of international content</li> </ul>	<p><b>Local content</b></p> <ul style="list-style-type: none"> <li>At least 60-80% of the Rail industry components will be local in nature and of a global standard</li> </ul>
<p><b>Technical capability</b></p> <ul style="list-style-type: none"> <li>Local capability largely in maintenance, repair and assembly</li> <li>SA mainly produces mechanical components</li> </ul>	<p><b>Technical capability</b></p> <ul style="list-style-type: none"> <li>Items designed and manufactured locally</li> <li>Components will be of a high complexity (e.g., electrical)</li> </ul>
<p><b>Jobs</b></p> <ul style="list-style-type: none"> <li>Low level of job creation as focus is placed on assembly</li> <li>Low level of skills as a result of low complexity items</li> </ul>	<p><b>Jobs</b></p> <ul style="list-style-type: none"> <li>Manufacturing capability will create numerous jobs (28 000 jobs) particularly focusing on HDIs</li> </ul>
<p><b>Small business</b></p> <ul style="list-style-type: none"> <li>Limited small business development due to historical small scale procurement and low levels of localised production</li> </ul>	<p><b>Small business</b></p> <ul style="list-style-type: none"> <li>A large number of transformed small businesses will develop to produce international quality products while growing sustainably</li> </ul>

## E. SUPPORTING DOCUMENTATION

### 1. 7-year commodity growth

SELECTED GENERAL FREIGHT FLOWS	YEAR - TONS							7 year Ton Increase	ASSUMPTIONS/INITIATIVES	
	2013/14 Budget	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20			
AGRICULTURE & BULK LIQUID	COMMODITIES NOT CLASSIFIED IN GROUPS	2,762	2,822	3,101	3,796	4,018	4,147	4,335	1,573	This category includes OTHER AGRICULTURE PRODUCE (for instance BEANS, FMCG (SUGAR etc) as well as GASSES. Demand projections indicates increased volumes by rail in support of the NMPP. Also, there has been increased overboard demand from Botswana and Mozambique
	GRAIN, MAIZE, WHEAT & FOODSTUFFS	4,184	4,477	4,95	5,844	6,055	6,304	6,635	2,451	Domestic harvests average between 10Mtpa - 14Mtpa, weather permitting. Demand projection represents TFR's projected increase of total market demand as traffic is shifted from road to rail, Transnet's rail and port capacity support agri-logistics and rural infrastructure including a TFR section dedicated to branch line development.
	TIMBER	2,49	2,576	2,894	3,363	3,485	3,646	5,118	2,628	Sappi Ngodwana - Production expansion will increase demand in 2013 by 115,000 tons from Piet Retief and Lothair areas. The plant will be completed in 2013. The expansion of the Sappi SAICCOR Wood yard rail is expected to increase timber intake by 75,000 pa by 2013. Mondi is building new private siding at Iswepe.
<b>AGRICULTURE &amp; BULK LIQUID</b>	<b>12,659</b>	<b>14,388</b>	<b>15,628</b>	<b>18,078</b>	<b>18,661</b>	<b>19,259</b>	<b>21,324</b>	<b>8,665</b>		
COAL	COAL (DOMESTIC - OTHERS)	1,681	2,696	2,825	2,889	3,047	3,047	3,388	1,507	Coal deliveries to the Mondi and SAPPI papermills, will increase based on the growth in electricity usage over the next year.
	COAL (ESKOM - ARNOT)	0	0	0	2	2	2	2	2	Commissioning and conclusion of the Arnot Powerstation
	COAL (ESKOM - GROOTVLEI)	0	0	0	0	5	5	5	5	Grootvlei will use container rail solutions for the next two years and tippler solutions thereafter. TFR business case for these have been approved.
	COAL (ESKOM - MAJUBA)	8,794	9,392	12,054	13,836	13,816	14	14	5,206	Eskom road to rail migration plan, Eskom Majuba heavy haul line coming on stream in 2014 - increase tons to 14mt
	COAL (ESKOM - TUTUKA)	0	0	0	5,5	6	6,5	7,5	7,5	Thuthuka will use container rail solutions for the next two years and tippler solutions thereafter. TFR business case for these have been approved.
	COAL (EXPORT DURBAN WESTS)	1,434	1,771	2,237	2,94	2,94	2,96	2,705	1,272	Transnet: SA Coal transportation system development, Export coal line, Waterberg developments, Swazi Rail link, Coal backbone capacity, Eskom Road to Rail, Cross-border connections.
	COAL (EXPORT RICHARDS BAY NAVITRATE)	0,638	1,016	1,183	1,854	1,854	1,854	1,998	1,36	Transnet: SA Coal transportation system development, Export coal line, Waterberg developments, Swazi Rail link, Coal backbone capacity, Eskom Road to Rail, Cross-border connections
COAL (EXPORT TCM/MAPUTO)	3,68	4,376	5,925	6,421	9,049	11,735	10,964	7,284	TCM expansion plan is to grow to 16mt in the next five years due to Limpopo projects (Vele and Mahado).	
<b>COAL</b>	<b>16,858</b>	<b>19,918</b>	<b>24,927</b>	<b>28,341</b>	<b>44,606</b>	<b>47,997</b>	<b>48,525</b>	<b>31,869</b>		
EXPORT IRON ORE & MANGANESE	MANGANESE (EXPORT - ALGOABAY PE)	5.1	5.1	0	9,897	13,138	14,357	16	10.9	SA's share of world output set to grow with junior miners and organic growth of traditional clients. New entrants are expected to commence with their respective productions in 2013/14. Global economy recovers from the current slump and demand from China does not subside. Lomiba Manganeese expansion in Ngqura materialises. South Eastern node & corridor development - Transnet: Ngqura Transhipment Hub, Integrated CDC development and Manganeese Export Corridor.
	EXPORT IRON ORE LINE & MANGANESE	8.7	8,716	11,575	13,047	15,56	17,032	18.9	10.2	
INTERMODAL	COAL (ESKOM - CAMDEN COAL IN CONTAINERS)	2,647	2,2	2,966	4,272	4,376	5,272	5,798	3,151	Coal deliveries to the Powerstations will increase based on the growth in electricity usage over the next years. Camden will use container rail solutions for the next two years and tippler solutions thereafter. TFR business case for these have been approved.
	CONTAINERS (3M, 6M, 12M & NON-ISO STANDARD)	8,852	8,096	9,273	10,293	10,358	10,883	11,647	2,796	Linked to GDP growth, Refurbishment and establishment of terminals, Containensing mineral products at key loading sites, Development of Freight Hubs in areas such as Polokwane and Beaufort West, New Castle Terminal, DeJank Strategy, Kingstree Yard Rail Stack, Reconfigure Bayhead Yard to push back trains, Durban - Free State - Gauteng Logistics and Industrial Corridor - Transnet: Port of Durban expansions, new dig-out port, Nator rail capacity expansion, Gauteng hubs and terminals development Transnet Integrated Container Strategy in consultation with current and potential customers.
	<b>INTERMODAL</b>	<b>12,628</b>	<b>14,209</b>	<b>18,321</b>	<b>19,935</b>	<b>15,333</b>	<b>16,705</b>	<b>18,781</b>	<b>6,153</b>	
MINERAL MINING & CHROME	COMMODITIES NOT CLASSIFIED IN GROUPS	4,261	3,553	4,825	6,756	6,918	7,007	7,477	3,216	Included in this group is Gold Ore & Other lesser Minerals and Ore Mining. These commodities currently enjoy a healthy demand.
	MAGNETITE (EXPORT MAPUTO)	2,405	3,567	4,25	4,615	4,839	4,839	6	3,595	Demand mainly from China - driven by increased steel production. Export growth indicates modest increase and domestic consumption is set to grow once local beneficiation projects are started.
	MAGNETITE (EXPORT RICHARDSBAY)	4,17	4,293	4,782	5,3	5,3	5,3	5,3	1,13	Demand mainly from China - driven by increased steel production. Export growth indicates modest increase and domestic consumption is set to grow once local beneficiation projects are started.
	ROCK PHOSPHATE (DOMESTIC RICHARDS BAY NAVITRATE ROG)	1,717	1,929	2,232	2,618	2,822	2,822	3	1,283	Building Drier 9 to support current 7 year demand
<b>MINERAL MINING &amp; CHROME</b>	<b>18,532</b>	<b>20,317</b>	<b>24,454</b>	<b>28,892</b>	<b>30,11</b>	<b>30,567</b>	<b>33,063</b>	<b>14,531</b>		
STEEL & CEMENT	CEMENT	4,585	5,204	5,661	6,111	6,265	6,271	6,343	1,758	Volumes to increase in line with SA's GDP growth (4% on average). TFR also targeting rail-friendly volumes in this sector. There is roughly 4mt of bagged cement currently on road. The Road to Rail strategy aims to target 300,000 tons in the 1st year and gradually capture more over the 7 year period.
	COAL (DOMESTIC - OTHERS)	5,24	6,631	7,66	8,465	9,024	9,024	9,511	4,271	Driven by growth in other industries, e.g. steel, cement, timber etc
	COMMODITIES NOT CLASSIFIED IN GROUPS	1,774	1,848	1,937	2,338	2,407	2,784	2,879	1,105	These include dolomite, iron slag etc used in the production processes of the Steel Manufacturers and is linked to increased output in the production processes.
	IRON ORE (DOMESTIC SISHEN)	1,082	2,673	3,639	3,731	3,839	3,839	3,84	2,758	Increases in domestic steel production supported by government infrastructure development plan, Domestic and regional consumption of steel fueling demand for iron-ore & new export project by Aquila from Thebasimbi to Maputo.
	LIME	1,451	1,536	2,186	2,417	2,501	2,497	2,595	1,144	Lime is used in the production processes of the Steel Manufacturers and is linked to increased output in the production processes.
<b>STEEL &amp; CEMENT</b>	<b>21,836</b>	<b>26,657</b>	<b>32,167</b>	<b>35,228</b>	<b>36,469</b>	<b>36,894</b>	<b>39,659</b>	<b>17,824</b>		
<b>Total General Freight</b>	<b>93,213</b>	<b>104,265</b>	<b>127,273</b>	<b>151,461</b>	<b>160,659</b>	<b>170,454</b>	<b>180,252</b>	<b>89,041</b>		

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## 2. General Freight fleet runout

Locos	Type	Class	GFB FLEET			Runouts and upgrades out same year					Wreck repairs from previous year, Cascados same year													
			10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32
6E	6E		12																					
	8E1		183	163		75	25																	
7E	7E		57	57		58	58	29																
	7E1					48	48	48	48	48														
	7E2		43	43		45	45	23																
	7E3		65	65		65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
	7E4								17	17	7													
8E	8E		58	37		37	37	37	25	13														
9E	9E																							
10E	10E		45	45		45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
	10E1		30	30		37	39	41	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
	10E2		17	17		22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	11E					1	1	1	11	23	19	19	19	19	19	19	19	19	19	19	19	19	9	
12E	12E																							
14E	14E		1	1		1	1	1	1	1	1													
	14E1		7	7		7	7	7	7	4	1													
15E	15E																							
18E	18E		506	525		587	647	697	727	727	727	682	632	582	532	482	432	382	332	282	232	182	132	82
19E	19E																							
20E	20E																							
20E	NewE																							
31	31 GE																							
32	32 GE																							
33	33 GE		17			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
34	34 GE		107	173		199	199	204	190	176	150	125	75	26										
	34 GM		85	85		119	119	124	111	95	79	79	79	79	69	44	19							
35	35 GE		43	43		39	39	39	36	32	29	25	18	10	2									
	35 GM		110	110		107	107	107	107	107	94	80	57	33	10									
36	36 GE		84	84		86	86	86	86	86	86	86	72	58	44	30	16							
	36 GM		83	83		81	81	81	81	81	81	81	81	81	81	81	67	53	39	25	11			
37	37 GM		50	50		70	70	58	46	34	22	10												
38	X38		35	38		38	38	38	38	38	38	38	38	19										
39	39 GM		55	55		53	53	53	53	53	53	53	53	53	53	48	48	48	48	48	48	48	48	48
43	43 GE		27	27		53	53	53	53	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
NewD	NewD																							
91	91 GE																							
<b>Grand Total</b>			<b>1730</b>	<b>1748</b>		<b>1888</b>	<b>1880</b>	<b>1864</b>	<b>1832</b>	<b>1776</b>	<b>1686</b>	<b>1550</b>	<b>1365</b>	<b>1201</b>	<b>1051</b>	<b>845</b>	<b>842</b>	<b>732</b>	<b>657</b>	<b>582</b>	<b>507</b>	<b>425</b>	<b>356</b>	<b>306</b>
Diesel Fleet (before wrecks)			706	758		850	850	848	806	753	683	628	524	410	310	254	201	152	138	124	110	99	99	99
Electric Fleet (Before Wrecks)			1024	990		1038	1040	1016	1026	1023	1003	922	841	791	741	691	641	580	519	458	397	326	257	207

## 3. Locomotive run-out mitigation

### Total Maintenance cost for Wagons and Locomotives

By inspection the cost per annum increase of locomotive maintenance is significantly greater than that of wagon maintenance. Locomotive maintenance increase from R2 377m to R3 335 over the five year period 2007/08 – 2011/12; an increase of 40 percent. By contrast wagon maintenance, which does not have the same level of technology, increased from R2 044 to R2 234 over the same period: an increase of 9.3 percent. All maintenance is performed by Transnet Engineering.<sup>8</sup>

### Locomotive class comparison Maintenance cost vs. NTK for the last 5 years

This figure shows the average cost of maintenance per class of locomotive over the past five years against its performance measured in Net Ton Kilometres.

<sup>8</sup> The increasing proportion of copex to opex in locomotive maintenance is a function of changes in accounting procedures as a greater proportion of maintenance is capitalised according international accounting standards.

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The new locomotives such as the 15E, 19E and 43D cannot be directly compared to the older locomotives as the new locomotives have not seen five full years of service but even making allowance for the shorter service, the savings in maintenance costs is evident.

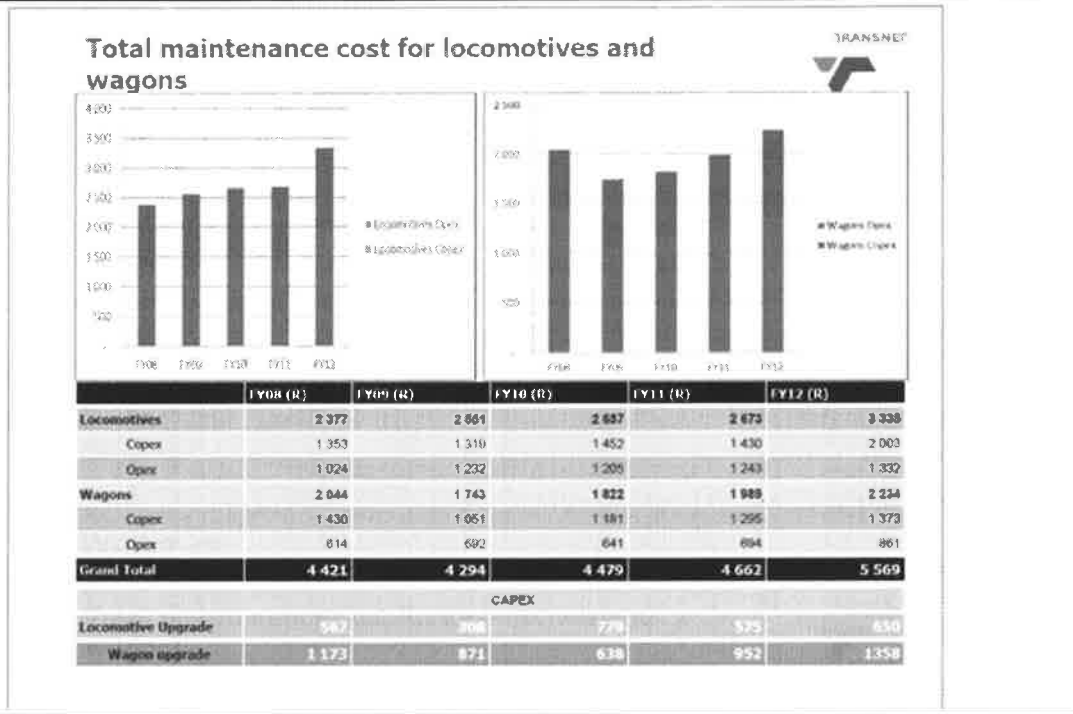
The three locomotives (excluding the new locomotives) with the best ratio of NTK/Cost of Maintenance are the heavy haul locomotives 9E, 11E and 7E1.

