TRANSNET

Transnet Engineering 2021

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Highlights

Revenue decreased **31%** to **R8,2 billion** (2020: R11,9 billion)

EBITDA decreased **283%** to an EBITDA loss of **R1,5 billion** (2020: R805 million)

Transnet Engineering's performance against the Shareholder's Compact targets on train reliability and efficiency is summarised below:

Key performance indicator	Target 2021 %	**Actual 2021 %**
Volume lost due to traction	6,0	**10,6**
Train delays due to traction	40,0	**21,6**
Train cancellations	6,0	**5,6**

- Train cancellations improved during the period under review and remained within target thus ensuring sustained support to Transnet Freight Rail's ability to move volumes.
- Transnet Engineering (TE) was designated by the African Union as SA's rolling stock manufacturing hub thus potentially giving the Operating Division an opportunity to utilise its capabilities and meet various customer demands.
- TE could not meet its manufacturing of locomotives and wagons targets mainly due to the COVID-19 pandemic lockdown.
- TE entered into a contract to the value of USD 22 533 540 with CFM (Mozambique) to deliver 300 high-sided wagons. The revised contract price after engineering changes emanating from transport route changes amounted to USD 22 369 500 (R360 058 159 with a forward exchange cover).
- Major progress was made on the Port Hauler prototypes, with the manufacturing of the Port Hauler Vehicle 1 (V1) prototype completed and ready for commissioning. The fabrication of Port Hauler Vehicle 2 (V2) has been completed and assembling has commenced.

Business overview

Transnet Engineering (TE), an Operating Division (the Division) of Transnet SOC Ltd, is an advanced manufacturing division of Transnet, with a rich and proud heritage spanning more than 150 years. TE's vision to be the preferred brand in rail and related engineering solutions in Africa and beyond remains key to its growth. This entails:

- Enhancing the Transnet value chain by delivering reliable rolling stock, port and pipeline equipment;
- Focusing on market segments and supply chains that generate the best returns;
- Becoming a preferred maintenance, repairer and overhaul partner for all rail and related equipment in Africa;
- Establishing centres of excellence for technical and engineering skills development in Africa; and
- Driving economic development and growth in sub-Saharan Africa.

Stemming from its core capabilities, TE remains a key anchor in supporting Transnet's freight operations in its pursuit of operational excellence and volume growth and by assisting Transnet in achieving its mandate of lowering the cost of doing business in South Africa. Furthermore, delivering on these core capabilities positions TE as a leader in providing rolling stock, port equipment and related services in the growing African logistics market.

The strategically positioned maintenance depots enable TE to continue to focus on improving operational efficiencies throughout the key corridors of Transnet Freight Rail (TFR). The maintenance performance approach focuses on availing reliable rolling stock that will ensure that train delays, cancellations and loss of volumes due to rolling stock are minimised. With the capacity to maintain approximately 70 000 wagons and 2 500 locomotives annually, the Division has created a solid base for a maintenance philosophy that is comparable to world standards.

TE remains committed to fully align with and support Transnet's strategic focus areas of customer service, safety, people, asset utilisation and cost control. The achievement in these focus areas is supported by initiatives that improve operational efficiencies while maintaining relevant quality standards such as the International Organization for Standardization (ISO) and European Standards across all its operations. The revitalisation of continuous improvement will be a cornerstone to continually achieve and maintain the desired operational standards. TE advocates a safe working environment in line with Company requirements. Automation of operational processes is an essential part of integration and a seamless service offering to customers. The Division will continue to place customer needs at the centre of its business activities by ensuring good quality products, timely delivery and continuous feedback.

TE has faced a number of challenges including reduced orders from TFR and minimal sales from the rest of Africa over the past few years. The Division's reputation has also been negatively affected by allegations of corruption at Transnet that have surfaced through the State Capture Commission of Enquiry. Furthermore, the COVID-19 pandemic has had a negative impact on most businesses, with TE being no different. Considering these challenges, the Division must speedily realign with the shifts in demand. The current business model is no longer sustainable and immediate interventions are required to turn the business around.

