

**TRANSNET**



*engineering*







# HIGHLIGHTS

Transnet Engineering (TE) recorded the following highlights for the 2023/24 financial year:

Revenue improved by **22% to R9,8 billion**, from R8,0 billion in the 2023/24FY.

**R2,0 billion EBITDA loss** in the 2023/24FY.

Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) improved significantly, reducing the loss by **90,7% to R0,2 billion**, from a previous

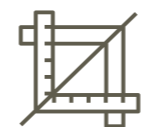
Despite these improvements, TE underperformed in meeting the **Shareholder Compact** targets related to train reliability and efficiency, as summarised in the table.

Key performance indicator	Target 2024	Actual 2024	Deviation
Volume lost due to traction (%)	7,0	13,3	-90%
Train delays due to traction (faults per million kilometres travelled)	40,0	58,4	-46%
Train cancellations (%)	6,0	6,2	-4%

# BUSINESS OVERVIEW

TE, vital to the logistics industry value chain and a key division within Transnet, stands as a cornerstone in South Africa's railway and ports industry. The division is renowned for its critical role in manufacturing and maintaining assets crucial to Transnet's operations.

TE's core activities:



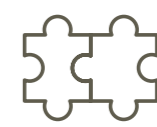
Designing



Manufacturing



Re-manufacturing



Assembly

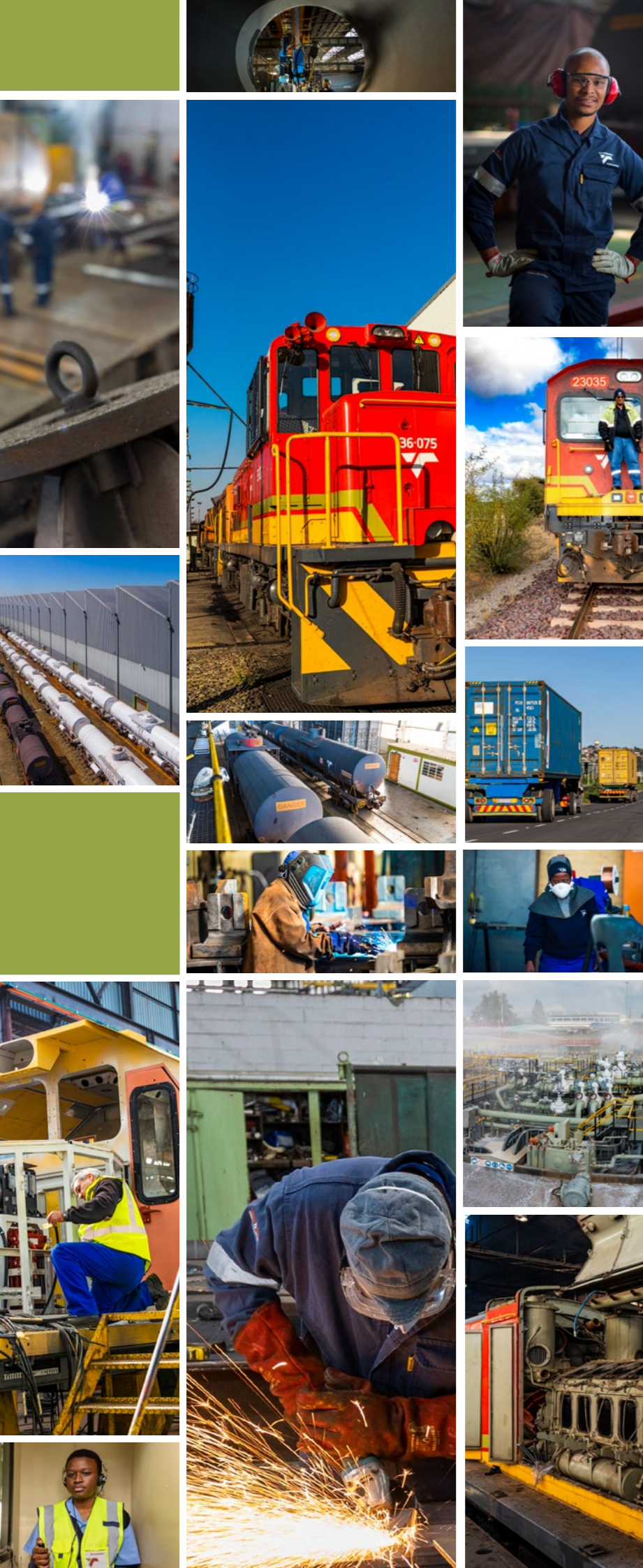


Maintenance of railway and Maritime assets:

- locomotives
- freight wagons
- specialised coaches
- port equipment

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**BUSINESS OVERVIEW** CONTINUED

The division's services span the lifecycle management of vital assets, extending beyond the fundamental activities. The division excels in specialised engineering with strong research, design, and testing capabilities. These technical strengths form the foundation of TE's excellence, promoting high standards of operation and fostering innovation across its diverse services and products.