The workhorse locomotives that have a poor NTK/Cost of Maintenance ratio include the 18E, 6E 34-000, 34-400 series.

The locomotives that have the worst NTK/Cost of Maintenance ratio include the 37-000, 7E2, 34-800, and the 33, 35 and 36 classes. These are amongst the oldest locomotives.

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1. EXHIBIT 47



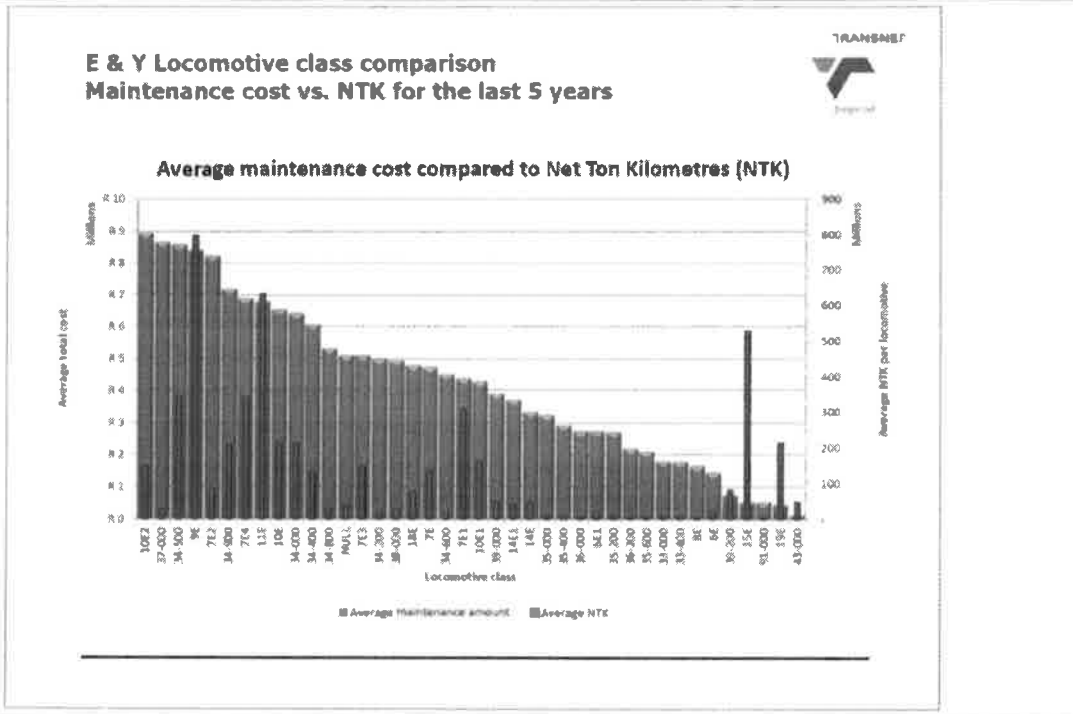
TFR has exhausted the life extension possibilities of its current “workhorse” fleet which are the primary contributors to GTK / NTK. Extending the life of “shunters” and “haulers” does not contribute to increasing GTK / NTK as the locomotives are not used and cannot be used for the heavy loads of main line operations.

The SMILIP programme for new traction power was developed circa 2002. When this programme was not accepted TFR responded by extending the life of the current workhorse fleet.

The life extension / upgrade programme included:

- 650 6E1 series upgrade to new class 18E providing a 12-15 year life extension. 120 upgrades are still to be completed by March 2016. By 2018 the first of the upgrades will start to run out.
- 150 class 34 GE locomotives programmed for fitting with new Britestar Contol systems with 55 still to be completed. As the locomotives are already over 35 years old this is a palliative.
- 75 class 34 GM locomotives fitted with new Nexsys Control Systems. A further 20 are programmed for 2013. As these locomotives are already 38 years old, this decision will be reconsidered in anticipation of the new locomotives.
- Other interventions were more essential maintenance than life extension strategies. The above programs result in extend the run out age from a designed 30 years to 45 years.
- The locomotives suitable for upgrade / life extension have already all being targeted. The balance of the fleet does not lend itself to similar interventions.

EXHIBIT 48



4. Locomotive 7-year locomotive requirement

		GFB 7 YEAR LOCOMOTIVE REQUIREMENT											
LOCOMOTIVE CLASS	GROUP	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
6E/6E1	6E	183	172	134	43								
18E	18E	506	521	662	744	760	715	715	665	615	565	515	465
7E	7E	64	66	42	42	42							
7E1	7E1	0	-	21	21	21	46	46	46	46	46	46	46
7E2	7E	32	34	34	34	34	34						
7E3	7E	11	65	65	65	65	65	65	65	65	65	65	65
8E	8E	58	54	37	33	24	12	12					
9E	9E		30	4	4								
10E1	10E	23	26	36	36	36	53	62	45	45	45	45	45
10E2	10E	59	58	62	62	62	62	62	62	62	62	62	62
14E1	14E	8	8	8									
33	GE	17											
34	GE	115	188	188	188	188	142	142	142	120	120	120	120
34	GM	82	90	94	94	94	94	94	94	94	94	94	94
35	GE	65	69	74	77	79	79	79	79	79	79	79	79
35	GM	79	86	93	93	96	96	96	96	96	96	96	96
36	GE	87	90	90	98	98	98	98	98	98	98	98	98
36	GM	81	84	84	92	92	92	92	92	92	92	92	92
37	GM	48	50	50	50	25	25						
38	X38	34	38	38	38	38	38	38	38	38	38	38	38
39	GM	55	50	50	50	50	50	50	50	50	50	50	50
43	GE	34	62	113	113	113	126	113	113	113	113	113	113
44D NEW		0	-	-	82	179	279	362	393	465	515	535	545
20E		0	-	-	81	202	332	462	599	671	721	771	821
Total		1641	1841	1879	2140	2302	2442	2592	2681	2753	2803	2823	2833

## 5. Deployment plan

EXHIBIT 49

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  - DEPLOYMENT PLAN 143X43D
  - DOMESTIC AND EXPORT COAL BU
  - STEEL AND CEMENT BU
  - MINERAL MINING AND CHROME BU
  - IRON ORE AND MANGANESE BU
  - CONTAINERS AND AUTOMOTIVE BU
  - AGRICULTURE, TIMBER, BULK LIQUID AND AFRICA TRADE BU
  - BACKUP SLIDES
  - IMPACT ON TFR & TRE
- 

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GLOSSARY

MUS – MUSSINA  
 PRZ – PYRAMID SOUTH  
 PHW – PHALABORWA  
 NLP – NELSPRUIT  
 KWD – KAAPMUIDEN  
 KTR – KOMATIPOORT  
 HLF – HALFWEG  
 SLD – SALDANHA  
 BLE – BELLVILLE  
 KGR – KRUGERSDORP  
 ELN – EAST LONDON  
 NAS – NATALSPRUIT  
 WED – WELGEDACHT  
 KAZ – KASERNE  
 SBG – SASOLBURG  
 MEI – MAFIKENG  
 SPR – SPRINGS  
 TIT – RICHARDT  
 BPR – BRAKPAN  
 ISO – ISANDO  
 BFX – BLOEMFONTEIN  
 NWT – NOUPOORT  
 HZL – HOTAZEL  
 PNG – POSTMASBURG  
 BEC – BEACONSFIELD  
 PCM – POTCHEFSTROOM  
 BIJ – BULKOR  
 MTN – MEYERTON  
 NCS – NEWCASTLE  
 DSL – DANSKRAAL  
 DNR – DURBAN  
 DER – DE AAR  
 PE – PORT ELIZABET

ALL – ST. ALBANS  
 JJA – JUBA  
 BFK – BEECHER  
 WWH – WILHELMINA  
 PLY – POLYANNE  
 BMG – BAMPKENI  
 CPH – CAPITAL PARK  
 MDS – MOEDIESPOORT  
 BUL – BULLHORN WEST  
 SFP – SPRINGPONTEN  
 PHE – PORT SHEPSTONE  
 UPN – UPINGTON  
 CSE – CANNING  
 JHE – JOHANNESBURG  
 GGL – GROOTEBELUN  
 TZE – THABAZIMBI  
 PTC – PIETRSBURG  
 COL – COLONY  
 NMB – NAMIBIA  
 SWS – SWARTKOP

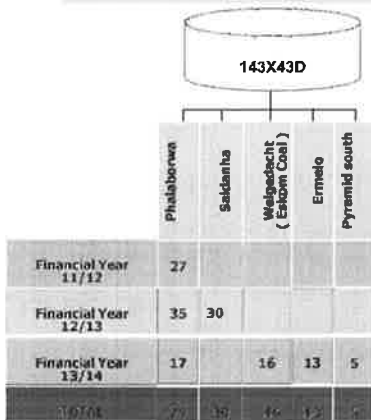


EXHIBIT 51

43D Deployment Plan

Efficiency and Volume Growth

Financial year 11/12 – 13/14



- Cascading of locos due to this injection is per BU
- The 43D locomotives will run from PHW to RCB and has eliminated loco change-over thereby improving loco and wagon cycle time
- Fueling will be done both in Phalaborwa and Richards Bay

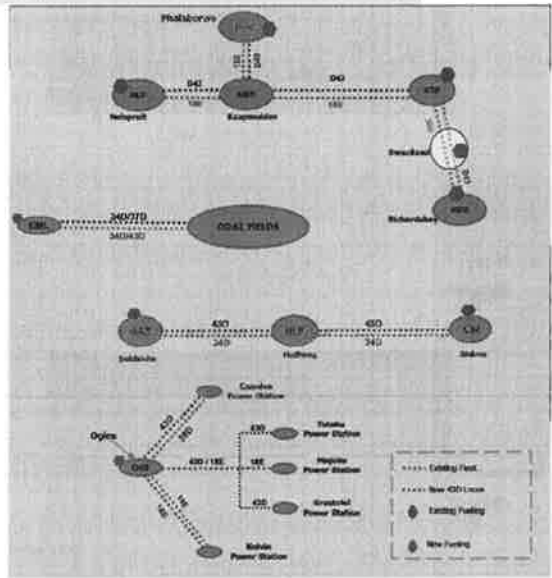


EXHIBIT 52

Cascading of 55x34D's from the Ore Line to GFB

period: Aug 2012- Jan 2013

TRANSNET

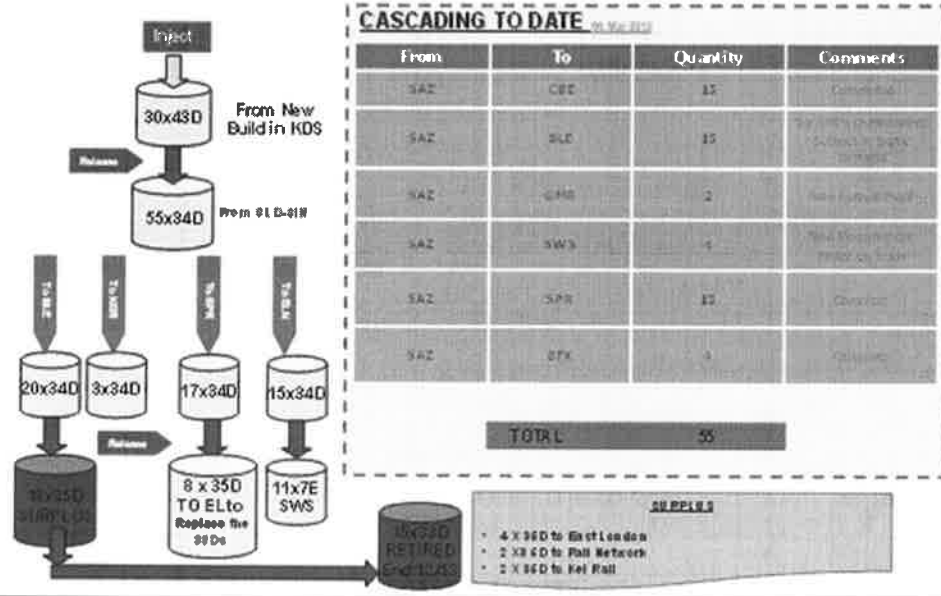


EXHIBIT 53

Schematic view of the deployment of new locomotives into the Coal Business Unit

Efficiency and Volume Growth

Financial year 12/13 – 20/21

TRANSNET

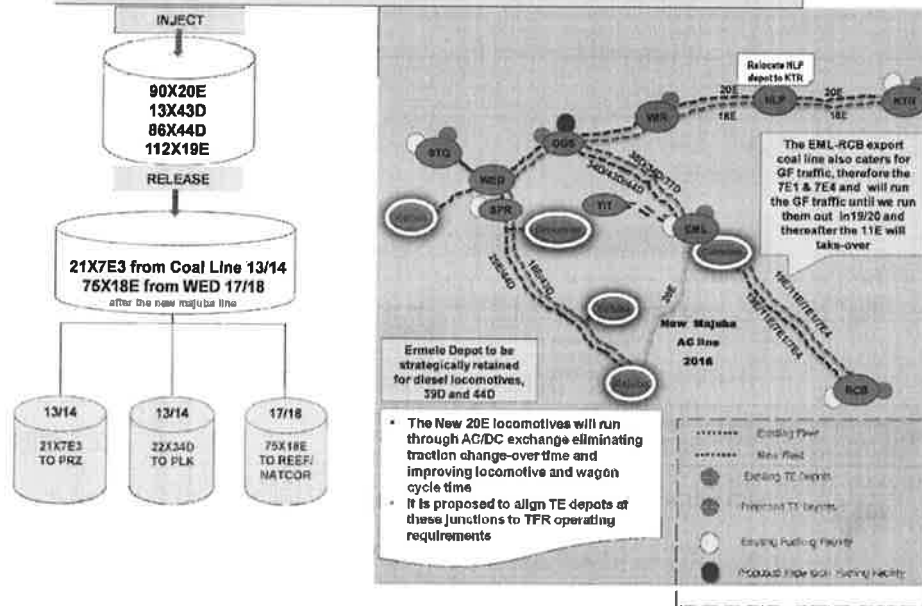


EXHIBIT 54

**New Locomotives Deployment Plan**  
Efficiency and Volume Growth

TRANSNET

Financial year 12/13 – 20/21

High Level Delivery, Cascading and Run out Plan for the Domestic and Export Coal Business Unit

	Current Fin Yr 12/13	Fin Yr 13/14	Fin Yr 14/15	Fin Yr 15/16	Fin Yr 16/17	Fin Yr 17/18	Fin Yr 18/19	Fin Yr 19/20	Fin Yr 20/21
APL 10E1	53	53	57	57	58	58	58	58	58
RCB 39200 (Diesel)						22	43	49	54
RCB 701	18								
RCB 911	32	37	37	37					
RCB 91E	45	45	45	45	58	22	27	27	27
RCB 330	140	140	145	(50) 95	(98) 0	112	100	78	21
RCB 340	17	17	15	15					
RCB 370	16	16	16	16	15				
RCB 430		13	21	21	21	31	37	41	37
RCB 440					29	(10) 19	10	78	30
RCB 450									
RCB 702		10	15	15	20	18	27		
RCB 912	53	57	57	57					
RCB 914					17	27	37		
RCB 99E1	5	5	5	5	5	37			
RCB 910						22	29	34	36
All from 2013/14								56	70-100
WFB 33E	76	76	76	75	75	75	75		
WFB 370		15							
WFB 308						20	(20) 0	(10) 10	30
WFB 340			20	(40) 20	58	78	50	58	58
WFB 370			20						
Grand Total	477	463	469	324	333	360	399	330	330

EXHIBIT 55

Deployment Strategy & Benefits : Coal

TRANSNET

**Coal : RBCT**

- > The 19E's will be increased from 110 to 222 from 2015/2016 to 2016/2017. The following strategic changes are envisaged:
  - It is to be noted that the 222 x 19E/equivalent's will run from RCB to various mines directly with only driver hot-seat changes.
  - The process will start 2013/2014.
  - This will reduce the cycle time of locomotives from 58 to 41 hours and wagons from 62 to 48 hours
  - This increases the volumes capacity of the current wagon fleet from 81 to 94.7 mtons.
  - By operating design all 19E/equivalent will be maintained in RCB.
  - This requires that all investment for maintenance at Ermelo to be reviewed as this depot will be retained for diesel locomotives maintenance (39200's and 43D/44D's). Capacity has to be reviewed as the maintenance work content on these locomotives is considerably less than the current fleet.
  - Richards bay will become a super maintenance depot. (Based on GF practices)
- > Cascade 11E's to GF traffic by 2016/2017. This could reduce to zero based on dual power processing and the clear the deck position of the 10E1s.
- > The whole diesel fleet to be replace by new diesels by 2016/2017.
- > Provide for the Under Floor Wheel Lathe at Richards Bay as it will be a singular super locomotive depot for TFR.
- > 67XOld Diesels (34D/37D) swapped with 43XNew Diesels (43D/44D), however the figure will be reviewed.