TE is approaching these challenges in two distinct phases. Phase 1, the reorganisation phase, entails reorganising the Division into clearly defined business units that can be measured with appropriate performance metrics. The reorganisation phase is an aggressive culture shift that will result in a value-driven organisation where ownership and asset care are key priorities. The reorganisation phase also includes:

- Aligning maintenance with TFR's corridor business model;
- Configuring the Manufacturing unit as a profit-driven business unit;
- Rationalising and broadening the Research and Development (R&D) business unit's scope and aligning it with the Transnet strategy; and
- Analysing market demand and surveying local industry to determine demand and strategic fit.

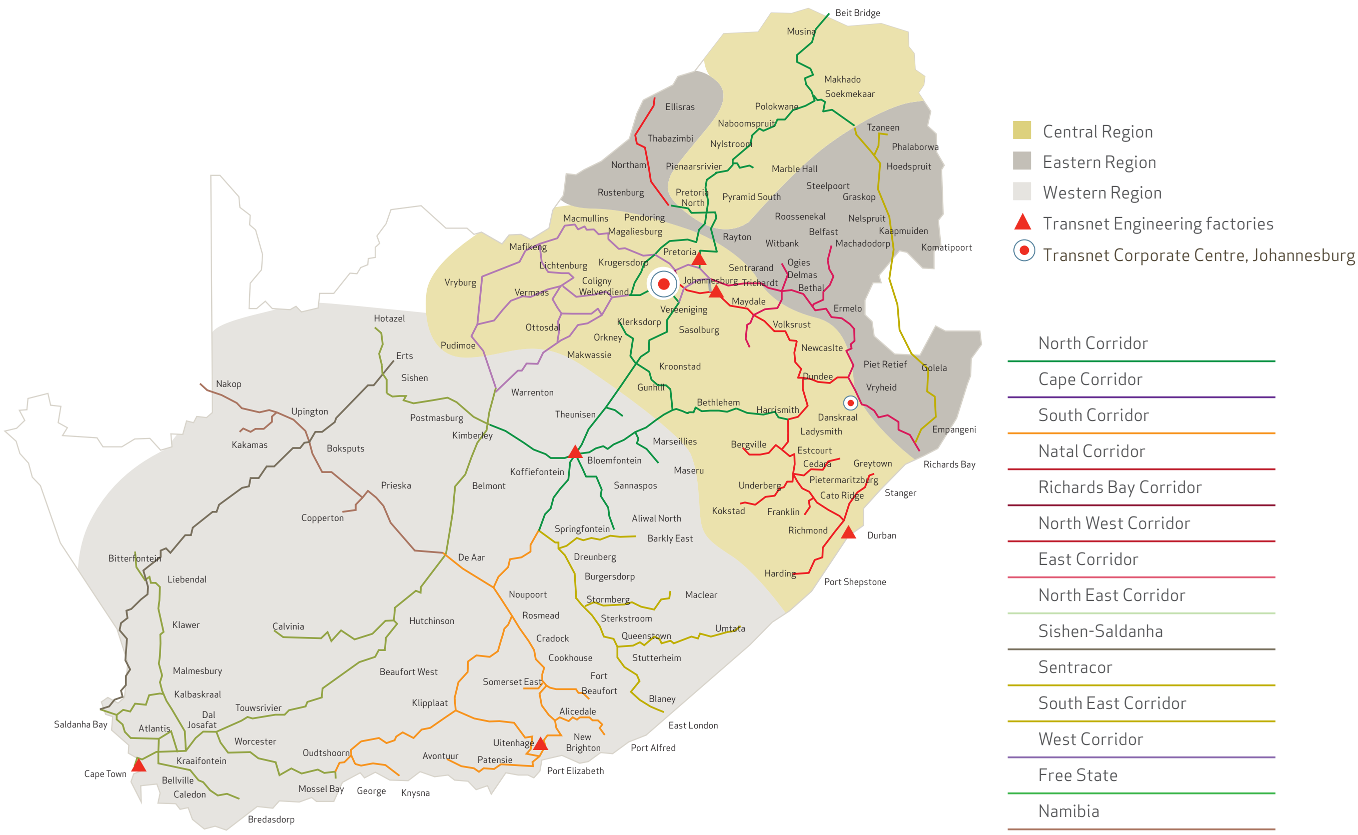
Phase 2, the remodelling phase, will be based on the outcome of market analysis and an industry survey and will potentially entail diversification, partnerships with the private sector both nationally and globally as well as potentially optimising and divesting from certain facilities to match the level of demand to TE's capabilities and services.