With over 150 years of rail operations expertise, TE is a prominent African original equipment manufacturer (OEM), known for pioneering wagon and locomotive production. TE drives innovation, marked by the development of the ground-breaking 'Trans Africa' locomotive (TAL) reflecting a commitment to locomotive manufacturing. Its engineering unit emphasises research, design, and fabrication, as seen by the Transnet port hauler development. This dedication to pushing the boundaries underscores TE's commitment to engineering excellence not only in the railways but including maritime.

TE, the largest heavy engineering operation in South Africa, excels in manufacturing and maintenance. With six main plants and 143 maintenance depots strategically positioned along key rail corridors and ports, the division ensures comprehensive service coverage. Its facilities have an installed capacity that enables the annual:

- Manufacture of ~ 4 000 wagons;
- Maintenance of ~ 70 000 wagons;
- Maintenance of a fleet of 2 500 locomotives;
- Manufacture of new port equipment: 120 x trailers, 30 x port haulers, 100 x various skips
- Refurbishment and maintenance of various port equipment: 150 x trailers, 50 x port haulers, 300 x various skips, 15 x straddle carriers and 10 x rtgs.

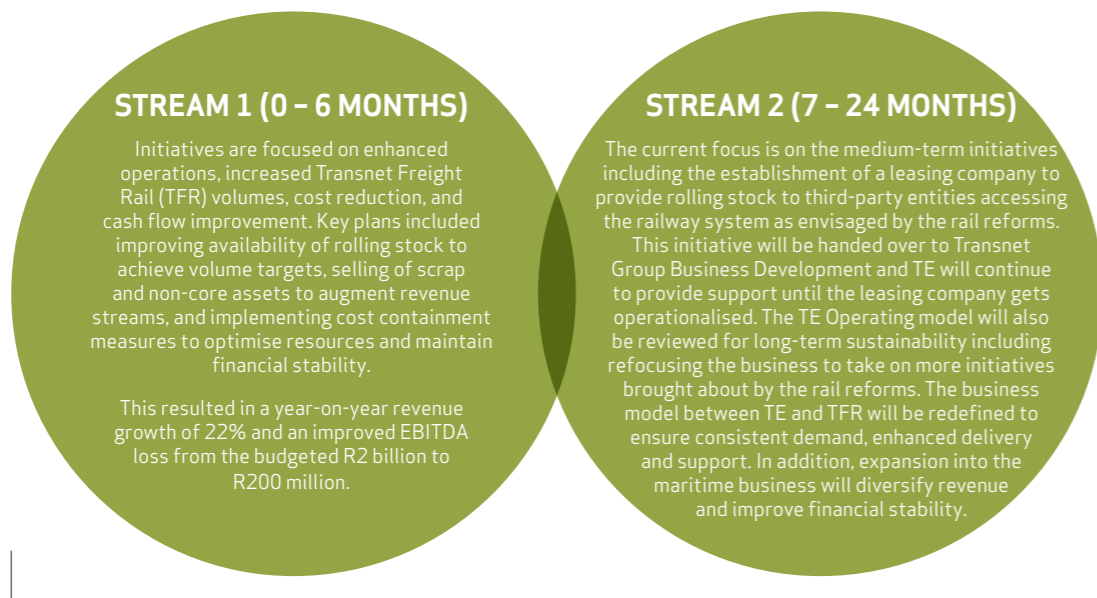
Although TFR remains TE's primary customer, its scope extends to other operating divisions and other external customers, and also serving clients in countries like Tanzania, Zambia, and the Democratic Republic of Congo. This continental presence, supported by a strong legacy and customer base, has fostered a maintenance philosophy that aligns with world-class standards, solidifying TE's reputation for rolling stock maintenance excellence.

TE, despite its strengths, faces challenges threatening operations and market position. Internally, reliance on TFR as a single major customer, and financial struggles marked by high levels of debt have hindered operations and increased costs. Operational inefficiencies, such as lengthy supply chain processes and long lead times further restrict responsiveness to opportunities. Externally, global competitors are entering African markets which directly challenges TE with integrated rolling stock solutions. Regulatory constraints, issues in the local railway sector, and difficulties in converting research and development (R&D) into commercial products also limit potential for growth.