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## Deployment Strategy & Benefits : Coal



### General Freight

- General Freight traffic on the Coal line will be injected with 21 x 7E1 from the 1 May 2013. The figure will be increased to 48 by 2015/2016.
- The 7E1 and 7E4 that are ring-fenced for the Coal line general freight traffic will run-out in 2019/2020, however if the efficiencies from PRZ are realized this run-out will be earlier.
- The 7E3 will be cascaded to Pyramid South to capture the growth in Coal, Chrome and Ferrochrome from the Rustenburg area.
- All 7E3's will be cascaded to Pyramid South by 2015/2016.
- Note that with dual power processing, the 7E type locomotives will also be eliminated from the Coal line.
- All traffic from Waterburg area will be dual powered thereby removing the need for Pyramid South.

## Deployment Strategy & Benefits : Coal



- The following are the benefits:
  - Reduced fuel consumption with new diesel locomotives being introduced
  - Improved cycle times for rolling stock
  - Improved reliability
  - Better utilisation of crews
  - Reduced handling and shunting
- Impact on Crew and Maintenance depot
  - Richards Bay to be the Super Locomotive Maintenance depot
  - Standardise the Ermelo depot to few locomotive types, specifically diesels ( 39200's, 43D's and 44D's )
  - Training crew on the new locomotives
  - Ermelo yard strength and crew strength will be reviewed to the new operating standards
  - Book off at Ermelo will be reviewed as some loading station can take 200 wagon trains straight in
- Necessitated required changes
  - System cannot afford to run a 41 hour and a 56 hour cycle as it will not be seamless and will be somewhat counter-productive.
  - This will then require the 10E1's to be converted to dual power for a one type 41 hour operation.
- Financial Impact Analysis
  - Savings due the introduction of the new operating model from 1 September:

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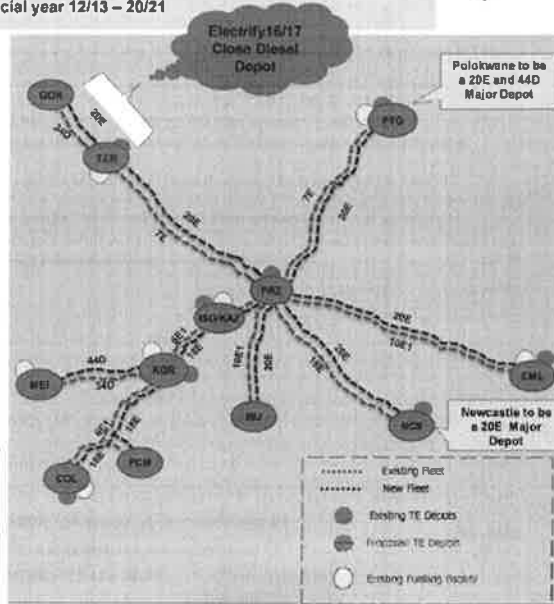
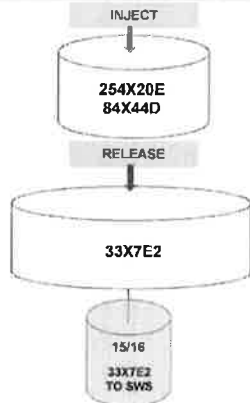
EXHIBIT 58

Schematic view of the deployment of new locomotives into the Steel and Cement Business Unit

Efficiency and Volume Growth

Financial year 12/13 – 20/21

TRANSNET



Increase capacity to move more volumes:

- Electrify the section between TZB – Lephalale/GOK
- Release the KDS 34D's to Polokwane
- Release PRZ 18E to Reef / Natcor
- New 20E locomotives to run through AC/DC exchange to eliminate time wastage
- Proposal to relocate TRE depots at junctions to where trains begin and end

EXHIBIT 59

New Locomotives Deployment Plan

Efficiency and Volume Growth

Financial year 12/13 – 20/21

TRANSNET



High Level Delivery, Cascading and Run out Plan for the Steel and Cement Business Unit

	Current Fin Yr 12/13	Fin Yr 13/14	Fin Yr 14/15	Fin Yr 15/16	Fin Yr 16/17	Fin Yr 17/18	Fin Yr 18/19	Fin Yr 19/20	Fin Yr 20/21			
BCE 20E	---	---	---	24	(45)	69	(30)	128	(35)	164	(90)	254
PRZ 7E2	33	33	33	---	---	---	---	---	---	---	---	---
PRZ 7E3	13	(21)	34	34	(21)	55	(11)	68	68	33	---	---
PRZ 10E1	30	30	30	30	(18)	45	---	---	---	---	---	---
KDS Dual Loco 10E1	---	---	---	---	---	---	45	45	45	45	45	45
PRZ 18E	15	15	---	---	---	---	---	---	---	---	---	---
TZB 34D	10	---	---	---	---	---	---	---	---	---	---	---
COL 6E1	14	---	---	---	---	---	---	---	---	---	---	---
COL 30E	---	74	(10)	44	44	44	44	44	44	44	44	44
KGR 34D	28	28	28	28	28	24	---	---	---	---	---	---
TZB 39D	23	20	20	20	20	20	---	---	---	---	---	---
KGR 44D	---	---	---	---	40	40	(12)	37	37	37	37	37
PRZ 43D	---	5	5	---	---	---	---	---	---	---	---	---
PRZ 18E	23	(22)	45	36	66	36	46	16	76	76	76	76
PRZ 44D	---	---	---	15	(2)	17	17	(15)	32	32	32	32



## Deployment Strategy & Benefits : SAC

### General Freight

- The introduction of the dual locomotives at Pyramid South will see all flows from origin to destination on the AC/DC route running with single type of locomotive. Flows such as Chrome to Richards bay; Coal & Iron Ore to Newcastle and Vereeniging, Cement to Polokwane and including over border traffic. This will eliminate traction change over at Pyramid South and Ermelo there by improving cycle time and enhancing asset utilisation.
- The efficiency of 20E's will play an important role in the release of 7E locomotives to areas where they are needed or for early run-out to reduce the cost of maintenance.
- Electrification of the section between Thabazimbi and Grootegeluk become vital for dual loco system, hence the need to fast tracked to 2015/2016
- The expectation is that once the dual 20E's are deployed it will negate the need for 10E1's in its current form, this calls for the 10E1's to be upgraded to dual powered.

### Impact on Crew and maintenance depot

- Koedoespoort diesel depot required to be down scaled as the number of diesels will be reduced.
- Thabazimbi no longer required as a maintenance depot
- Retraining of crew on new routes.
- Introduce new book-off practices.
- Pyramid South to be a run through yard with minimum processing for maize trains, cement trains etc.
- The new electric locomotive will be running to Richards Bay, Newcastle, Blijkor and Durban, therefore these areas need to prepare for the maintenance of these locomotives.
- Upgrade the colligny depot to increase its scope of work and down-scale activities in Sentrtrand depot.
- Polokwane to be a 20E and 44D depot
- Newcastle to be a 20E depot
- The yard capacity at Pyramid will require to be reviewed

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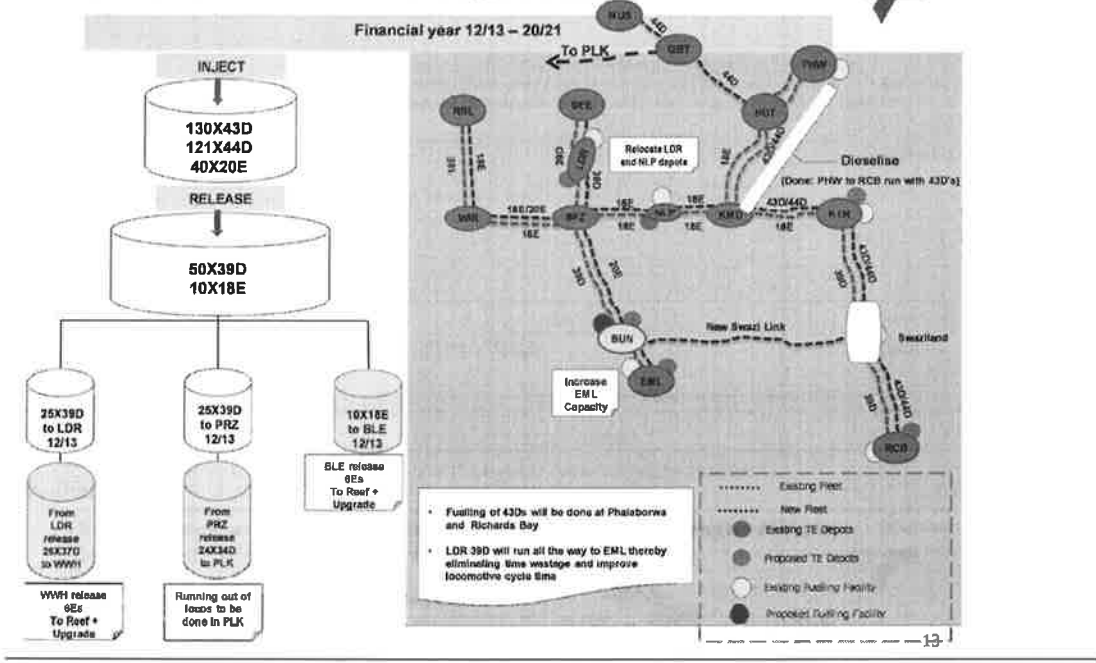
Deployment Strategy & Benefits : SAC



Financial Impact Analysis

- Pyramid yard strength to be addressed
- Cycle time from Lephalale to Richardsbay will be reduced conservatively by 30 hours
- This impacts on wagon requirements for the these tons to be calculated
- Fuel savings from replacing old diesels with new
- Pyramid South and Rustenburg yard no longer needed as holding yards, parking of Pyramid South 7E2's and 7E3's, Krugersdorp 34D and the Polokwane 34D's: SAVINGS

Schematic view of the deployment of new locomotives into the Mineral Mining and Chrome Business Unit Efficiency and Volume Growth



Transnet Freight Rail	Capital projects	
1064 Locomotives Team	18/04/2013	Page 78 of 101

EXHIBIT 63

**New Locomotives Deployment Plan**  
Efficiency and Volume Growth

TRANSNET



Financial year 12/13 – 20/21

High Level Delivery, Cascading and Run out Plan for the Mineral Mining and Chrome Business Unit

	Current Fin Yr 12/13	Fin Yr 13/14	Fin Yr 14/15	Fin Yr 15/16	Fin Yr 16/17	Fin Yr 17/18	Fin Yr 18/19	Fin Yr 19/20	Fin Yr 20/21
WAR 20E	---	---	---	---	---	20	(10) 30	(10) 30	30
EMO 19E	---	---	---	---	---	---	---	---	---
VTR 18E	83	83	83	83	83	55	43	43	73
EME 37E	27	30	30	30	30	30	50	50	50
PNW 43D	67	(17) 79	(16) 65	(5) 100	100	(30) 130	120	120	130
PHW 44D	---	---	---	---	---	12	(10) 22	22	22
BCB 45D	---	---	---	---	---	18	(8) 28	28	28
PKI 41E	---	---	---	---	14	14	14	14	14
Syaz Link 11E	---	---	---	---	---	---	30	(24) 54	(5) 80

EXHIBIT 64

**Deployment Strategy & Benefits : MMC**

TRANSNET



**General Freight**

- Note the original deployment was 89 locomotives for required MDS tons, based on the efficiencies achieved this was dropped to 79 locomotives for the same tons. The GTKa was achieved in advance of what the business case stated.
- Increase the 62 x 43D's at Phalaborwa to 79 to capture the growth in Magnetite and coal from Musina by 2013/2014.
- The locomotive cycle time has improved from 72 hours to 55 hours with the injection of the 43D's
- Wagon cycle time has improved from 7 days to 5 days on the corridor.
- Deployed 39D's at Lydenburg
- Eliminated locomotive change over at Belfast. Running the 39D's all the way to Ermelo.
- A 100 wagon train was tested successfully between Lydenburg and Ermelo.
- Steelport to be 104 wagon RDP train
- Investigate the future growth plans for the Roossenekal area and keep Witbank depot in the meantime

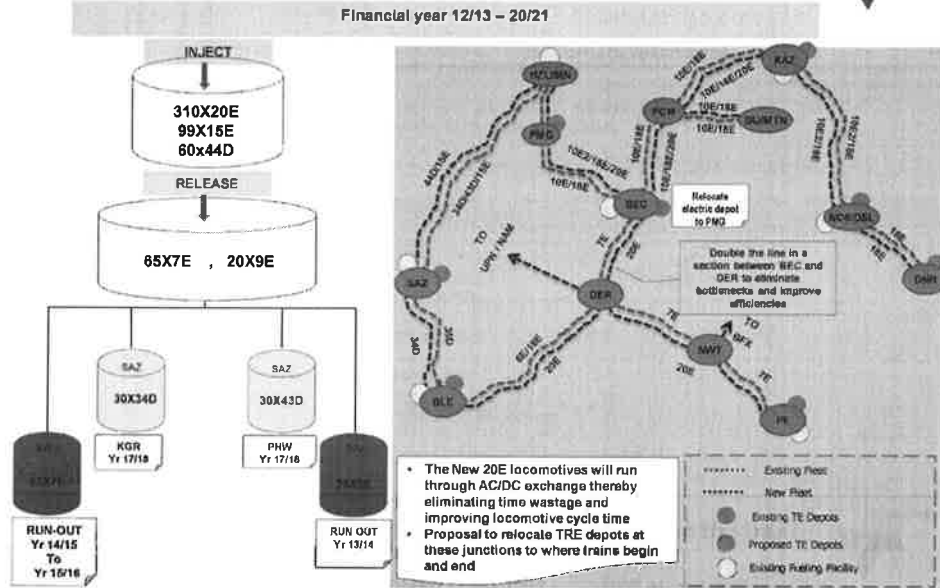
**Impact on Crew and Maintenance depot**

- **Nelspruit**
  - Relocate the crew and maintenance depot at Nelspruit to Komatipoort
- Komatipoort**
  - Komatipoort to have a 12 ton crane and a drop-pit.
- **Waternal Boven**
  - Relocate the crew depot Witbank and Komatipoort
- **Lydenburg**
  - The corridor has been standardised to 39D's only
  - Future maintenance to be done at Ermelo
  - Relocate Lydenburg as a Loco and Crew depot to Steelport

Transnet Freight Rail	Capital projects	
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EXHIBIT 65