Where we operate

TE has plants and depots spread throughout South Africa, creating a network of sites that serve the main rail corridors and ports. The six main plants are located in Cape Town, Johannesburg, Durban, Bloemfontein, Pretoria and Uitenhage.

These plants serve as regional centres for their satellite depots and provide them with support services. There are a total of 132 maintenance depots and 11 yards. Out-of-service heavy maintenance and manufacturing are undertaken at the plants while the depots concentrate on in-service maintenance of rolling stock.

Figure 1: Transnet Engineering's geographic spread



Regulatory environment

TE currently complies with approximately 70 legislative requirements as well as various regulations and supervisory requirements. These legal requirements impose strict engineering, governance, health and safety, environmental, labour and procurement compliance obligations and requirements. The National Railway Safety Regulator Act, No 16 of 2002, as amended by Act 69 of 2008, provides for the establishment of a Railway Safety Regulator whose mandate is to issue operating licences and oversee safety in the railway industry. Like other rail operators, Transnet complies with stringent application requirements of annual safety permits, which include the establishment and maintenance of the safety management system.

During 2021/22, T E expects that the two critical Bills, namely the Railway Safety Bill which promotes safe rail operations, amongst others, and the Railway Levies Bill which provide for the imposition of levies, penalties and interest by the Rail Safety Regulator will come into operation following public comment. These two Bills were initially published by the Department of Transport in 2016. Over the years, there have been engagements with stakeholders and amendments were made. The two Bills, if passed into legislation, will dramatically change the rail environment in terms of administrative requirements and costs.

Operational performance

Core initiatives

TE will focus on:

- Providing solutions from pit to port, including port and rail equipment, as well as predictive maintenance initiatives to expand maintenance services;
- Extending its maintenance services to other Transnet Operating Divisions to ensure that they leverage the available technical knowledge embedded in TE;
- Expanding its customer base for maintenance and services to increase revenue streams locally and in the rest of Africa by marketing its maintenance capability and forging closer collaboration with Transnet International Holdings;
- Running efficient operations, introducing stringent cost-control measures and creating more value for customers within the manufacturing and maintenance operations;
- Leveraging on its R&D capabilities and partnerships to enhance its product offerings;
- Commercialising the TransAfrica Locomotive, which has been successfully moving loads. It will help for TE to capture its intended market; and
- Developing and implementing cost-control initiatives to effectively control its costs.