To address these challenges, TE has developed a comprehensive Recovery Plan to improve operational efficiency and focus on increased support for the TFR volume growth whilst repositioning the business for growth and competitiveness. The Recovery Plan follows a phased approach for systematic and comprehensive implementation as well as promoting cross-functional collaboration with measurable milestones to ensure accountability. The initial phase involves a thorough assessment and overhaul of core processes to eliminate inefficiencies, streamlining and enhancing operations, as well as establishing a high-performance culture. Key priorities include improving operational efficiency, optimising resource allocation within existing limits, and enforcing strict cost-saving measures to counter declining financial performance.

**The TE Recovery Plan is structured into the following strategic streams:**

- Stream 1: covers the first six months;
- Stream 2: covers seven to 24 months; and
- Operational Efficiency.



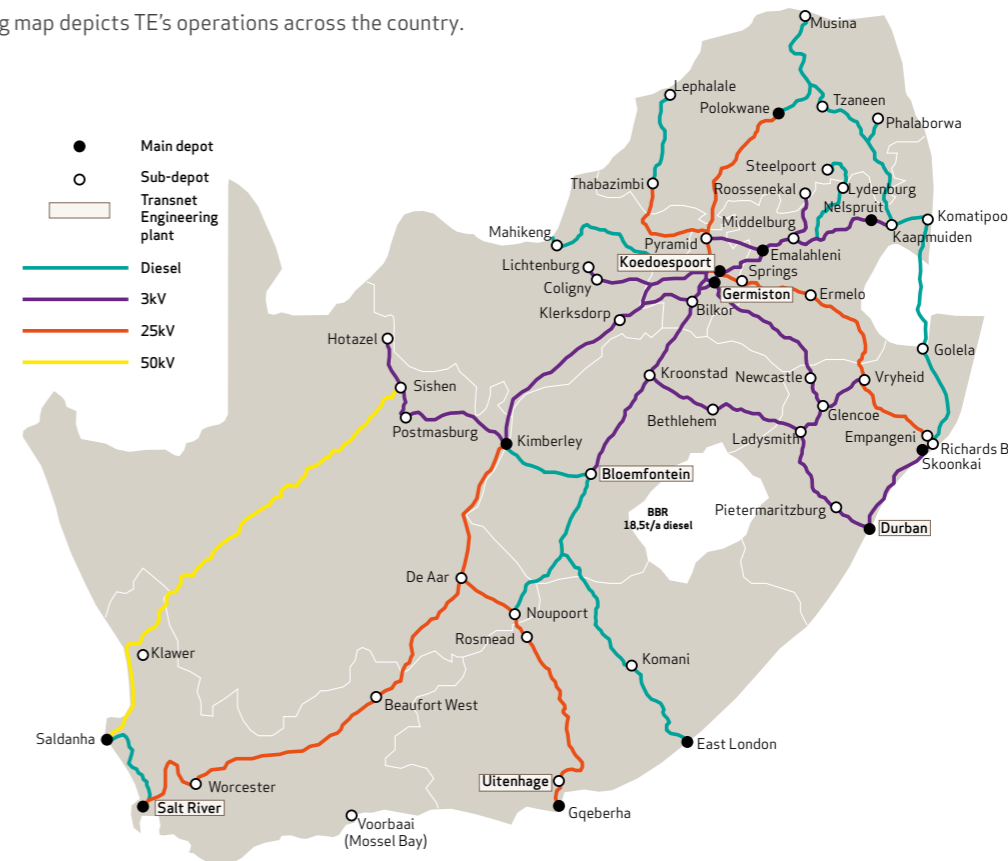
OPERATIONAL EFFICIENCY

Streamlining operational efficiencies is a key focus area for TE, alongside the two strategic streams (described above). Multi-disciplinary project teams are being implemented to create focused planning, execution and monitoring to resolve some of the current operational challenges. Matters for priority attention include a supply chain strategic shift from tactical to strategic sourcing which will eliminate bottlenecks, fostering a performance-driven culture, increase material supply and improve the availability and reliability of plant equipment and machinery. These measures are designed to reduce procurement lead times, production and equipment downtime - resulting in more efficient operations. A command centre will be established alongside the Enterprise Project Management Office (EPMO) to provide vital visibility of the Recovery Plan and track milestones to ensure successful rollout of the plan. Long-term strategies aim to ensure sustainable performance, boost revenue, diversify revenue streams and strengthen competitiveness for sustained growth and success.