Schematic view of the deployment of new locomotives into the Iron Ore and Manganese Business Unit Efficiency and Volume Growth



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EXHIBIT 66

New Locomotives Deployment Plan

Efficiency and Volume Growth



Financial year 12/13 – 20/21

High Level Delivery, Cascading and Run out Plan for the Iron Ore and Manganese Business Unit

GFB	Current Fin Yr 12/13	Fin Yr 13/14	Fin Yr 14/15	Fin Yr 15/16	Fin Yr 16/17	Fin Yr 17/18	Fin Yr 18/19	Fin Yr 19/20	Fin Yr 20/21
PMC 20E	—	—	25	(46) 21	(14) 85	95	85	95	95
PMB 20E	—	—	—	—	50	140	200	145	110
SWS 2E	24	20	20	—	—	—	—	—	—
SWS 2E2	12	12	—	—	—	—	—	—	—
PHC 10E4	45	44	44	43	44	—	—	—	—
PHG 10E4 (10E2)	—	—	—	—	—	85	84	84	84
PHG 10E4	28	28	28	28	28	28	28	28	28
SAZ 310	30	30	30	30	30	—	—	—	—
SAZ 9E	4	4	4	4	4	4	4	4	4
SAZ 10E	—	—	—	—	—	30	30	30	30
PHW	224	207	208	183	147	122	45	47	47
PHW 20E	—	—	—	—	—	—	—	—	—
SAZ 15E	(44) 150 59	(11) 74	76	(11) 57	(11) 55	52	55	55	55
SAZ 43D	28	28	28	28	28	—	—	—	—
SAZ 44Q	2	9	6	9	6	20	20	20	20
PHW	224	207	208	183	147	122	45	47	47
Grand Total	383	374	367	429	472	512	542	587	589



## Deployment Strategy & Benefits : IOM

### Ore Line

- The Ore line 15E will increase from the current 44 x 15E to 76 x 15E by 2013/2014 financial. This will further be increase by 24 x 15E to meet the MDS volume budgets.
- The 30 x 9E will be reduce to a rough figure of 4 to cater for GF traffic on the Ore Line and mine shunting requirement. This will address the Saldanha Coal service and the containerised manganese to Saldanha.
- An injection of 30 x 43D's will be used to on the long trains due to power supply constraint. This will also improve reliability and fuel consumption.
- The 34 class diesels will reduce to 30 x 34D's to cater for other GF traffic, Infra and shunting purposes.
- By 2017/2018 all diesels on the Ore Line to be replaced by the new 44D diesels

### General Freight Lines

- The deployment of the new electric dual powered locomotives will bring benefit in the manner in which trains are operated. The new AC/DC locomotives will have the capability to run through the interchange at Beaconsfield and Beaufort West thereby eliminating traction change over time.
- The dual powered locomotives for Postmasburg depot will service both the PMG-PE route and the Gauteng-Cape Town/PE route with Swartkops being the super depot.
- Swartkops 7E's retired in 2016/2016, 33XPRZ 7E2 cascaded to Swartkops to be retired in Swartkops the 2016/2017.
- 10E/2 to be converted to dual power locomotives and this will impact positively on the cycle times.

### Impact on Crew and Maintenance depot

- Beaconsfield maintenance depot no longer required
- Investigate the possibility of De Aar as a book-off place
- Postmasburg to be the a critical turn around locomotive maintenance depot.



## Deployment Strategy & Benefits : IOM

### Financial Impact Analysis

- Car and container trains to Kaalfontein and Kazame from PE will have an improvement in cycle time of 10 hours.
- Further fuel saving will be achieved with moving the combination of 19E and 34e to 15E and 43000. this is approximated to be around 1M litres
- Yard capacity to be reviewed at Kimberly due to run through and only hot seat changes.
- Parking of SWS 7E by 2016/2016:

Transnet Freight Rail	Capital projects	
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**Deployment Strategy & Benefits : IOM**



**Financial Impact Analysis**

- Car and container trains to Kaalfontein and Kazero from PE will have an improvement in cycle time of 10 hours.
- Further fuel saving will be achieved with moving the combination of 15E and 34s to 16E and 43000. this is approximated to be around 1M litres
- Yard capacity to be reviewed at Kimberly due to run through and only hot seat changes.
- Parking of SWS 7E by 2016/2016:

**New Locomotives Deployment Plan**

Efficiency and Volume Growth

TRANSNET



Financial year 12/13 – 20/21

High Level Delivery, Cascading and Run out Plan for the Container and Automotive Business Unit

	Current Fin Yr 12/13	Fin Yr 13/14	Fin Yr 14/15	Fin Yr 15/16	Fin Yr 16/17	Fin Yr 17/18	Fin Yr 18/19	Fin Yr 19/20	Fin Yr 20/21
NEO 101	222	222	222	222	222	(30) 292	(10) 262	262	262
REX 340	44	44	44	44	44	---	---	---	---
REX 440	---	---	---	30	(10) 40	40	40	(10) 50	50
WWH 370	39	39	39	27	15	---	---	---	---
WWH 440	---	---	43	(20) 33	33	33	(10) 43	(5) 40	40



**Deployment Strategy & Benefits : CAB**

**General Freight**

➤ **Kasernie/City Deep**

- Postmasburg/Swartkops 20E locomotive fleet will cater also for this corridor to Cape Town. This will improve the container services between Gauteng and Cape Town
- Reviewing the containers to Port Elizabeth to run via Beaconsfield, including the motorcars.
- This will improve on the assets cycle time thereby eliminating traction change overs at Beaconsfield and Beaufort West.

➤ **Impact on Crew and maintenance depot**

- Retraining of crew on the new locomotives.
- Introduce book-off where feasible.
- Belville to be major depot while Kasernie becomes a supporting depot for the new electric locomotives.
- Review viability of Wentworth maintenance depot considering maintenance cycle times of 44D's versus 37D's and the 37D failures rates.

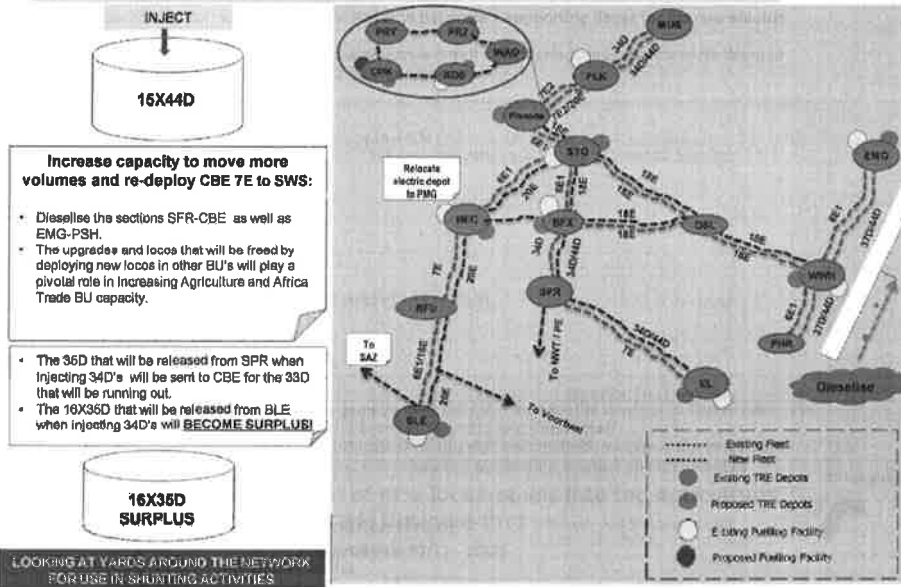
➤ **Financial Impact Analysis**

- Fuel savings when replacing 34/37 with 44Ds
- Parking of Wentworth 37D by 2017/2018 and Bloemfontein 34D by 2017/2018: **SAVING**



**Schematic view of the deployment of new locomotives into the Agriculture, Timber, Bulk Liquids and Africa Trade Business Unit** Efficiency and Volume Growth

Financial year 12/13 – 20/21



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EXHIBIT 73

**New Locomotives Deployment Plan**  
Efficiency and Volume Growth

TRANSNET



Financial year 12/13 – 20/21

High Level Delivery, Cascading and Run out Plan for the Agriculture and Africa Trade Business Unit

	Current Fin Yr 12/13	Fin Yr 13/14	Fin Yr 14/15	Fin Yr 15/16	Fin Yr 16/17	Fin Yr 17/18	Fin Yr 18/19	Fin Yr 19/20	Fin Yr 20/21
ALL 350	29	13	13	17	13	17	13	13	13
BIF 340	13	14	14	11	11	14	12	14	11
DLE 18E	27	27	27	27	27	15	15	15	15
CPH 18E	5	5	(10)	15	15	15	15	15	15
670 6E (PHASED OUT)	133	0	0	---	---	---	---	---	---
JHB 18E	---	50	(50)	100	100	(12)	(40)	(55)	(28)
SPR 350	10	---	---	---	---	---	---	---	---
SPR 340	27	(11)	28	28	28	28	28	28	28
DBE 340	16	20	20	20	20	20	20	20	20
DBL 480	---	---	---	---	---	---	19	12	13

EXHIBIT 74

**Deployment Strategy & Benefits : ABL**

TRANSNET



**General Freight**

- The Sentraland depot will start to receive 18E's from 2013/2014.
- The 6E locomotives will be phased out by 2016/2017, with the rest upgraded to 18Es.
- Dieselise the Springfontein to East London and make Springfontein a run through yard.
- The depots under ABL will be standardised to 18E's on DC areas.
- The Polokwane 34D retired in 2020/2021 as we receive new diesels.
- Beaufort West no longer required as a change-over yard

**Impact on Crew and maintenance depot**

- Retraining of crew on the new locomotives.
- Introduce book-off were feasible.

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## 6. Business unit power sheets

See attached power sheer excel file "20130418 Supporting Document F6 Business Unit Power Sheets"

Transnet Freight Rail	Capital projects	
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# 7. NPV analysis

	2014	2015	2016	2017	2018	2019	2020	2030	2035	2040	2045	2046	2047	2048	2049
WACC	9.0%	7.1%	6.0%	5.1%	4.5%	4.0%	3.5%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%	0.0%
Discount factor	0.905	0.826	0.751	0.680	0.612	0.548	0.488	0.432	0.380	0.331	0.285	0.242	0.201	0.162	0.125
PII	4.0%	5.1%	6.0%	7.0%	8.0%	9.0%	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	16.0%	17.0%	18.0%
CRF	5.2%	5.5%	5.8%	6.0%	6.2%	6.4%	6.6%	6.8%	7.0%	7.2%	7.4%	7.6%	7.8%	8.0%	8.2%
Volume increase's Escalation factor (PII)	1.05	1.13	1.21	1.29	1.37	1.45	1.53	1.61	1.69	1.77	1.85	1.93	2.01	2.09	2.17
CRF discount factor	0.905	0.826	0.751	0.680	0.612	0.548	0.488	0.432	0.380	0.331	0.285	0.242	0.201	0.162	0.125
Present Value to Start of Fin Year 2014															
Total volumes (Net tons)	91	104	127	151	181	210	240	270	300	330	360	390	420	450	480
Intermodal Volumes (Net tons)	1	7	21	41	60	77	98	112	130	150	170	190	210	230	250
Tariffs Average (R/ton/m)	0.42	0.45	0.48	0.50	0.54	0.58	0.64	1.12	1.50	2.01	2.69	3.02	3.20	3.39	3.58
Average distance (Kms)	552	551	553	533	539	542	542	542	542	542	542	542	542	542	542
Revenue	109,104	149,95	272	109,47	174,37	241,99	405,40	543,52	726,01	971,56	111,86	131,92	153,97	176,02	198,07
Total Diesel TCO	22,090	26,74	33,13	40,40	49,46	60,42	73,47	89,52	108,57	129,62	152,67	177,72	203,77	230,82	258,87
Initial capital outlay	8,314	2,583	2,709	2,876	3,058	3,249	3,440	3,631	3,822	4,013	4,204	4,395	4,586	4,777	4,968
Disposal value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel	8,637	90	459	824	1,233	1,713	2,204	2,814	3,735	4,956	6,577	8,600	11,023	13,846	17,069
Maintenance	1,449	14	14	63	124	220	377	596	889	1,364	2,087	3,062	4,407	6,152	8,397
Personnel costs	3,029	0	130	296	598	959	1,462	2,059	2,760	3,561	4,462	5,463	6,464	7,465	8,466
Insurance	49	0	2	7	10	11	16	21	28	38	53	72	97	127	167
Emissions	182	0	9	17	26	36	42	60	80	107	144	193	252	321	390
0% Hedging costs (included in purchase price)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0% Hedging costs (included in purchase price)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contingency adjustment to corporate plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Electric TCO	21,793	318	1,974	4,951	5,352	5,689	6,670	8,465	11,465	15,465	20,465	26,465	33,465	41,465	50,465
Electric TCO	12,252	318	1,974	4,951	5,352	5,689	6,670	8,465	11,465	15,465	20,465	26,465	33,465	41,465	50,465
Initial capital outlay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Disposal value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel	3,801	0	21	133	387	577	840	1,465	1,956	2,611	3,466	4,518	5,868	7,518	9,168
Maintenance	1,724	0	0	1	17	70	152	835	1,346	1,403	2,599	1,610	1,224	839	240
Personnel costs	3,401	0	17	110	275	468	692	1,312	1,883	2,665	3,667	4,428	5,379	6,430	7,481
Insurance	53	0	0	2	5	8	12	21	27	37	49	61	74	89	104
Emissions	531	0	3	19	48	80	117	204	273	366	489	608	719	820	921
0% Hedging costs (included in purchase price)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contingency adjustment to corporate plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Wagon costs	12,463	3028	3456	3979	4474	4943	5388	5808	6203	6573	6928	7268	7593	7903	8208
Purchase cost	10,017	3022	3417	3828	4228	4603	4953	5278	5578	5853	6103	6338	6558	6763	6953
Capex	1,381	3	23	70	151	242	359	591	917	1,135	1,577	1,877	2,157	2,417	2,657
Opex	863	3	17	48	95	142	190	318	421	553	754	864	974	1,084	1,194
Total Infrastructure costs	18,491	1085	3171	4173	4772	4719	6003	8008	10013	12018	14023	16028	18033	20038	22043
Expansion	9,513	1026	2787	3379	3023	3092	4987	6992	8997	10992	12997	14992	16997	18992	20997
Capex and replacement capex	8,978	60	384	795	1249	1627	1887	3038	4065	5440	7280	8345	9680	10920	12160
Overhead costs	23,910	111	660	1385	2781	4055	5153	6539	8239	10247	12463	14883	17403	20023	22643
Net cashflow before tax	10,397	8946	-10772	-13077	-10559	-5901	476	19125	25871	34344	45678	59981	77101	96201	117301
20% Effective Tax costs (negative = credit)	7,598	0	341	-789	-1039	-1016	-238	5240	7073	9446	12619	16540	21301	27001	33701
Cashflow after tax	2,799	-6,946	-10,411	-12,288	-9,520	-4,885	-219	14,084	18,797	24,898	33,039	40,442	54,801	69,201	83,601