Overview of key performance indicators

Key performance area and indicator	Unit of measure	2019/20 Target	2019/20 Actual	2020/21 Target	**2020/21 Actual**	2021/22 Target
Financial sustainability						
EBITDA margin	%	3,3	6,8	1,5	**(18,0)**	(14)
Operating profit margin	%	(0,6)	(1,4)	(4,7)	**(25,2)**	(23,3)
Gearing	%	104,8	112,1	120,3	**58,1**	57,8
Net debt to EBITDA	times	26,4	19,7	100,0	**(4,4)**	(5,4)
Return on total average assets	%	(0,5)	(1,0)	(3,0)	**(12,2)**	(13,1)
Asset turnover	times	0,9	0,7	0,7	**0,5**	0,6
Cash interest cover	times	1,0	(0,5)	0,6	**2,0**	0,6
Total revenue	R million	12 973	11 879	10 977	**8 191**	7 645
– External	R million	1 754	875	331	**230**	579
– Internal	R million	11 220	11 004	10 646	**7 961**	7 066
Capacity creation and maintenance						
Capital expenditure	R million	510	306	575	**191**	81
Planned maintenance	R million	198	183	251	**181**	150
Operational excellence						
Train cancellations due to traction						
General freight business	%	≤ 6,0	3,8	≤ 6,0	**4,42**	≤ 6,0
Export coal	%	≤ 6,0	5,2	≤ 6,0	**12,4**	≤ 6,0
Export iron ore	%	≤ 6,0	2,3	≤ 6,0	**3,15**	≤ 6,0
Net volume lost due to traction						
General freight business	%	≤ 6,6	4,0	≤ 6,6	**5,21**	≤ 6,6
Export coal	%	≤ 6,6	9,3	≤ 6,6	**20,45**	≤ 6,6
Export iron ore	%	≤ 6,6	3,5	≤ 6,6	**3,15**	≤ 6,6
Traction delays						
General freight business	%	≤ 36	20,4	≤ 36	**Not Available**	≤ 36
Export coal	%	≤ 36	22,6	≤ 36	**Not Available**	≤ 36
Export iron ore	%	≤ 36	21,35	≤ 36	**Not Available**	≤ 36
Human capital						
Employee turnover	%	6	4,1	6	**4,8**	6
Employee headcount	permanent	10 786	9 851	9 737	**9 660**	9 337
Revenue per employee	R million	1,2	1,2	1,1	**0,9**	0,8
Transformation						
Black employees	%	90	82,4	91	**83,6**	90
Females	%	35	24,4	45,3	**23,6**	45,3
People with disabilities	%	3,3	2,0	3,3	**2,2**	3,3
Skills development						
Apprentice trainees	headcount	200	246	200	**199**	200
Technician trainees	headcount	30	68	30	**34**	30
Engineering undergraduate trainees	headcount	20	20	20	**0**	0
Sector specific	headcount	250	260	250	**208**	200
Training spend	% of personnel cost	2,50	2,52	3,50	**2,15**	2,50
Risk, safety and health						
Cost of risk	% of revenue	4,5	1,7	4,4	**2,95**	4,3
DIFR	rate	0,69	0,82	0,72	**0,66**	0,72
Regional integration						
Africa sales revenue	R million	254	363	95	**173**	183
Industrial capability building						
R&D costs	R million	304	236	236	**142**	99

Financial performance review

Salient features		Year ended 31 March 2021 R million	Year ended 31 March 2020 R million	% change
Revenue		**8 191**	11 879	(31,0)
– Internal		**7 961**	11 004	(27,7)
– External		**230**	875	(73,7)
Operating expenses		**(9 665)**	(11 074)	(12,7)
– Energy costs		**(224)**	(224)	0,1
– Maintenance		**(181)**	(183)	(1,1)
– Materials		**(2 787)**	(4 098)	(32,0)
– Personnel costs		**(5 618)**	(5 633)	(0,3)
– Other		**(855)**	(937)	(8,7)
Profit from operations before depreciation, derecognition, amortisation and items listed below (EBITDA)		**(1 474)**	805	(283,1)
Depreciation, derecognition and amortisation		**(594)**	(975)	(39,1)
Profit from operations before items listed below		**(2 068)**	(170)	1 114,9
Impairments and fair value adjustments		**(774)**	(284)	172,7
Net finance costs		**(564)**	(1 392)	(59,5)
Profit before taxation		**(3 406)**	(1 846)	84,6
Taxation		**915**	583	56,9
Profit after taxation		**(2 490)**	(1 262)	97,4
Total assets (excluding CWIP)		**15 964**	17 702	(9,8)
Profitability measures				
EBITDA margin[1]	%	**(18,0)**	6,8	(24,8)
Operating margin[2]	%	**(25,2)**	(1,4)	(23,8)
Return on total average assets (excluding CWIP)[3]	%	**(12,3)**	(1,0)	(11,3)
Asset turnover (excluding CWIP)[4]	times	**0,49**	0,66	(26,8)
Capital investments[5]	R million	**191**	306	(37,6)
Employees				
Number of employees (permanent)	number	**9 660**	9 851	(1,9)
Revenue per employee	R million	**0,85**	1,21	(31,0)