# WHERE WE OPERATE

TE has plants and depots throughout South Africa, forming a network of sites that serve the rail corridors and ports. The six main plants (referred to as centres) are in Cape Town, Durban, Germiston, Bloemfontein, Pretoria, and Uitenhage.

The following map depicts TE's operations across the country.



# REGULATORY ENVIRONMENT

The Railway Safety and the Railway Levies Bills, initially published by the Department of Transport in 2016, were expected to take effect during the 2023/24FY after public comments, their implementation is now anticipated in the 2024/25FY. During this waiting period, TE continues to comply with all relevant regulations. Annual assessments of applicable legislation are conducted to ensure operations remain compliant and relevant in an evolving regulatory landscape.





# OPERATIONAL PERFORMANCE

In the 2023/24FY, TE launched the Recovery Plan project. Its primary goal was to better support TFR, its major customer, to increase freight volumes and boost revenue. The project focused on improving locomotive availability to meet the target of 1 600 active units. Although the milestone was achieved at the end of the third quarter, sustaining the availability levels proved challenging, and the year ended with locomotive availability at 1 556 active units.

At the end of March 2024, TE fell short of its revised revenue target linked to the Recovery Plan but surpassed its EBITDA target.

## REVENUE

Despite exceeding external revenue targets by R134 million, internal revenue from TFR and Maritime operations fell short of budget by R1,2 billion. This was due to significant backlogs caused by material shortages stemming from long lead times, and supply chain delays. This significantly impacted execution of Locomotive Major Operations Programmes (MOPs), New Build Wagons, Locomotive General Overhaul (GOs), and fleet renewals.

## EBITDA

The division reported a loss of R187 million, compared to the revised recovery plan EBITDA loss of R1,4 billion. This improved performance was as a result of operating cost savings of R2,2 billion, largely driven by material under-expenditure of R832 million, other operating cost savings of R959 million and personnel cost savings of R420 million.

The recovery plan has focused on initiatives to support TFR volume performance by increasing efforts to source critical spare parts for rolling stock through collaboration with customers as well as improved sourcing strategies. This initiative aims to expedite maintenance and improve rolling stock availability.

## CUSTOMER SERVICE

The initiatives were tailored to address specific challenges affecting rolling stock availability for TFR, being our major customer.

The key improvements included the following:

- Increasing the number of available jumbo wagons on the North Corridor;
- Adding D43 locomotives to the Ore Corridor;
- Reducing the under-supply of CR13/14 wagons on the Ore Line; and
- Boosting Manganese wagon sets for the Cape Corridor to the required 30 sets.

## PEOPLE

The successful implementation of the Re-organisation project (Phase 2) brought about a new organisational structure and delayering. Measures to manage incapacity and absenteeism included the establishment of incapacity panels and the reduction of leave provision which resulted in significantly reduced labour costs. Continuous skills development in technical and functional areas improved performance and ensured business continuity. Training investment (as a percentage of labour) reached 4,8%, surpassing the 2,5% target. People management dashboards were also implemented to provide better information visibility, planning, monitoring, and effective decision-making.

## SAFETY

TE remains committed to assisting Transnet to retain its safety permit as a railway operator, ensuring safe rail operations and compliance. On 31 August 2022, the Rail Safety Regulator (RSR) granted Transnet a safety permit, effective 29 August 2022, with two special conditions. The first condition required Transnet to address the transportation and management of dangerous goods. TE had to conduct a risk assessment where loaded trains are entering depots for maintenance, which was successfully completed and accepted by the RSR. The second condition required the filling of 115 safety-critical positions, of which 89 were filled. Further recruitment is set to continue in the 2024/25FY.

The Back-to-Basics programme maintained its focus on occupational safety, health, and environmental protection during the reporting period. The programme enhances compliance to health and safety legal requirements. TE continues to prioritise this initiative as part of Transnet's safety 10-point plan, with 80% of the tasks completed.

A few strategic objectives that were not concluded in the previous year included emergency preparedness, which was not met due to budget constraints and high vacancies in the Safety, Health and Environment (SHE) department. These impacted the Back-to-Basics programme implementation and will be prioritised in the new year.