## 8. Risk register

No	Key Elements	Risk Something will occur	Impacts leading to...	Causes caused by...	Controls controlled by...
1	Change Management: Risk	Ineffective change management in implementing the strategies as encompassed in the	<ul style="list-style-type: none"> <li>&gt; Lack of buy in from labour</li> <li>&gt; Lower employee morale</li> <li>&gt; Employee resistance</li> <li>&gt; Relocation of people</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Lack of understanding as to the business need for the changes</li> <li>&gt; Ineffective communication resulting from the communication</li> </ul>	<ul style="list-style-type: none"> <li>None. Pending deployment plan approval</li> </ul>
2	Volumes Risk	Volumes Risk associated with the late delivery (1064)	<ul style="list-style-type: none"> <li>&gt; Loss of Revenue (R70.9bn)</li> <li>&gt; Loss of Tonnes</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Current planned timelines may be at risk for local production<sup>1</sup> and suggest annual locomotive shortages peaking at 150 electric and 70 diesel in 2015</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Close monitoring of the delivery schedule</li> <li>&gt; 1064 steerco</li> </ul>
3	Planning Risk	Incorrect fleet life cycle planning	<ul style="list-style-type: none"> <li>&gt; Tonnes not materialising as a result of the unavailability and unreliability of the fleet</li> <li>&gt; projects falling behind schedule,</li> <li>&gt; underutilised assets</li> <li>&gt; inability to deliver the fleet as per the plan</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Severely underestimating the contractual complexities</li> <li>&gt; Adding additional requirements and complexities to the contract</li> <li>&gt; Lengthy approval processes causing delays and mismatch between scheduled deployment and operational requirements</li> <li>&gt; Non alignment between rolling stock planning, network planning and technology planning</li> <li>&gt; There is an inherent risk with the increase in number of OBM's used for locomotives increases the acquisition time for design and testing, and increases the contractual complexities</li> <li>&gt; Unrealistic timelines creating undue pressure on fast tracking the time taken for design and testing</li> <li>&gt; Lack of co-ordination and integration between the various Capital projects</li> <li>&gt; Protracted negotiations</li> <li>&gt; TFR lack of capacity to manage contracts</li> <li>&gt; Lack of capacity / capability from the supplier to execute contracts within the required time frame</li> <li>&gt; Ineffective lifecycle planning</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Standard agreement &amp; standardised technical specifications</li> <li>&gt; 1064 loco steer committee</li> <li>&gt; Improved approval process of prototypes prior to planned builds ahead of demand (Wagons &amp; loco's upgrade)</li> <li>&gt; Signed off user requirement specifications (Wagons)</li> <li>&gt; Alignment of fleet deployment plan according to traffic file</li> <li>&gt; Procurement controlled by current procurement strategy.</li> <li>&gt; Aggressive delivery forced by conservative payment regimes</li> <li>&gt; None</li> <li>&gt; None</li> <li>&gt; Contract management process</li> <li>&gt; Project Management, contractual terms for terminating and contract penalty clauses</li> <li>&gt; Resuscitate of the fleet plan</li> <li>&gt; Deployment plan</li> </ul>

No	Key Elements	Risk Something will occur	Impacts Leading to...	Causes caused by...	Controls controlled by...
4	Market Risk	Inherent risk that the commercial sectors that the w agents and locomotives are built for do not achieve the anticipated market growth	<ul style="list-style-type: none"> <li>&gt; tonnage not materialising as a result of the unavailability and unreliability of the fleet</li> <li>&gt; projects falling behind schedule,</li> <li>&gt; underutilised assets</li> </ul>	<ul style="list-style-type: none"> <li>&gt; lower than anticipated customer demand</li> <li>&gt; The anticipated customer demand does not materialise</li> <li>&gt; The customer demand exceeds planned demand</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Annual budget review of the demand (Demand file)</li> <li>&gt; Logistic integration function (monitors asset performance &amp; allocate resources)</li> <li>&gt; Annual budget review of the demand (Demand file)</li> <li>&gt; Financial KPI focusing on asset utilisation (Return on total assets)</li> <li>&gt; Annual/ Quarterly review of the build programme to align TE factories (w wagon fleet)</li> <li>&gt; Maintenance staffing plan</li> </ul>
5	Skills Risk	Lack of required skills to build, maintain, project manage and utilise the new fleet	<ul style="list-style-type: none"> <li>&gt; Delay in the execution of the fleet plan</li> <li>&gt; Delay in project schedule/ deployment</li> <li>&gt; Underutilised assets</li> <li>&gt; Poor assets handling assets</li> </ul>	<ul style="list-style-type: none"> <li>&gt; not obtaining the right wagon mix for the right volumes of commodities at the right time</li> <li>&gt; Insufficient maintenance skills (artisans, technicians)</li> <li>&gt; Insufficient new generation technology maintenance skills</li> <li>&gt; Train drivers not adequately equipped to utilise the new fleet</li> <li>&gt; Inadequate transfer of knowledge of skills from the OBM to Transnet</li> <li>&gt; Lack of project management skills</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Succession plan &amp; training with SQR</li> <li>&gt; Train Drivers are trained in accordance with training plan</li> <li>&gt; Training is built in the contract with the suppliers to train the maintainer (TRE) on the new technology</li> <li>&gt; Project management staffing plan</li> <li>&gt; Efficiency improvement initiatives</li> </ul>
6	Exogenous Risks	Impact of Eskom generation capacity shortage on the fleet plan Impact of strike action at major supplier plants	<ul style="list-style-type: none"> <li>&gt; Projects delay commissioning</li> <li>&gt; Power shortages</li> <li>&gt; Cost overruns</li> <li>&gt; Scope creep</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Eskom's inability to secure long term sourcing contracts</li> <li>&gt; Industrial action from major suppliers</li> <li>&gt; Earthquakes</li> <li>&gt; Floods</li> <li>&gt; War</li> <li>&gt; Sanctions or trade restrictions the world countries</li> <li>&gt; Component prices going up</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Energy Saving Initiatives</li> <li>&gt; Establish Energy Efficiency Forum</li> <li>&gt; High level engagement with Eskom as to plans to address shortage of capacity (including contractual agreements with Eskom)</li> <li>&gt; Complete list of TFR projects submitted to Eskom.</li> <li>&gt; Contracts clauses</li> <li>&gt; Contract - under the force majeure clauses</li> <li>&gt; The force majeure is valid for six months of which afterwards Transnet can terminate contract or apply breach of contract terms.</li> <li>&gt; SLA with suppliers of TRE</li> <li>&gt; TFR and TRE annual price review and escalation to TFR</li> </ul>

No	Key Elements	Risk something will occur	Impacts leading to	Causes caused by	Controls controlled by
7	Governance Risk	Lengthy Approval processes Treasury note on supplier development has introduced uncertainty	> Delay in the execution of the fleet	> long lead time in obtaining approval as per PRMA requirements by DPE	> Project approval governance process
8	Operational Readiness	Ability to integrate new fleet into operations (readiness of the entire supply chain)	> loss of revenue > Poor return on investment > Delay in deployment > Underutilised capacity	> Lack of capacity by School Of Rail, School Of Engineering & curriculum readiness (Skills) > Lack of maintenance capacity (Facilities and Personnel) at TE > Lack of capacity & facility alignment with TPT & Customers > Lack of fully integrated technology plan > Lack of Rail network maintenance capacity, poor condition of the track > Inadequate systems to support the operability of the fleet post deployment (Existing IT related systems) > Lack of proper handover of the asset to operations and maintenance > Impact of the deployment plan on the organisation i.e. fleet & ITP once the deployment plan has approved.	> OR implementation guideline and Training approach & guideline > Maintenance Philosophy and Deployment Plan > Customer relations management > Technology plan > Rail Network Maintenance Plan > IT Plan and contracts > Draft Handover policy > Change Impact Assessment > 7 Year maintenance plan (TRE)
9	Maintenance Risk	Ability to align maintenance and build plan to the fleet plan	> Not meeting the delivery schedule > Exceeding planned unit price to works instructions	> Supplier to deliver on the IFR mandate (normal scheduled maintenance; new build programme, major fleet overhaul)	> Delivery of materials planned ahead of demand > Annual/ Quarterly review of build programme that align TRE factories > Production lines at TRE doubled > Additional material suppliers sourced > Some factories operating 24 hour shifts to mitigate risk of delay to schedule > Fix unit prices for major components > Project management process
10	Technology Implementation Risk	No clear identification of the technology functional needs and user requirements specifications Inappropriate technology	> Inadequate functionality of the fleet > Wrong technology deployed Non optimal functional of the fleet	> Inadequate process to define the URS > Lack of fleet ownership to identify the technology functional needs (no clear URS) Lack of knowledge and expertise to provide correct specified technologies	> Signed off URS Technology management section with experts
11	Technology risk				

## 9. Fraud risk management plan

1064 - Transnet Locomotive Acquisition Process: Fraud / Corruption Risk Management Plan							
Activities	Status	Responsibility	Process Owner	Start Date	End Date	Objective	Measurement
<b>Fraud / Ethics</b>							
Rollout Awareness Education Training sessions to internal stakeholders involved in the 1064 Locomotive Acquisition process, which includes Fraud, Ethics & Information Security		Forensic Champion / TIA Forensic OD Leader				- Employees involved in the Locomotive acquisition process become aware of fraud and are able to identify incidents of possible fraud and report their allegations effectively.	- Training to be aligned to 1064 Locomotive Acquisition plan / strategy.
Monitor the roll-out of Supplier Integrity Pacts for suppliers bidding for the supply of the Locomotives.		Forensic Champion / TIA Forensic OD Leader				- Ensure that suppliers bidding for the supply of locomotives are being made aware of the Supplier Integrity Pact and its content - Ensure that suppliers bidding for the supply of locomotives sign the Supplier Integrity Pact as part of their contractual obligations with Transnet	- Feedback provided at monthly Locomotives Acquisition Steering Committee
Perform a Fraud Risk Assessment on the 1064 Locomotive Acquisition process		Forensic Champion / TIA Forensic OD Leader				- Identify fraud risks associated with the Locomotive acquisition process. - Ensure controls and action plans are in place to mitigate fraud and corruption risks relevant to acquisition process	- Workshops to be scheduled with stakeholders timely and - Fraud Risk Document distributed to all key Stakeholders involved in the acquisition process.
<b>Governance</b>							
- Establishment of a Locomotive Acquisition Steering Committee (LSC) - Finalize the Mandate and terms of reference for the LSC.		Forensic Champion				- Ensure that there is oversight and that key stakeholders are held accountable in terms of their obligations in the locomotive acquisition process.	- Finalise terms of reference and mandate for the Locomotive Acquisition Steering committee.
High Value Gateway Review Process		Forensic Champion				- Provide assurance that due process is complied with in the acquisition of the Locomotives.	- Timely delivery of assurance reports to Locomotives Acquisition Steering committee.
Conduct a Conflict of Interest compliance check for employees involved in the 1064 Locomotive Acquisition process		Forensic Champion / TIA Forensic OD Leader				- Determine compliance with the Declaration of Interest and Related Party Disclosures Policy - Identify possible conflicts of interest	- Timely delivery of the final report to Steering Committee.
Conduct a Gifts compliance check for stakeholders involved in the 1064 Locomotive Acquisition process		Forensic Champion / TIA Forensic OD Leader				- Determine compliance with the Gifts Policy - Identify possible incidents of non compliance	- Timely delivery of the final report to Steering Committee.
Conduct a Delegation of Authority compliance check for stakeholders involved in the 1064 Locomotive Acquisition process		Forensic Champion / TIA Forensic OD Leader				- Determine compliance with the Delegation of Authority framework - Identify possible incidents of non compliance	- Timely delivery of the final report to Steering Committee.
Perform Vendor Due Diligence on all entities that proposed for 1064 locomotives, including site visits, 3rd tier business interests against Transnet restricted vendors and their directors		Forensic Champion / TIA Forensic OD Leader				- Determine compliance with all Transnet related Policies	- Timely delivery of the final report to Steering Committee.
Conduct Minceast and Harddrive Analysis on all internal stakeholders involved in the 1064 Locomotive Acquisition process.		Forensic Champion / TIA Forensic OD Leader				- Identify possible fraud / corruption being committed by stakeholders in the 1064 Locomotive Acquisition process.	- Timely delivery of reports to Management and the Locomotives Acquisition Steering Committee.
Review and enhance OEM site visit guidelines		Forensic Champion / TIA Forensic OD Leader				- To ensure that dealings with OEMs are kept at arms length during site visits by Transnet employees or agents	- Timely delivery of the enhanced OEM site visit guidelines to the Steering Committee for adoption.

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## 10. 7-year man plan

	Yr12/13	Yr13/14	Yr14/15	Yr15/16	Yr16/17	Yr17/18	Yr18/19
<b>Natcor</b>							
Required	752	805	861	1025	1137	1205	1278
Available	408	408	408	408	408	408	408
Delta	344	397	453	617	729	797	870
<b>Natcor2</b>							
Required	216	231	247	294	327	346	367
Available	146	146	146	146	146	146	146
Delta	70	85	101	148	181	200	221
<b>Coalline</b>							
Required	783	838	896	1067	1184	1255	1330
Available	417	417	417	417	417	417	417
Delta	366	421	479	650	767	838	913
<b>Ore line</b>							
Required	156	167	179	213	236	250	265
Available	107	107	107	107	107	107	107
Delta	49	60	72	106	129	143	158
<b>Capecor1&amp;2</b>							
Required	598	640	685	815	904	959	1016
Available	426	426	426	426	426	426	426
Delta	172	214	259	389	478	533	590
<b>Hockystick</b>							
Required	278	297	318	379	420	446	472
Available	191	191	191	191	191	191	191
Delta	87	106	127	188	229	255	281
<b>Westcor</b>							
Required	128	137	147	174	194	205	217
Available	109	109	109	109	109	109	109
Delta	19	28	38	65	85	96	108
<b>Northcor</b>							
Required	236	253	270	322	357	378	401
Available	158	158	158	158	158	158	158
Delta	78	95	112	164	199	220	243
<b>Sentracor</b>							
Required	270	289	309	368	408	433	459
Available	208	208	208	208	208	208	208
Delta	62	81	101	160	200	225	251
<b>Eastcor</b>							
Required	212	227	243	289	321	340	360
Available	180	180	180	180	180	180	180
Delta	32	47	63	109	141	160	180
	Yr12/13	Yr13/14	Yr14/15	Yr15/16	Yr16/17	Yr17/18	Yr18/19
<b>Required</b>	<b>3629</b>	<b>3884</b>	<b>4155</b>	<b>4946</b>	<b>5488</b>	<b>5817</b>	<b>6165</b>
<b>Available</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>
<b>Delta</b>	<b>529</b>	<b>784</b>	<b>1055</b>	<b>1846</b>	<b>2388</b>	<b>2717</b>	<b>3065</b>