[1] *EBITDA expressed as a percentage of revenue.*
[2] *Profit from operations before impairment of assets, fair value adjustments, net finance costs and taxation expressed as a percentage of revenue.*
[3] *Profit from operations before impairment of assets, fair value adjustments, net finance costs and taxation expressed as a percentage of total average assets, excluding capital work in progress.*
[4] *Revenue divided by average total assets, excluding capital work in progress.*
[5] *Actual capital expenditure (replacement + expansion), excluding borrowing costs.*

Performance commentary

Financial sustainability

Revenue for the year under review decreased 31% to R8,2 billion (2020: R11,9 billion). TE's revenue performance was significantly impacted by extended periods of lockdown necessitated by the COVID-19 pandemic. Internal TFR revenue was almost R2,8 billion below budget, primarily as a result of TFR utilising fewer rolling stocks as commodities moved remained subdued. External revenue suffered a drastic blow due to contract irregularities on the 1064 programme and not being awarded the Prasa tender. Internal revenue (about 99% from TRF) decreased to R7,96 billion (2020: R11 billion) while external revenue declined 74% to R230 million (2020: R875 million). Stringent cost-control strategies resulted in a 13% decrease in operating costs to R9,7 billion (2020: R11,1 billion), which alleviated the negative impact of the R2,8 billion revenue shortfall against budget, resulting in an EBITDA loss of R1,5 billion (2020: R805 million EBITDA). TE recorded a negative return on total average assets during 2021 of -12,3% (2020: -1%).

Looking ahead

- Align TE's operating model to meet customers' needs.
- TE will implement "on-edge" manufacturing to be closer to the customer and reduce response time and costs to serve.
- The Division will explore repurposing and optimising centres, depots and sub-depots.
- TE will adopt zero-based budgeting principles, allowing for a financially viable and a self-funding business.
- The Division will realign the R&D strategy on technology to meet the needs of TE's current and future customers.
- TE will diversify its products and services offering by working across the Operating Divisions in the Group and with other state-owned companies such as Eskom and Denel.

Operational performance

Train cancellations due to traction across the lines performance was within target for GFB (4,42%) and export iron ore (3,15%) against a threshold of 6%, and below target for export coal (12,40%).

The net volumes lost due to traction for GFB and export iron ore were well within the target of 6,6% (GFB: 5,21% and export iron ore: 3,15%). Export coal was 20,45% against the target of 6,6%.

TE will continue its efforts to reduce traction delays even further. While TE continues to apply the maintenance philosophy that is aimed at predicting the exceptions and also introducing systems to enhance the maintenance service, it is crucial to continually introduce reliable fleet to improve these measures.

Looking ahead

- TE will establish corridors in line with TFR's corridor strategy.
- TE aims to improve the customer experience by providing on-time, value-for-money products and services that are fit-for-purpose.
- TE will use relevant technology to offer improved maintenance and services to its customers.
- TE will continue to expand its customer base for maintenance and services and increase its revenue streams.
- The Division also aims to expand its services and capabilities to local and neighbouring ports with domestic-based technical services and products.

Capacity creation and maintenance

Capital investment of R191 million for the year was 38% lower than the prior year (2020: R306 million).

Looking ahead

The Division aims to spend R81 million in the 2021/22 financial year on its balanced portfolio of projects that cover R&D initiatives, aiming to grow its customer base for maintenance and services, optimise its operational efficiency, create more value for customers and increase its revenue streams. Some of the initiatives that TE will continue to execute to achieve these goals include:

- Designing, developing and testing a prototype energy storage system for dynamic on-locomotive regeneration application;
- Industrialising locomotive condition monitoring system devices; and
- Designing double-stacker trailer systems and completing the testing of the port hauler to get it ready for production.

Sustainable development outcomes

Human capital (employment and transformation)

- TE achieved a reduction of permanent employee headcount to 9 660 against the target of 9 737.
- Black employees represented 83,6% of the total employee base (target: 91%).
- Female employees represented 23,6% of the total employee base (target: 45,3%).
- People with disabilities represented 2,2% of the total employee base (target: 3,3%).