# CORE INITIATIVES

Key strategic initiatives to increase revenue, diversify and reduce reliance on TFR, while aligning with Rail Reforms include:



## LEASING COMPANY

TE will position itself to seize the opportunities that will flow from the establishment of a leasing company for rolling stock and maritime equipment. This initiative will be handed over to Transnet Group Business Development and TE will continue to provide support until the LeaseCo is operational.



## TE OPERATING MODEL

TE's operating model will be revised to position it for growth and efficiency opportunities in order to better service Transnet and other external customers including third party operators.



## MARITIME SERVICES BUSINESS

The TE Maritime Services Business' mandate is to provide various maintenance and engineering solutions for TNPA and TPT to enhance availability and reliability of critical Port/Maritime equipment (Bulk and Container sector). This will be further enabled through strategic OEM partnerships which aim to expand the scope of services throughout the African continent. The business has established itself as a manufacturer of key container and bulk material handling equipment as well as a service provider in refurbishing and maintaining port equipment.

# OVERVIEW OF KEY PERFORMANCE INDICATORS

To keep TE on track with its objectives, specific Key Performance Indicators (KPIs) have been identified. The following table represents these KPIs, along with their targets and actual performance in each area.

Key performance indicator	Unit of measure	2023 Actual	2024 Target	2024 Actual	2025 Target
<b>Financial sustainability</b>					
EBITDA margin	%	(24,9)	0,0	(1,9)	(17,0)
Operating profit margin	%	(27,7)	(7,4)	(5,1)	(21,1)
Gearing	%	91,7	101,8	101,3	139,5
Net debt to EBITDA	times	(5,7)	(7,5)	(40,4)	(5,3)
Return on Invested Capital (ROIC)	%	(12,1)	(14,7)	(4,4)	(24,0)
Asset turnover	times	0,5	0,5	0,7	1,1
Cash interest cover	times	(4,2)	1,1	4,8	(3,2)
Total revenue	R million	8 045	10 839	9 817	12 512
External	R million	210	419	553	2 019
Internal	R million	7 835	10 420	9 264	10 493
<b>Capacity creation and maintenance</b>					
Capital expenditure	R million	21	148	100	148
Planned maintenance	R million	172	168	172	200

Key performance indicator	Unit of measure	2023 Actual	2024 Target	2024 Actual	2025 Target
<b>Operational excellence</b>					
<b>Train cancellations due to traction</b>					
Cape corridor	%	2,58	≤6,0	10,48	≤6,0
Central	%	0,64	≤6,0	0,97	≤6,0
Container	%	1,23	≤6,0	2,87	≤6,0
North corridor	%	4,07	≤6,0	6,37	≤6,0
Northeast corridor	%	5,76	≤6,0	6,51	≤6,0
Ore line corridor	%	10,88	≤6,0	15,99	≤6,0
<b>Net volume lost due to traction</b>					
Cape corridor	%	2,7	≤7,0	9,8	≤7,0
Central	%	0,9	≤7,0	1,4	≤7,0
Container	%	1,3	≤7,0	3,4	≤7,0
North corridor	%	9,3	≤7,0	12,8	≤7,0
Northeast corridor	%	7,2	≤7,0	13,8	≤7,0
Ore line corridor	%	10,2	≤7,0	19,3	≤7,0
<b>Traction delays</b>					
Cape corridor	Faults per million kilometres travelled	65,9	40	64,1	40
Central	Faults per million kilometres travelled	54	40	78,5	40
Container	Faults per million kilometres travelled	70,8	40	61,8	40
North corridor	Faults per million kilometres travelled	47,1	40	58,8	40
Northeast corridor	Faults per million kilometres travelled	65,9	40	54,4	40
Ore line corridor	Faults per million kilometres travelled	36,1	40	34,8	40
<b>Human capital</b>					
Employee turnover	%	4,3	6	5	6
Employee headcount (permanent)	permanent	8 126	7 281	7 770	7 400
Revenue per employee (permanent)	R million	1,0	1,5	1,3	1,7
<b>Transformation</b>					
Total blacks	%	86,8	92	87,8	92
Total females	%	27,5	35	27,9	35
Total people with disabilities	%	1,9	3	1,7	3
<b>Skills development</b>					
Apprentice trainees	headcount	200	200	200	200
Technician trainees	headcount	0	9	9	21
Engineering undergraduate trainees	headcount	0	17	16	23
Sector specific	headcount	2 940	250	2 212	250
Training spend	% of personnel cost	2,7	2,5	4,8	2,5
<b>Risk, safety, and health</b>					
Cost of risk	% of revenue	N/A	N/A	N/A	N/A
LTIFR	rate	0,85	0,70	0,93	0,70
<b>Regional integration</b>					
Cross-border sales revenue	R million	106	265	261	1 277
<b>Industrial capability building</b>					
R&D costs	R million	76	83	58	100