# 11. Infrastructure plans

EXHIBIT 75

## Track / Perway – Axle loading (Current status)

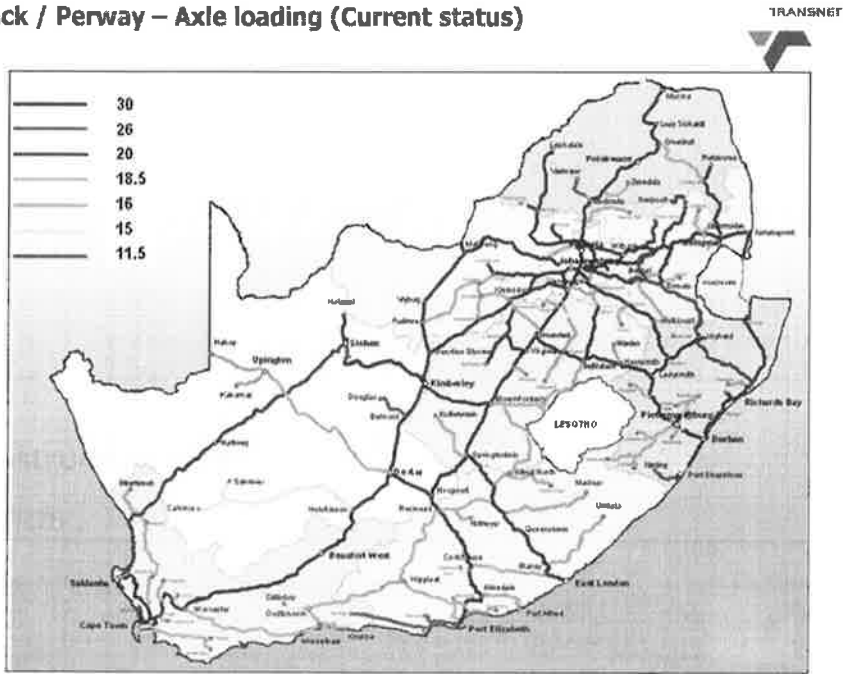


EXHIBIT 76

## Electrification (Current status)

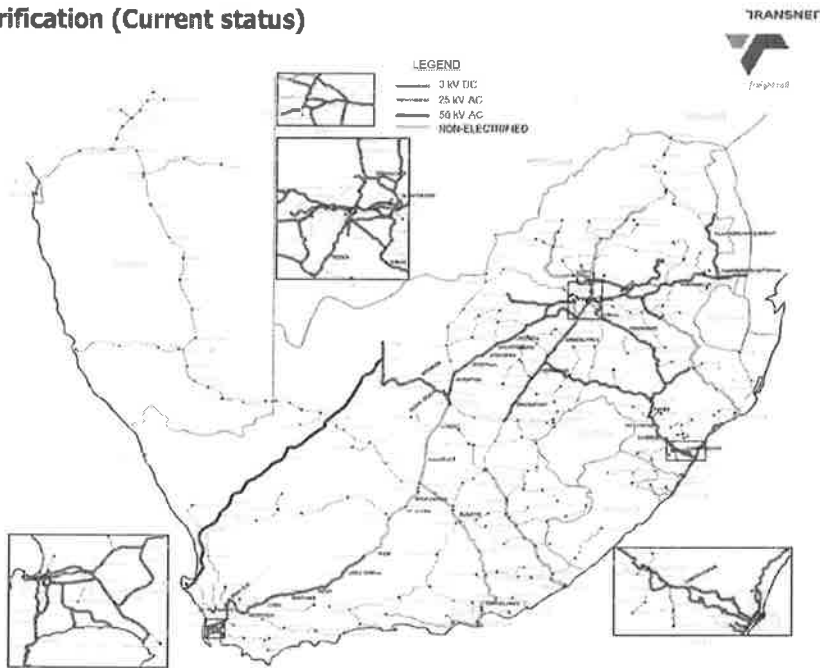


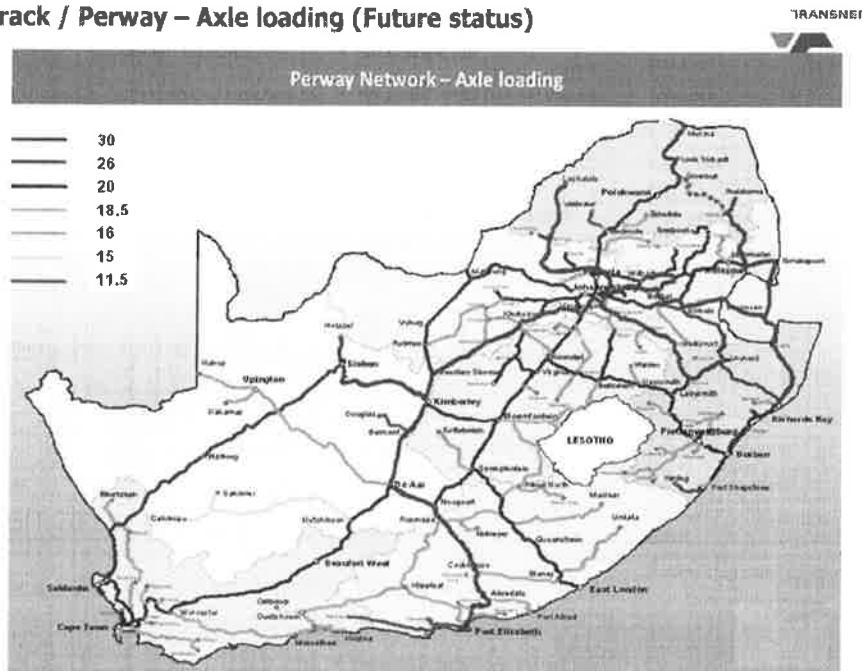
EXHIBIT 77

**Expansionary infrastructure expenditure timeline**

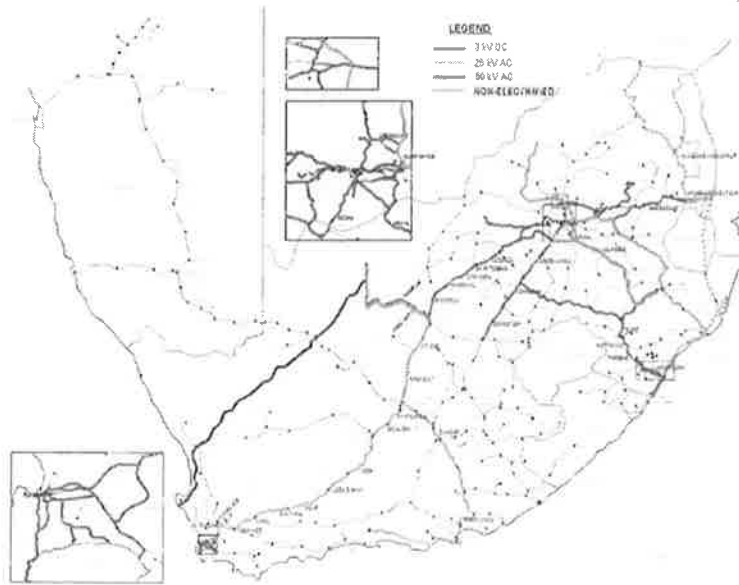
Business focus	Preparation for growth (zero to two years)	Sustained growth (two to five years)	Consolidate (five to seven years)
<b>Infrastructure expansion: Perway/axle loading</b>	<ul style="list-style-type: none"> <li>Increase axle loading</li> <li>Increase coal line capacity to 81mt</li> <li>Eskom 32mt project</li> <li>Partial doubling of RCB-Nsezi line</li> <li>Waterberg – Phases 2-5 additional passing loops</li> <li>Manganese 16mtpa (Hotazel – Coega)</li> <li>Swazi rail link 15mt.</li> <li>Increase axle loading on Groenbult– Hoedspruit</li> </ul>	<ul style="list-style-type: none"> <li>Increase axle loading</li> <li>Increase coal line capacity to 81mt</li> <li>Coal 91mt project (including Overall tunnel doubling)</li> <li>Eskom 32mt project</li> <li>Geluksploas grade separation</li> <li>Line tripling Broodsnuyersplaas-Ermelo</li> <li>Waterberg – Phases 2-5 additional passing loops</li> <li>Manganese 16mtpa (Hotazel – Coega)</li> <li>Ore line Phase 2A to 82.5mtpa</li> <li>Swazi rail link 15mt</li> </ul>	<ul style="list-style-type: none"> <li>Increase axle loading</li> <li>Overall tunnel doubling</li> <li>Coal 91mt project (Including Overvaal tunnel doubling)</li> <li>Eskom 32mt project</li> <li>Line tripling Broodsnuyersplaas-Ermelo</li> <li>Swazi rail link 15mt</li> <li>Doubling of all critical deviations</li> </ul>
<b>Infrastructure expansion: Electrical</b>	<ul style="list-style-type: none"> <li>Increase electrical capacity on the AC section on the coal line</li> <li>Upgrade section Rookop-Newcastle, Manganese 16mtpa New and Upgraded sub-stations and OHTE</li> </ul>	<ul style="list-style-type: none"> <li>Manganese 16mtpa New and Upgraded substations</li> <li>Ore line Phase 2A to 82.5mtpa power upgrade (including of OHTE)</li> <li>Increase electrical capacity on the AC section on the coal line</li> <li>Coal 91mt project</li> <li>Upgrade substations and electrical equipment</li> <li>Commence with the conversion of 3kV DC to 25kVAC Ermelo-Pyramid South</li> </ul>	<ul style="list-style-type: none"> <li>Completion of the conversion of 3kVDC to 25kVAC Ermelo-Pyramid South</li> <li>Coal 91mt project</li> <li>Eskom 32mt project</li> <li>Upgrade substations and electrical equipment</li> <li>Waterberg – Phase 6 (23mtpa) commence with the electrification of Thabazimbi-Lephalale</li> <li>Conversion of 3kVDC to 25kVAC on Ermelo-Pyramid South</li> </ul>
<b>Infrastructure expansion: Signaling</b>	<ul style="list-style-type: none"> <li>Manganese 16mtpa</li> </ul>	<ul style="list-style-type: none"> <li>Pyramid South – Lephalale: Communication based authorisation (CBA) pilot installation</li> <li>Manganese 16mtpa</li> </ul>	<ul style="list-style-type: none"> <li>Commence with the re-signaling of the coal line (CBA)</li> </ul>

EXHIBIT 78

**Track / Perway – Axle loading (Future status)**



**Electrification (Future status)**



**Maintenance infrastructure expenditure timeline (1/3)**

<b>Business focus</b>	<b>Preparation for growth (zero to two years)</b>	<b>Sustained growth (two to five years)</b>	<b>Consolidate (five to seven years)</b>
<b>Infrastructure maintenance: sustaining Perway</b>	<ul style="list-style-type: none"> <li>▪ Increase on-track machines capacity and productivity</li> <li>▪ Accelerated rail replacement (765km to 865km)</li> <li>▪ Increase sleeper replacement (480 000 – 550 000/year)</li> <li>▪ Increase ballast screening (690km – 750km)</li> <li>▪ Ore line rail break mitigation plan, Wayside Intelligent Longstress measurement System (WILMA), Ultrasonic Broken Rail Detector System (UBRD)</li> <li>▪ Longstress measurement system (WILMA) – Natcor and coal line</li> <li>▪ Infrastructure sustains (General Freight business) tunnels and bridges</li> <li>▪ Additional three rail trains</li> <li>▪ Level crossing elimination/Level crossing protection (new bridges/protection systems)</li> <li>▪ Drainage rehabilitation</li> <li>▪ Formation rehabilitation</li> <li>▪ Install wheel Impact monitoring and weigh-in motion (WIM-WIM) system</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase on-track machines capacity and productivity</li> <li>▪ Accelerated rail replacement (865km to 1 065km)</li> <li>▪ Increase sleeper replacement (550 000 to 650 000/year)</li> <li>▪ Increase ballast screening (750 – 800km)</li> <li>▪ Longstress measurement systems (WILMA) for core lines</li> <li>▪ Infrastructure sustains (General Freight business) tunnels and bridges</li> <li>▪ UBRD systems on General Freight business core lines</li> <li>▪ Level crossing elimination/Level crossing protection (new bridges/protection systems)</li> <li>▪ Drainage rehabilitation</li> <li>▪ Formation rehabilitation</li> <li>▪ Install wheel impact monitoring and weigh-in motion (WIM-WIM) system</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase on-track machines capacity and productivity</li> <li>▪ Accelerated rail replacement (1 065km to 1 200km)</li> <li>▪ Maintain sleeper replacement at 650 000/year</li> <li>▪ Increase ballast screening (800km – 850km)</li> <li>▪ Longstress measurement systems (WILMA) for core lines</li> <li>▪ Infrastructure Sustain (General Freight business) tunnels and bridges</li> <li>▪ UBRD systems on General Freight businesses core lines</li> <li>▪ Level crossing elimination/level crossing protection (new bridges/protection systems)</li> <li>▪ Drainage rehabilitation</li> <li>▪ Formation rehabilitation</li> </ul>

EXHIBIT 81

**Maintenance infrastructure expenditure timeline (2/3)**

Business focus	Preparation for growth (zero to two years)	Sustained growth (two to five years)	Consolidate (five to seven years)
Infrastructure maintenance: Sustaining electrical	<ul style="list-style-type: none"> <li>Primary circuit breaker replacement</li> <li>Track breaker replacement</li> <li>Upgrade and replace switchgear (distribution subs)</li> <li>Traction substations 25-year lifecycle intervention</li> <li>Traction substations 50-year lifecycle intervention</li> <li>Sabotage/vandalism/theft projects</li> </ul>	<ul style="list-style-type: none"> <li>Primary circuit breaker replacement</li> <li>Track breaker replacement</li> <li>Upgrade and replace switchgear (distribution subs)</li> <li>Traction substations 25-year lifecycle intervention</li> <li>Traction substations 50-year lifecycle intervention</li> <li>Sabotage/vandalism/theft projects</li> </ul>	<ul style="list-style-type: none"> <li>Traction substations 25-year lifecycle intervention</li> <li>Traction substations 50-year lifecycle intervention</li> <li>Sabotage/vandalism/theft projects</li> </ul>
Infrastructure maintenance: Sustaining signaling	<ul style="list-style-type: none"> <li>Consolidation of single manned cabins</li> <li>Centralisation of CTCs</li> <li>Subsystem replacement to extend life (e.g., replace track circuits, remote control systems, power equipment)</li> <li>Migrate systems from copper to optic fibre (coal line, Manganese corridor, Natcor, Sentraran area, Houtheuwel – Klerksdorp)</li> <li>Installation of electronic interlocking systems (three pilot sites)</li> <li>Resignalling of Kamfersdam – Postmasburg</li> <li>Resignalling of Bellville – Wellington</li> <li>Resignalling of Umgeni – Stanger</li> <li>In-motion weighbridges</li> <li>Upgrade/replace measurement systems</li> </ul>	<ul style="list-style-type: none"> <li>Centralisation of CTCs</li> <li>Subsystem replacement to extend life (e.g., replace track circuits, remote control systems, power equipment)</li> <li>Migrate systems from copper to optic fibre (Port Elizabeth – De Aar, De Aar – Wellington, Empangeni, Ogies)</li> <li>Rationalisation of signaling systems in the central region (Gauteng area)</li> <li>Remodeling track layout and resignalling Gauteng area (Elsburg – India – Jupiter – Watties)</li> <li>Resignalling of Bellville – Wellington</li> <li>Resignalling of Umgeni – Stanger</li> <li>Replace PEL Interlockings in the Karoo and Port Elizabeth</li> <li>Upgrade/replace measurement systems</li> </ul>	<ul style="list-style-type: none"> <li>Subsystem replacement to extend life (e.g., replace track circuits, remote control systems, power equipment)</li> <li>Migrate systems from copper to optic fibre</li> <li>Replace PEL interlockings in the Karoo and Port Elizabeth</li> <li>Coal line: Upgrade/replace the Vehicle Identification System (VIS)</li> <li>Resignalling projects on General Freight business lines commence</li> </ul>

EXHIBIT 82

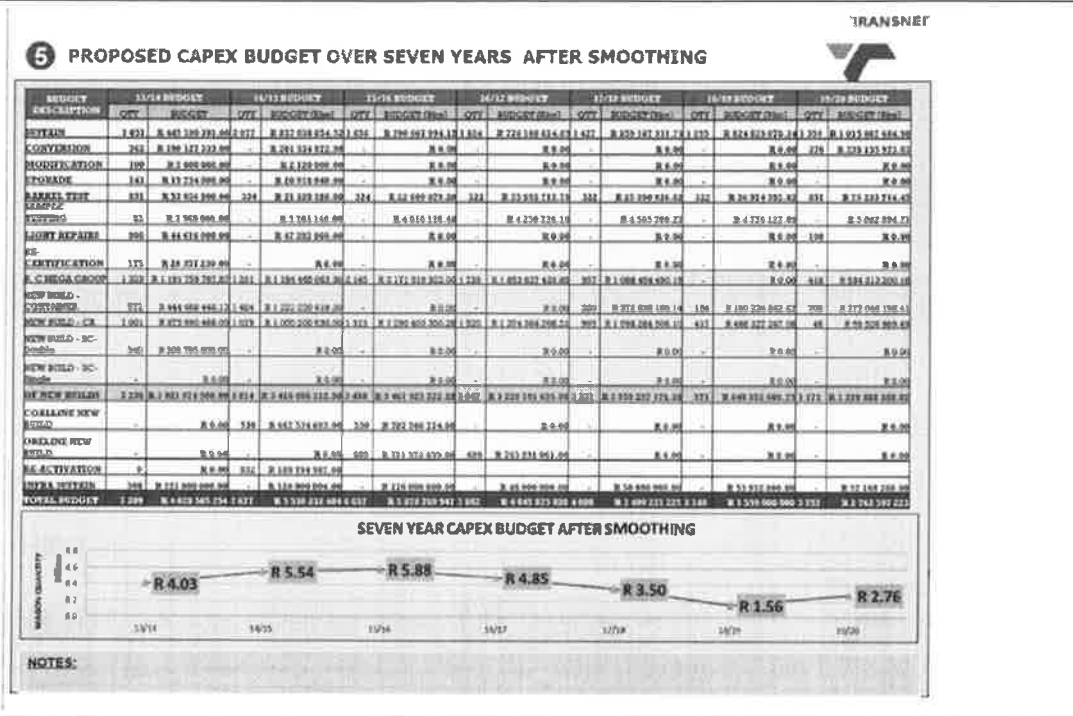
**Maintenance infrastructure expenditure timeline (3/3)**