Skills development

- Training spend as a percentage of labour costs: 2,15% was spent against the 2,5% target.
- Artisan (apprentices) trainees: 199 apprentices were recruited (target: 200).
- Engineering trainees: In total, 0 full-time bursaries were issued, not meeting the target of 20.
- Technician trainees: A total of 34 apprentices (phase 1 and phase 2 students) were recruited (target: 30).
- Sector-specific training: 208 employees were trained (target: 250).
- Employees trained against the Industrial Development Plan: 2 135 employees were trained against the target of 4 712.

Regional integration

The Division achieved Africa sales revenue of R173 million (2020: R363 million) against a target of R95 million. Target is as per Corporate Plan. TE exceeded it's Corporate Plan target mainly as a result of TE landing a contract to supply 300 wagons to CFM Mozambique to the value of R360 million, of which 115 wagons to the value of R148,9 million were delivered in the current financial year.

Industrial capability building

R&D expenditure of R142 million (2020: R236 million) was 39,8% below the target of R236 million for the financial year.

Environmental stewardship

TE continues to ensure environmental compliance and minimises adverse impacts on the environment in which it operates. This is facilitated by implementing and monitoring various environmental initiatives such as waste management, energy efficiency, water management, air quality monitoring and pollution management.

Waste management

The implementation of the TE Waste Management Improvement Plan is ongoing. The primary objective remains that of improving waste management practices across the organisation. The implementation of this plan has already resulted in some waste streams being diverted away from landfill and going through environmentally friendly treatment options like reuse and recycling. There are robust engagements that are taking place with the service providers to ensure that the concept of waste minimisation versus that of disposal is embedded. The implementation will continue to be monitored until significant changes are realised.

Energy efficiency

Energy-efficiency improvements cover both electricity and fuel (i.e. petrol, diesel and oil). Electricity and fuel contribute 90% and 10% respectively to TE's total energy consumption. TE achieved a 15,9% improvement in electricity savings and 16,9% improvement in fuel savings during the year under review. The improvement in electricity savings was a result of declining operational activities since the inception of lockdown restrictions. The most energy significant users remain Koedoespoort, Durban and Bloemfontein, mainly due to high electricity-consuming machinery in the respective plants coupled with higher production volumes compared to other centres.

Fuel savings are attributed to a reduced operation of in-service vehicles, less operation of material handling equipment (forklifts) as a result of declining production activities and fuel-saving initiatives undertaken by the regions and businesses, respectively.

Water management

TE continues to monitor ground and surface water, including industrial effluent from effluent plants as part of operational activities and to ensure compliance with municipal by-laws and discharge permits. Most of the results have shown a high degree of compliance and are within the parameter limits. Where there are abnormalities, these have been investigated and addressed accordingly. Areas where pollution was previously detected during ground water monitoring (i.e. Germiston, Uitenhage and Bloemfontein) are currently undergoing site assessments to determine the level of pollution so that appropriate correction measures can be put in place.

Air quality monitoring

Air quality monitoring started during the second quarter of the 2020/21 financial year in the Bloemfontein (BFX) region. Germiston (GMX) and Koedoespoort (KDS) ambient air quality monitoring will commence in June 2021, while Salt River (SRX) and Uitenhage (UTH) will be conducted in 2022/23 in line with the monitoring schedule. This air quality monitoring is more critical for the foundry business (KDS and BFX), which is classified as the listed activity in line with the National Environment Management: Air Quality Act, No 39 of 2004 and needs to comply with the condition of the current existing atmospheric emission licences (AEL). Koedoespoort is in the process of reapplying for its AEL which has since expired.

Pollution management

TE is committed to ensuring the past and current pollution is well managed and that sites that have been identified as contaminated are appropriately remediated and cleaned up. The Department of Environment, Fisheries and Forestry (DEFF) has been notified of these contaminated sites in line with Part 8 of the National Environment Management Waste Act, No 59 of 2008. These sites will have to be assessed during the 2021/22 financial year to determine the level and extent of pollution. The assessments of reports will be submitted to DEFF for approval and issuing of remediation orders for specific sites.