# FINANCIAL PERFORMANCE REVIEW

The table below reflects TE's financial performance and comparison based on prior year results. The table aims to give an overview of the various drivers of performance. The key drivers of performance were the revenue line which showed an increase of 22% year-on-year. The substantial increase in revenue was largely driven by both external sales up 163,6% as well as internal sales up 18,2% year-on-year, whilst operating expenses remained flat. All these translated to an improved EBITDA loss of 90,7% compared to the prior period.

	Year ended 31 March 2024 R million	Year ended 31 March 2023 R million	% change	
<b>Salient features</b>				
Revenue	9 816,9	8 045,1	22,0	
- Internal	9 263,8	7 835,3	18,2	
- External	553,1	209,8	163,6	
Operating expenses	(10 003,5)	(10 048,2)	(0,4)	
- Energy costs	(69,9)	(252,8)	(72,3)	
- Maintenance	(172,1)	(172,4)	(0,2)	
- Materials	(3 445,3)	(3 227,2)	6,8	
- Personnel costs	(5 578,7)	(5 257,2)	6,1	
- Other	(737,5)	(1 138,6)	(35,2)	
<b>Profit from operations before depreciation, derecognition, amortisation and items listed below (EBITDA)</b>	<b>(186,7)</b>	<b>(2 003,0)</b>	<b>(90,7)</b>	
Depreciation, derecognition, and amortisation	(318,2)	(226,1)	40,8	
<b>Profit from operations before items listed below</b>	<b>(504,9)</b>	<b>(2 229,1)</b>	<b>(77,4)</b>	
Net finance costs	(892,0)	(945,8)	(5,7)	
Loss before taxation	(1 491,6)	(3 015,3)	(50,5)	
<b>Taxation</b>	<b>265,3</b>	<b>1 526,5</b>	<b>(82,6)</b>	
<b>Loss after taxation</b>	<b>(1 226,3)</b>	<b>(1 488,9)</b>	<b>(17,6)</b>	
<b>Total assets (excluding CWIP)</b>	<b>10 901,6</b>	<b>15 931,6</b>	<b>(31,6)</b>	
EBITDA margin*	%	(1,9)	(24,9)	(92,4)
Operating margin**	%	(5,1)	(27,7)	(81,4)
Return on average total assets (excluding CWIP)***	%	(3,8)	(13,4)	(71,8)
Asset turnover (excluding CWIP)****	times	0,7	0,5	51,8
<b>Capital investments^</b>	R million	<b>100,3</b>	20,7	384,5
Number of employees (permanent)	number	<b>7 770,0</b>	8 126,0	(4,4)
Revenue per employee	R million	<b>1,3</b>	1,0	27,5

\* EBITDA expressed as a percentage of revenue.

\*\* Profit from operations before impairment of assets, fair value adjustments, net finance costs, and taxation expressed as a percentage of revenue.

\*\*\* Profit from operations before impairment of assets, fair value adjustments, net finance costs, and taxation expressed as a percentage of average total assets excluding capital work in progress.

\*\*\*\* Revenue divided by average total assets excluding capital work in progress.

^ Actual capital expenditure (replacement + expansion) excluding borrowing costs.

# PERFORMANCE COMMENTARY

During the year under review, TE recorded revenue of R9,8 billion compared to R8,0 billion in the 2023/24FY. This represents a 22,0% (R1,8 billion) year-on-year increase in revenue. TE achieved an 18% (R1,4 billion) year-on-year increase in internal revenue, driven by a R1,3 billion rise in TFR related revenue and a R115 million boost in TPT/TNPA related revenue. External revenue also soared, with a 164% year-on-year increase. These gains were achieved despite a challenging global economic environment that put significant pressure on consumers and producers.

TE achieved a 0,4% (R45 million) year-on-year decrease in net operating costs, despite a 5,3% increase in inflation. Consequently, an EBITDA loss of R200 million was recorded against the previous year EBITDA loss of R2,0 billion.