Business focus	Preparation for growth (zero to two years)	Sustained growth (two to five years)	Consolidate (five to seven years)
Infrastructure maintenance: Sustaining telecoms	<ul style="list-style-type: none"> <li>Upgrade national optical fibre cable network</li> <li>Upgrade and replace access multiplexers</li> <li>Improve train communication in rail tunnels countrywide</li> <li>Provision of new telecommunication backbone infrastructure</li> <li>Train radios Phase 4</li> <li>Replace unstable masts and towers</li> <li>De-copper in Empangeni, Ermelo and Ogies</li> </ul>	<ul style="list-style-type: none"> <li>Upgrade national optical fibre cable network</li> <li>Upgrade and replace access multiplexers</li> <li>Improve train communication in rail tunnels countrywide</li> <li>Provision of new telecommunication backbone infrastructure</li> <li>Train radios Phase 4</li> <li>Replace unstable masts and towers</li> </ul>	<ul style="list-style-type: none"> <li>Upgrade national optical fibre cable network</li> <li>Upgrade and replace access multiplexers</li> </ul>

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# 12. Wagon requirements

EXHIBIT 83



### 13. Locomotive types and capacity

EXHIBIT 84

The GFB fleet currently has a total capacity of ~92 MGTK per year

Electric			Diesel		
Loco type	Number in fleet	Total capacity (MGTK p.a.)	Loco type	Number in fleet	Total capacity (MGTK p.a.)
6E	75	2,507	33	5	38
7E	216	23,224	34	318	7,689
8E	37	19	35	146	1,006
9E	0	0	36	167	244
10E	104	13,795	37	70	1,372
11E	1	130	38	38	827
14E	8	330	39	53	2,852
18E	597	34,026	43	53	4,235
<b>Total</b>	<b>1038</b>	<b>74,031</b>	<b>Total</b>	<b>850</b>	<b>18,626</b>

The current fleet is made up of 66 percent electric and 34 percent diesel with a total fleet size of 1,888 locomotives and capacity of 92 million gross ton kilometres per year. The active GFB fleet includes both the operational fleet and the fleet undergoing maintenance, but excludes mothballed locomotives. The operational fleet consists of the locomotives available for operations. Typically, 12 percent of the active fleet’s locomotives are undergoing maintenance or minor repairs, but this varies depending on the level of reliability of individual locomotives and locomotive classes at any point in time.

The operational fleet is categorised into “shunters” and “workhorses.” Workhorses are the prime movers, hauling loads between hubs, and generate the income earning net ton kilometres. They are TFR’s inputs in locomotive efficiency measures. Shunters are primarily used to place and clear loaded wagons and compile trains before departure. Although shunters are not prime income earners, they are an essential component of operations and an overhead cost that must be covered.

### 14. Locomotive specifications

Locomotives have a long lifespan and the technology is constantly evolving. Therefore, to maintain efficiencies and capacity, TFR needs to procure recently designed locomotive types that not only enable it to deliver on the Fleet Plan but also capture the aforementioned operational efficiencies.

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**General locomotive specifications**

Locomotive feature	Electric		Diesel	
	Energy source	25 kv AC and 3 kv DC		Diesel
Maximum axle load (tonnes)	22		22	
Continuous tractive effort <sup>1</sup>	Bo-Bo	Co-Co	Bo-Bo	Co-Co
	267	400	267	400
Base speed	34		34	
Maximum operating speed (km/hr)	100		100	

<sup>1</sup> Bo-Bo: 2521 kw at 34 km/hr and Co-Co: 3778 kw at 34 km/hr  
SOURCE: 1064 Loco Business Case Annexure K- Locomotive Specifications

Exhibit 9, above, shows the high-level specifications of the locomotives to be procured. A major feature of the procurement is that it offers suppliers the choice of providing either Bo-Bo<sup>9</sup> or Co-Co<sup>10</sup> wheel configurations. It also requires the electric locomotives to run on both AC and DC lines given South Africa's gridline structure.

The proposed locomotives have significant improvements in engine design and lower pollutants per tonne kilometre. They are 8 percent more fuel efficient and are also more powerful, with a continuous tractive effort of 349 kN compared to the 218 kN of the class 34 diesels in dry conditions.

A direct comparison of class 6E and 18E to the proposed new locomotive is not possible. However, our knowledge of and experience with the recently delivered 19E and 15E suggest TFR can expect an electrical efficiency improvement of at least 18 percent, as well as regenerative capability that feeds power back into the Eskom grid. The design calls for a tractive effort between 267 and 400 kN, which is considerably higher than the 170 kN of the 6E series or the 200 kN of the 18E series.

**15. Technology**

The new locomotives will all be equipped with new technology which is currently being retrofitted to the existing fleet. The technologies are summarised below.

<sup>9</sup> Two-wheel configuration

<sup>10</sup> Three-wheel configuration

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- Integrated Asset Tracking to track locomotives and wagons using a combination of tracking technologies including GPS and GPRS.
- Electronic Control Pneumatic Braking (ECPB). This enhances the current pressurised air brake system by sending an electric signal via a control cable simultaneously to all wagons to apply their brakes. This eliminates the propagation delay encountered in the traditional system where the signal is pneumatically transmitted from the locomotive down the length of the train. A result of this system trains brake more responsively and more evenly and safer. It is being implemented on all 200 wagon trains.
- Radio Distributed Power enables driverless locomotives to be placed within the length of the train and remotely control them from the lead locomotive. This enables longer and safer trains as the tractive forces are more evenly distributed along the length of the train. Coupler breakages because are reduced to being eliminated as the tractive forces are no longer concentrated at the leading locomotive consist.

This technology was pioneered on the Iron Ore Export Line and will be used in other heavy haul operations but will not be universally fitted.

- Cab based authorisation, control and communication systems. This cab mounted equipment provides an unobtrusive visual display to the driver with easy and intuitive controls and inputs. There are also interfaces to the locomotive controls providing automatic stop features in the event of over speeding or failure to adhere to a valid command.

All new locomotive designs will incorporate the design ergonomics of these systems and interfaces to the locomotive controls conception through to commissioning.

Retrofitting this equipment to existing locomotives almost always results in suboptimal ergonomic designs and control interfaces.

- Electronic Fuel Injection Engine Technology provides better green fuel efficiencies and higher power output using micro controllers that intelligently switches the engine on and off to eliminate excessive idling. Indications are that these could reduce the energy bill for these locomotives with up to 10 percent.
- Data Loggers report on the condition (health) of the locomotive fleet, thereby optimising maintenance and improving efficiencies in the maintenance of the locomotive fleet. It is planned that this information is transmitted back to the central locomotive control for maintenance planning and to analytically develop preventative maintenance measures.
- Trip Optimisers are being tested and evaluated for diesels and are being considered for electric locomotives. The Trip Optimiser results in significant fuel and energy savings as it computes the best match for the throttle / notch position of the locomotive to preloaded profile for the trip and running time to be achieved. Using the trip optimiser ensures that only the optimum power is applied at any one time and integrated over the trip, the minimum energy is consumed. As a stand-alone system with automatic throttle control, energy savings of 3 percent - 17 percent are indicated in the commercial literature depending on the locomotive type, track conditions and driver behaviour. Further savings are possible depending on the degree of integration into other systems such as Dynamic

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Brake Control, Integration with Train Authorisation Systems and ultimately Movement Planning.

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# Project Authorisation Signatures

## *Transnet Freight Rail*

Submission supported:

_____	_____
<b>Rita Roper</b> General Manager, Capital Projects	Date

Submission supported:

_____	_____
<b>Mlamuli Buthelezi</b> Chief Operating Officer	Date

Submission recommended:

_____	_____
<b>Siyabonga Gama</b> Chief Executive: Freight Rail	Date

## *Transnet Group*

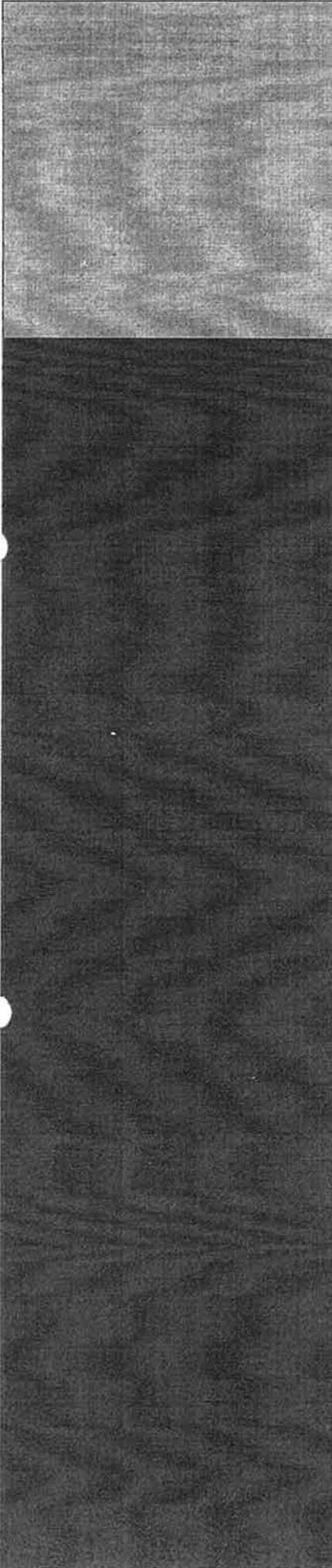
Submission recommended:

_____	_____
<b>Anoj Singh</b> Chief Financial Officer	Date

Submission recommended:

_____	_____
<b>Brian Molefe</b> Group Chief Executive	Date

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Advisory services related to  
the acquisition of the 1064  
locomotives tender

TRANSNET

RFP GSM/12/05/0447

Memorandum of withdrawal

04 February, 2014

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CONFIDENTIAL

Memorandum to  
Anoj Singh, Group Chief Financial Officer, Transnet

## Advisory services related to the acquisition of the 1064 locomotives

### PURPOSE

The purpose of this memorandum is to inform Transnet of McKinsey's decision to withdraw from the provision of advisory services relating to the acquisition of the 1064 locomotives. The background and reasons for our decision are laid out below. High level guidance on the best way to add value to the transaction at this stage is included at the end of the memorandum.

### CONTEXT

Transnet requested assistance from McKinsey to help clarify the commercial terms and provide commercial negotiation support for the acquisition of the 1064 locomotives. The high level scope of work agreed was as follows:

#### ■ Commercial negotiation

- Use TCO modeling to compare bids and help identify areas for price negotiation
- Estimate cost/benefit under different locomotive delivery scenarios
- Use aggregated price benchmarking to recommend areas for potential price negotiation
- Identify additional negotiation levers through publicly available supplier intelligence
- Detail the negotiation process from its current state to a preliminary agreement with bidders

#### ■ Commercial terms

- Recommend target commercial ranges for the terms identified and supporting negotiation arguments e.g. delivery flexibility, penalties and incentives

At Transnet's request, McKinsey spent the last week preparing for the work above by discussing similar transactions with our experts (maintaining Transnet's confidentiality at all times) and doing research on best practice in this area. The information gathered was applied to Transnet's particular situation using our knowledge of the current state of the transaction gathered through stakeholder interactions.

## **FINDINGS AFTER WEEK 1**

Expert opinions and initial analysis suggests that we would not be able to add significant value through the requested activities at this stage in the process. The transaction itself is in such a late stage that few negotiation levers are available, and those that do remain are likely either low value or unreasonably difficult to apply given the remaining negotiation power and time available to Transnet. Experts repeatedly advised us that to add significant value, we would need to be engaged much earlier in the process, ideally 6-12 months before the intended closing date.

### **The advanced stage of the process leaves few terms open to change**

- Technical specifications have been agreed and are not open for further negotiation. This is usually a key area where value can be added in a procurement transaction, and would be a primary means of reducing total cost of ownership
- Best and Final Offers (BAFOs) have already been submitted and preferred bidders appointed, so no material changes can be made to the commercial terms without creating significant risk of dispute by both preferred and non-shortlisted bidders
- The initial delivery schedule is fixed, so accelerating or delaying locomotive delivery to incentivise bidders is not an option for the first 3-4 years, after which point any delivery delay will have a limited NPV benefit

### **Limited time constrains price and local content improvement options**

In the limited time available, it is unlikely McKinsey could catalyze further improvement in price and local content terms:

- Current pricing proposals are already below business case benchmark levels. This, combined with the fact that vendor offers appear to be closely clustered, suggests further reduction would require detailed analyses and preparation which could not be completed within the requested timelines
- Local content thresholds set by the DPE have already been met in current proposals, so further negotiation is of marginal value to Transnet here relative to the time that would be required to re-open the thresholds if desired

### **Few negotiation levers remain**

Based on the context provided by Transnet, only a limited set of negotiation levers appear to remain, making it difficult for McKinsey to drive any improvement in the offers for terms still open for negotiation:

- As preferred bidders, vendors likely know they will be awarded some production volume, reducing pressure to negotiate
- The fact that alternate vendors have been retained in the case of contracting failure is not a significant lever: preferred bidders are usually awarded the contract and vendors typically know the process is open to dispute if the preferred bidders are disqualified
- Transnet has limited the locomotive volume split among preferred bidders to a maximum spread of 60%/40%, which translates to 50 fewer locomotives over 7 years for the secondary preferred bidder. This, combined with the size of the overall contract and the timeframes involved, makes the volume lever unlikely to be material to bidders
- Strategic value (e.g. the ability to claim that a supplier is the exclusive provider of locomotives to Africa's pre-eminent railway) is often important to major manufacturers even for small volume deals. As multiple vendors will be awarded, this lever is of limited use to Transnet

### **NEGOTIATION PREPARATION**

In negotiations where buyer leverage is limited, McKinsey's approach to value creation requires comprehensive preparation so that we can support the creation of a controlled situation whose pace is determined by the buyer. However, this preparation requires significant time (usually months), far longer than Transnet's short timelines allow for

## **CONSIDERATIONS FOR THE NEGOTIATIONS**

As Transnet drives this transaction to its conclusion, the greatest remaining value is most likely to be derived from understanding suppliers, determining appropriate value-capturing compromises and negotiation skill. A few considerations for the upcoming negotiations:

- Ensure there is a structured process in place to which all participants are aligned before engaging vendors in negotiation. Running a successful negotiation process requires intensive planning and coordination.
- Assign a team with a mixture of past negotiation experience, commercial acumen, technical knowledge and supplier insight. The experience and skill of the negotiation team will be a key factor in securing favorable terms in the current context
- Before interacting with suppliers, ensure team members have clear roles and responsibilities tailored to their skill sets
- Prepare for each session by understanding your goals for the negotiations with any particular supplier and by also considering what the supplier is hoping to achieve. Agree the trade-offs you are willing to make and thresholds you are not willing to cross beforehand: shift discussion of unexpected trade-offs to later sessions, so that team alignment and planning can happen beforehand

## **CONCLUSION**

The late stage of the transaction, few terms open for negotiation and limited buyer leverage suggests that McKinsey could not add significant value through this engagement. As McKinsey strives to serve Transnet only on issues where we can have outsized impact, we must regretfully conclude that it is in neither our interests nor those of Transnet to continue this engagement.