Community development (social accountability)

At the heart of TE's corporate social investment philosophy is the commitment to make conditions and life better for vulnerable communities living next to our operations. TE's approach is that impactful social investment has the ability to contribute positively to nation-building and to drive positive change in communities. We align our social development projects with national developmental imperatives, underpinned by a need to make a measurable impact through investment that empowers the nation to reach its social development and economic upliftment goals.

In line with the National Development Plan, TE's drive for social transformation and shared value finds expression in the empowerment and upliftment of those who are most vulnerable, especially those in areas of the greatest need. The Company achieves its CSI intent through five focus areas: health, sports, employee volunteerism, social infrastructure and education.

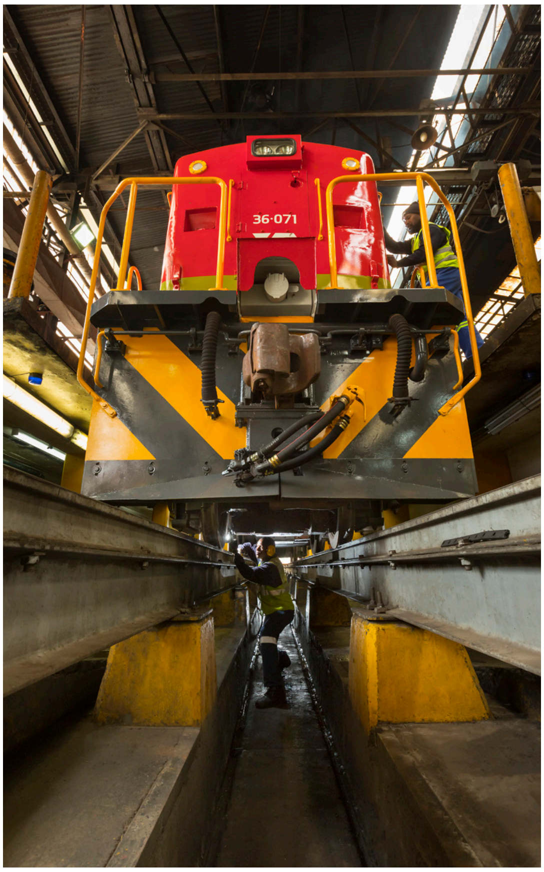
Key risks and mitigating activities

The top three risks below were identified during the year under review with appropriate mitigating plans:

Key risks	Mitigating plans
Inability to manage and contain operating expenses	• Implement reorganisation and headcount reduction in order to ensure that headcount aligns with the available work • Continue monitoring the COVID-19 response and prepare for a possible third wave of infections to prevent excessive spending
Unavailability of critical material and components	• Continue to engage National Treasury (NT), Department of Public Enterprises and Department of Trade, Industry and Competition and roll out NT instruction to promote local content • Investigate integrated Demand Management System and roll out demand management training for end users
Frequent machinery, equipment and facility breakdowns	• Develop and execute equipment and machinery upgrade and replacement programme • Conduct benchmark exercise on mechanisms adopted in order to address the issue of ageing machinery • Assess resource utilisation to ensure effective prioritisation • Implement reorganisation and headcount reduction to ensure that headcount aligns with the available work

Opportunities

- New rail corridors are being developed within sub-Saharan Africa
- Offering funding packages for rolling stock procurement to customers in targeted markets
- New discoveries of bulk commodity mines in Africa
- Mining companies purchasing their own rolling stock and not relying on traditional railway operators
- Rolling stock overhauls and upgrades are in demand in Africa
- The ability to offer turnkey products and services solutions for locomotives, wagons and maintenance to customers
- Improving technical skills for both manufacturing and maintenance and servicing of port equipment
- Building partnerships with OEMs and other strategic partnerships that will build value, increase investment funding and improve returns



Abbreviations and acronyms

CWIP	Capital work in progress
DIFR	Disabling injury frequency rate
EBITDA	Earnings before interest, taxation, depreciation and amortisation
GFB	General freight business
OEM	Original equipment manufacturer
Prasa	Passenger Rail Agency of South Africa
R&D	Research and development
TE	Transnet Engineering
TFR	Transnet Freight Rail