## Looking ahead

TE is dedicated to optimising the utilisation of existing capabilities to improve financial sustainability by securing profitable external contracts and aligning resources, infrastructure, and personnel to meet customer demands. The division will expand from the traditional lines focused on coaches, wagons, and locomotives to include maritime and manufacture of products for external customers to enhance cash preservation and manage costs. Reduction of absenteeism and overtime costs will continue to be prioritised. Supply chain management initiatives will continue to be implemented to lower expenditure, particularly through contract price negotiations with suppliers and improving customer collaboration to increase critical material availability.

## OPERATIONAL PERFORMANCE

The corridors that contributed significantly to the targets not being met as a result of train delays, volumes loss, and train cancellations were the North, Northeast, Ore, and Cape Corridors.

### NORTH CORRIDOR

The lack of Original Equipment Manufacturer (OEM) support on the new fleets has negatively impacted the corridor. This has resulted in delays/deferrals in planned maintenance and change-out programmes which impacted the reliability of locomotives. There have been numerous locomotive start-up failures due to the delayed replacement of batteries and premature failure of compressors. A collaborative initiative by both TFR customers and Transnet has assisted in reducing this constraint by procuring batteries and compressors through alternative processes and suppliers. Pantograph hook-ups were another contributing factor - due to the alternative supply of pantographs the pantograph settings had to be modified to cater for the revised conditions. Coupled with reinforcing inspections and installation of new inspection towers, this failure has been successfully mitigated.

### ORE CORRIDOR

The corridor experienced capacity shortages in terms of technicians, diesel and electric fitters, examiners and repairers which impacted the supply of D43 Class locomotives on the corridor. Technical staff were temporarily redeployed to address the staff shortage, while recruitment efforts for more skilled resources are underway. Wagon availability also contributed to the poor performance due to the theft of earth cables on the wagons. Initiatives are in progress to reduce earth cable shortages including manufacturing cables internally as well as redesigning them with theft-resistant materials.

### NORTHEAST CORRIDOR

The D44 Class locomotives on the corridor were significantly affected by the early failure of fuel pumps, resulting in numerous unplanned replacements. Material deliveries from the OEM is currently being expedited to address the current stalled locomotives whilst the engineering team works on redesigning the defective component as well as identifying additional sources of material supply.

### CAPE CORRIDOR

The Cape Corridor was impacted by panto failures on the 23E Class locomotives. The environmental conditions in the Cape, particularly salt from seawater, is affecting the insulators and roof busbars on the pantographs. The interim solution involves cleaning salt off these components as soon as it is detected to prevent high-voltage arcing, whilst a more permanent solution is being investigated.

## Looking ahead

The goal moving forward is to improve rolling stock reliability and availability by securing long-term OEM support through entering into Material and Reliable Support Agreements (MRSA) with OEMs and seeking alternative OEMs where required. This will assist in ensuring a reliable and adequate supply of spare parts and components for the respective locomotive fleets. The workforce capacity shortages are being addressed by recruiting skilled resources for the key corridors. This strategy will enhance current operations and guarantee swift fault resolution as well as support continuous train operations.

## CAPACITY CREATION AND MAINTENANCE

In the 2023/24FY, TE was allocated a Capex budget of R192 million and spent R58 million due to governance challenges, supply chain delays and capacity constraints that resulted in delayed project execution. The projects that were prioritised for the year related to sustaining revenue and addressing compliance and safety matters.

## Looking ahead

In the 2024/25FY, TE plans to invest R142 million in the following critical projects:

- Replacement of equipment destroyed by the KZN floods of 2022;
- Replacement of obsolete equipment and tools; and
- Establishment of the maritime workshop and the acquisition of associated tools.

These projects will bring greater operational efficiencies, increase TE's production tempo, provide greater customer value and generate new revenue streams.





PERFORMANCE COMMENTARY CONTINUED

## SUSTAINABLE DEVELOPMENTAL OUTCOMES

TE's contribution towards sustainable development outcomes focused on employment preservation, gender equity and skills development.

**HUMAN CAPITAL  
(EMPLOYMENT AND TRANSFORMATION)**

- TE achieved a permanent employee headcount of **7 770** against a target of 7 281.
- Black employees represented **87,8%** against a targeted 92%.
- Female employees represented **27,9%** against a targeted 35%.
- People living with disabilities represented **1,7%** against a targeted 3%.

**SKILLS DEVELOPMENT**

- Training spent, as a percentage of labour costs was **4,8%** which exceeded the target of 2,5%.
- Artisan (apprentices) trainees met the target of **200**.
- Engineering trainees were **16** against a target of 17.
- Technician trainees met the target of **9**.
- Sector-specific training was **2 212** which exceeded the target of 250.
- Employees trained (Annual Training Plan – IDP) were **4 532** which exceeded the target of 2 546.