We wish you the best of luck in these final stages of a purchase that will be critical to the future of Transnet and South Africa.

## **PROFESSIONAL ARRANGEMENTS**

Per our summary of professional practices included in our original proposal, we believe that either party should have the freedom to terminate the relationship at any time if it becomes evident that the potential value of the work does not warrant further effort. In the event that a project is stopped before completion, only

the professional fees and costs incurred to that date are billed. For reference, summary of our professional practices is attached to this memorandum.

At Transnet's request, and in the course of coming to the above conclusions, McKinsey has incurred expenses including an Engagement Manager, an Associate and two Business Analysts staffed for one week, as well as expert time for interviews, and the professional services of ART. To cover these costs Transnet will be invoiced R1.65m, excluding VAT. This is significantly less than the original estimated weekly run rate, as this first week was supported by a smaller team than agreed for the full engagement, in order to better understand our ability to have impact first.

We would invoice you at the end of this month and our standard payment terms are 15 days from the date of issue of the invoice. Interest (at prime) will be charged on past-due payments.

□ □ □

We regret that we cannot have significant impact on this topic under the circumstances, and hope that it remains clear we are committed to Transnet's continued success, and keen to support you wherever we believe we can make a meaningful difference for Transnet and South Africa.

Sincerely

Vikas Sagar

Principal

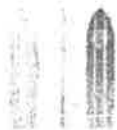
Appendix/attachments:

Summary of Professional Practices



**November 11, 2017 – Statement of David Robert Fine**

**ANNEXURE E: NOTE TO REGIMENTS RE. AFRICA CONFIDENTIAL PRESS  
REPORTS**



**Fw: Follow up on our call**

Vikas Sagar to: Benedict Phiri

Cc: Alexander Weiss

2017-06-1  
3 07:33  
PM

Vikas Sagar | Senior Partner  
McKinsey & Company | Sandown Mews, East, 88 Stella Street | 2196 Sandown | Republic of South Africa  
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vikas\_sagar@mckinsey.com

Assistant Jodie van der Merwe | Direct + 27115068829 | Fax + 27115069829 | Mobile + 27798780131 | Internal 3278829  
jodie\_van\_der\_merwe@mckinsey.com

----- Forwarded by Vikas Sagar/JOH/Africa/MCKINSEY on 2017-06-13 04:50 PM -----

From: Vikas Sagar/JOH/Africa/MCKINSEY  
To: eric@tcp.co.za  
Cc: David Fine/JOH/Africa/MCKINSEY@MCKINSEY, Benedict Phiri/JOH/Africa/MCKINSEY@MCKINSEY  
Date: 2016-02-15 04:44 PM  
Subject: Follow up on our call

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Hello Eric,

Our conversation earlier today refers; I referenced the article below which you may already seen.

We are concerned from a risk and reputation management perspective and also need to better understand the situation to respond to related questions from our client service staff (many of whom worked with Mo Bobat). To this end it would be helpful to:

- + Get your opinion on the article
- + Have you shed light on Bobat's current relationship with Regiments or Trillian and also at the time to which the article refers
- + Get your input, if any, on the alleged relationship between Bobat and the politically exposed persons referred to in the article. This is a critical issue to address for McKinsey's risk management framework and potentially also to comply with the legislation we are subject to like FCPA

I understand you are taking a couple of days off and appreciate your offer to respond to us within a day.

Thanks

Rgds  
Vikas

Vikas Sagar | Director  
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melanie\_eddison@external.mckinsey.com

<http://www.biznews.com/leadership/2016/02/15/named-van-rooyens-two-gupta-advisors-who-almost-hijacked-sa-treasury/>

**November 11, 2017 – Statement of David Robert Fine**

**ANNEXURE F: LETTER FROM TRILLIAN CONCERNING INVOLVEMENT OF  
MOHAMED BOBAT**



Att: Mr Vikas Sagar  
McKinsey&Company  
88 Stella Street  
Sandown  
2196  
cc: Mr David Fine, Mr Benedict Phiri

26 February 2016

Dear Sir

**RE: MOHAMED BOBAT**

In response to your e-mail dated 15 February 2016, I can confirm that Mohamed Bobat was an employee at Regiments Capital until he resigned in December 2015. At the time of his resignation, Bobat was a Principal within the management consultancy division at Regiments.

Bobat has no relationship with Trillian nor has he had any relationship with Trillian. I am unable to comment on Bobat's alleged relationship with the politically exposed persons referred to in the article to which you make reference as he independently pursued the advisory role in his own personal capacity.

I am also not in a position to comment on the remaining allegations made in the article to which you refer, but I can confirm that Bobat is a previous employee of Regiments Capital as stated in the article. That relationship was terminated subsequent to his resignation. Regiments Capital had no prior knowledge of his appointment as a special advisor to the minister and our first knowledge of the appointment was when it became public knowledge.

Yours sincerely

A handwritten signature in black ink, appearing to read "Bianca Smith", written over a light blue circular stamp.

**BIANCA SMITH**  
CEO



Trillian Management Consulting (Pty) Ltd  
Reg No: 2015/111709/07  
Address: 4th Floor, 23 Melrose Boulevard, Melrose Arch, 2196  
Directors: B.S Smith, B Bernard  
A Trillian Capital Partners Company

**November 11, 2017 – Statement of David Robert Fine**

**ANNEXURE G: TERMINATION OF INTERACTIONS BETWEEN TRILLIAN AND  
MCKINSEY**

February 25, 2016

CONFIDENTIAL

Eric Wood  
Trillian Management Consulting  
ericw@tcp.co.za

Dear Mr. Wood

**TRILLIAN, HUBEI HONGYUAN, E GATEWAY GLOBAL CONSULTANTS  
FZC, AND ESKOM DUVHA BOILER PURCHASE**

We refer to your discussion with Mr. Vikas Sagar with respect to the above matter on 23 February 2016. We have also now received a Duvha Unit 3 Combined Clarification Register from Eskom confirming that:

1. Trillian Management Consulting is the BBBEE partner to Hubei Hongyuan, the principal boiler vendor in respect of the Duvha Unit 3 boiler purchase, and
2. E Gateway Global Consultants FZC, Trillian's subcontractors on the Generation Work Package, have been appointed as EPCM coordinators in respect of the Duvha Unit 3 boiler purchase.

We are of the view that Trillian and E Gateway's respective roles as described above may represent a material conflict of interest with their prospective respective roles under the Procurement and Finance Packages contemplated under the 3-year at-risk contract due to be executed between McKinsey and Eskom to support its Top Consultants Programme. In particular, Trillian has identified the following initiatives to be undertaken by it in respect of the Finance Package: "Rebuild – Duvha Unit 3 Recovery Project to recover the 600MW capacity loss" and "Insurance claims management for the Duvha Unit 3 Recovery Project".

Despite the potential material conflict of interest represented by these roles, the multiple conversations we have had on the basis for our potential work with Trillian, our unanswered requests for you to confirm your corporate structure and related party interests, we learnt of Trillian's involvement with Hubei Hongyuan and E Gateway's role for the first time during an internal Eskom tender clarification meeting held on 22 February. We find this development unacceptable, particularly in light of the high levels of transparency and good faith we expect from entities with which we seek to partner, the potential legal and reputational ramifications involved, and the specific nature of the relationship between BBBEE partners and organisations they work with. We are duty bound to Eskom to avoid material conflicts of interests and ensure that our prospective subcontractors and their

subcontractors give effect to the same obligations. Where we do not give full effect to these obligations, we face the potential prospects of legal action flowing from such breach. Potential conflict issues may also create risks to our clients, whose interests we always place first.

Given the above, we have automatically triggered a global review (in line with McKinsey's risk management policies) of our potential arrangement with Trillian on work for Eskom. An emergency risk and legal call was held on the evening of 23 February 2016. To give effect to the conclusions of this call, and to progress both our internal conversations and ongoing discussions with Eskom, we request that you furnish us with the written confirmations below before or during the course of Friday 26 February, with confirmation on point 4 by 5pm today, 25 February:

1. Detailed account of the form and legal status of Trillian's relationship with Hubei Hongyuan;
2. Detailed account of the form and legal status of Trillian's relationship with E Gateway Global Consultants FCZ;
3. Confirmation that Trillian, its employees, or any of its subcontractors or affiliates have no other interests which may conflict with their respective roles as advisor to Eskom;
4. Confirmation that, pending your detailed response to this letter and with immediate effect, no Trillian personnel, subcontractor personnel, or personnel of any affiliate undertaking will conduct or undertake any activities on any element of the Top Consultants Programme which may lend themselves to a conflict of interest whether real or perceived;
5. Confirmation that Trillian indemnifies, defends and holds McKinsey harmless from any and all claims brought against McKinsey in respect of and relating to Trillian's relationship with Hubei Hongyuan and any services performed by Trillian and/or any of its subcontractors or their affiliates for Eskom.

We should note that we will also inform Eskom of these developments.

We look forward to your favourable reply.

Yours sincerely,



Georges Desvaux  
Managing Partner, Africa



Jean-Christophe Mieszala  
Chair, Client Service Risk Committee  
Europe, Middle East & Africa

March 10, 2016

CONFIDENTIAL

Eric Wood  
Trillian Management Consulting  
eric@tcp.co.za

Dear Mr. Wood

**TRILLIAN, HUBEI HONGYUAN, E GATEWAY GLOBAL CONSULTANTS FZC,  
AND ESKOM DUVHA BOILER PURCHASE**

The above matter refers. Mr. Vikas Sagar has forwarded your e-mail dated March 08, 2016 to us. We have noted the contents thereof with thanks. We wish to inform you however that our global risk review remains ongoing with a view to being concluded during the middle of the coming week. To this effect, in addition to your undertaking to furnish us with a detailed group profile of the Trillian Group (which we have still not received), we would also appreciate your detailed responses to our letter dated February 25, 2016 before the close of business on Friday 11 March 2016. Your response should contain the following, as previously requested by us:

1. Detailed account of the form and legal status of Trillian's relationship with Hubei Hongyuan;
2. Detailed account of the form and legal status of Trillian's relationship with E Gateway Global Consultants FCZ;
3. Confirmation that Trillian, its employees, or any of its subcontractors or affiliates have no other interests which may conflict with their respective roles as advisor to Eskom;
4. Confirmation that, pending your detailed response to this letter and with immediate effect, no Trillian personnel, subcontractor personnel, or personnel of any affiliate undertaking will conduct or undertake any activities on any element of the Top Consultants Programme which may lend themselves to a conflict of interest whether real or perceived;
5. Confirmation that Trillian indemnifies, defends and holds McKinsey harmless from any and all claims brought against McKinsey in respect of and relating to Trillian's relationship with Hubei Hongyuan and any services performed by Trillian and/or any of its subcontractors or their affiliates for Eskom.

We look forward to your favourable reply.

Yours sincerely,



Georges Desvaux  
Managing Partner, Africa



Jean-Christophe Mieszala  
Chair, Client Service Risk Committee  
Europe, Middle East & Africa



March 15, 2016

CONFIDENTIAL

Eric Wood  
Trillian Management Consulting  
eric@tcp.co.za

Dear Mr. Wood

**TERMINATION OF INTERACTIONS BETWEEN MCKINSEY AND THE TRILLIAN GROUP IN RESPECT OF THE TOP CONSULTANTS PROGRAMME AT ESKOM**

We refer to our letters to you dated February 25 and March 10, 2016 and to which we have not received any formal responses. In particular, we did not receive your responses to the following requests:

1. Detailed group profile of the Trillian Group including ultimate beneficial shareholders, related parties and executive management;
2. Detailed account of the form and legal status of Trillian's relationship with Hubei Hongyuan;
3. Detailed account of the form and legal status of Trillian's relationship with E Gateway Global Consultants FCZ;
4. Confirmation that Trillian, its employees, or any of its subcontractors or affiliates have no other interests which may conflict with their respective roles as advisor to Eskom;
5. Confirmation that, pending your detailed response to this letter and with immediate effect, no Trillian personnel, subcontractor personnel, or personnel of any affiliate undertaking will conduct or undertake any activities on any element of the Top Consultants Programme which may lend themselves to a conflict of interest whether real or perceived;
6. Confirmation that Trillian indemnifies, defends and holds McKinsey harmless from any and all claims brought against McKinsey in respect of and relating to Trillian's relationship with Hubei Hongyuan and any services performed by Trillian and/or any of its subcontractors or their affiliates for Eskom.

As we mentioned to you, our global risk committee has reviewed and discussed the proposal to work with Trillian, as our BBBEE partner, on our engagement with Eskom. As a result of this discussion, we have decided not to proceed with this proposal.

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Whilst we are aware that this will be a disappointment to you, we hope that you will understand that, for a programme of this scale and importance, we require more clarity on our partner firm than you have been able to provide us to date. We may consider any additional information that you may furnish subsequent hereto.

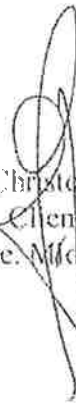
We will inform Eskom of the recent developments and trust that you will be willing for our team to discuss with you and with Eskom how to transition arrangements in a way that best supports Eskom's plans.

We will also communicate any advices from the client in this regard.

Yours sincerely,



Georges Desvaux  
Managing Partner, Africa



Jean-Christophe Mieszala  
Chair, Client Service Risk Committee  
Europe, Middle East & Africa

# McKinsey & Company

30 March, 2016

CONFIDENTIAL

Mr. Anoj Singh  
Group CFO  
Eskom Holding SOC Ltd  
Megawatt Park  
Sunninghill, Sandton  
Johannesburg  
South Africa

Dear Mr. Singh

## TOP CONSULTANTS PROGRAMME

We refer to your letter to us dated February 19, 2016 and our response thereto dated February 25, 2016. This letter serves as an update on further developments since our last letter to you on February 25, 2016. In particular, you may recall, that we confirmed to you that we will not be in a position to commence a relationship with Trillian, or any other partner/sub-contractor until the criteria below have been met and approved by our global risk and legal teams:

- Shareholding of holding companies
- Ultimate beneficial shareholders
- Related parties and group companies (e.g., significant lenders)
- Executive management team and other "key man" dependencies for both the company and group companies
- Majority Black ownership
- Majority Black management and staff or a clear and committed plan to deliver this outcome

We have requested the above, and other additional relevant information, from Trillian on separate occasions including via letters to them dated 25 February 2016 and 10 March 2016. We have, to date, not received any formal responses to each of the letters despite the respective deadlines of 25 February 2016 and 11 March 2016.

We have also had separate discussions with Mr. Eric Wood on a number of occasions. During these meetings, Mr. Wood orally provided partial information

## McKinsey & Company

concerning Trillian's potential shareholders and directors but expressed that the information was neither complete nor final. The information received served as input into McKinsey's risk management process and review of the proposed contracting arrangement which has been ongoing.

All information received to date concerning our requests to Trillian, as set forth above, was presented and evaluated during a periodic McKinsey global risk committee meeting. The committee came to the following conclusions:

- McKinsey does not know enough about Trillian, its ownership and governance to be comfortable going ahead on a programme of this scale
- Trillian's speed and clarity of response to McKinsey's questions has not been satisfactory
- McKinsey is uncomfortable about Trillian's transparency on conflict issues
- McKinsey has material concerns around reputational risk to the Firm given the above.

As a result, McKinsey's interactions with Trillian have now been terminated with confirmation having been sent to Trillian.

We acknowledge that the draft of the Services Level Agreement between Eskom and McKinsey entails the requirement of outsourcing a percentage of the total consulting fee to a Supplier Development partner. We are fully committed to giving effect to this obligation despite the termination. In light of the previously envisaged sub-contracting relationship with Trillian which, under the current conditions, will not be possible, we would appreciate an opportunity to develop options with Eskom to ensure that we meet our supplier development obligations.

We are very much committed to support Eskom on this going forward. Please take it as our sign of commitment that we so far continued our teams to push for impact

Yours sincerely,



Dr. Dr. Alexander Weiss  
Director



Georges Desvaux  
Managing Partner, Africa