**REGIONAL INTEGRATION**

- Recorded cross-border revenue was **R261 million** against the budget of R265 million for the 2023/24FY which is an increase from R106 million in the prior year. The year-on-year increase is due to TE landing more orders for the refurbishment and maintenance of wagons and locomotives from cross-border customers.

**INDUSTRIAL CAPABILITY BUILDING**

The R&D budget for the 2023/24FY was R90 million with a recorded expenditure of R58 million, falling short of the target which is primarily due to the late allocation of Capex funding and the cost saving initiatives on the Opex funding.

In the past, the focus was on leveraging technological trends within the rail sector to make Transnet more customer-centric and sustainable. Now, this focus has expanded to encompass the broader transport sector. Key technological strategies include:

- **User connected systems, big data, machine learning and Internet of Things (IoT)** – Improving operational and maintenance efficiency while enhancing customer experience;
- **Alternative and sustainable energy solutions** – Reducing operational costs and supporting Transnet's environmental sustainability goals;
- **Signalling systems** – Enhancing safety and optimising operations by adapting the points machines to reduce the manual authorisations; and
- **Port technologies** – Reducing reliance on international OEMs for equipment/services and cutting the total life cycle cost.

Key products that have been developed and delivered in the financial year include:

- Development of a reliability analytics platform that analyses and displays the statistics of component failures on TFR's locomotive fleet;
- Development of an automated declaration of interest platform to improve TE's compliance to corporate governance; and
- Development of a Standard Gauge Wagon Bogie to position TE to offer Wagon products in the Standard Gauge market.

The objectives of R&D for the next financial year will include:

- Extending R&D to other operating divisions, with specific focus in the Maritime sector;
- Increasing the rate at which technology is being developed;
- Contributing to the EBITDA line by improving the quantum of products that qualify for tax incentives; and
- Developing products that are aligned to the market needs and can be commercialised to generate external revenue.

The R&D department is developing cutting-edge initiatives to be delivered in upcoming financial years, which include the following:

- **Acoustic Cracked Wheel Detector:** Mitigates the risks of main line derailments as a result of cracked wheels, which currently costs Transnet R70 million to R150 million per incident;
- **Power Conversion Systems** – Enables precise motor control and prevents wheel slippage, reducing damage to rail infrastructure and improving energy efficiency;
- **Alternative Energy Technologies** – Develops strategies for using alternative energy sources for rolling stock and port applications, including batteries, hydrogen and blended fuels;
- **Machine Vision** – Provides security, access control, and condition monitoring for rolling stock, rail infrastructure and overhead traction equipment;
- **AC Traction Motor Development** – Positions TE as an OEM for traction motors through in-house design, development, manufacturing, refurbishment and diagnostics. These motors are used in electric, diesel, fuel cell and battery-powered rolling stock, and can be adapted for road and port vehicles;
- **High Site Monitoring** – Monitors the availability of telecommunication towers, including GSM, fibre, and Ethernet systems; and
- **Alternative Energy Technologies** – Investigation and integration of alternative energy sources for rolling stock and port applications, inclusive of batteries, hydrogen and blended fuels to support the Transnet ESG strategy.

**ENVIRONMENTAL STEWARDSHIP**

TE remains committed to environmental compliance and reducing its environmental impact. Efforts focus on waste management, energy efficiency, water management, air quality monitoring, and pollution control. Various environmental initiatives are carefully implemented and monitored to achieve these goals.

**Waste management**

TE is implementing a Waste Management Improvement Plan to enhance waste management practices across the organisation. This plan has diverted some waste streams from landfills to more sustainable treatment options for recycling. Intensive engagement with service providers emphasises waste minimisation over waste disposal. The plan will be closely monitored until significant improvements are realised. Specific waste management plans have also been developed and implemented for various businesses. The Wheels Business has installed munchers and conveyors which collect wheel shavings, which are sold as scrap for recycling by external parties.

**Water management**

TE continues to monitor ground, surface, and drinking water, as well as industrial effluent to ensure compliance with municipal by-laws and discharge permits. Results mainly show high compliance within established parameters, abnormalities such as elevated levels of copper, iron, boron, oil, or grease at some depots, which are being investigated and addressed. A Water Use Licence (WUL) for the asbestos-contaminated Koedoespoort site was obtained on November 15, 2023, and compliance is being closely monitored throughout the remediation project.

**Air quality monitoring**

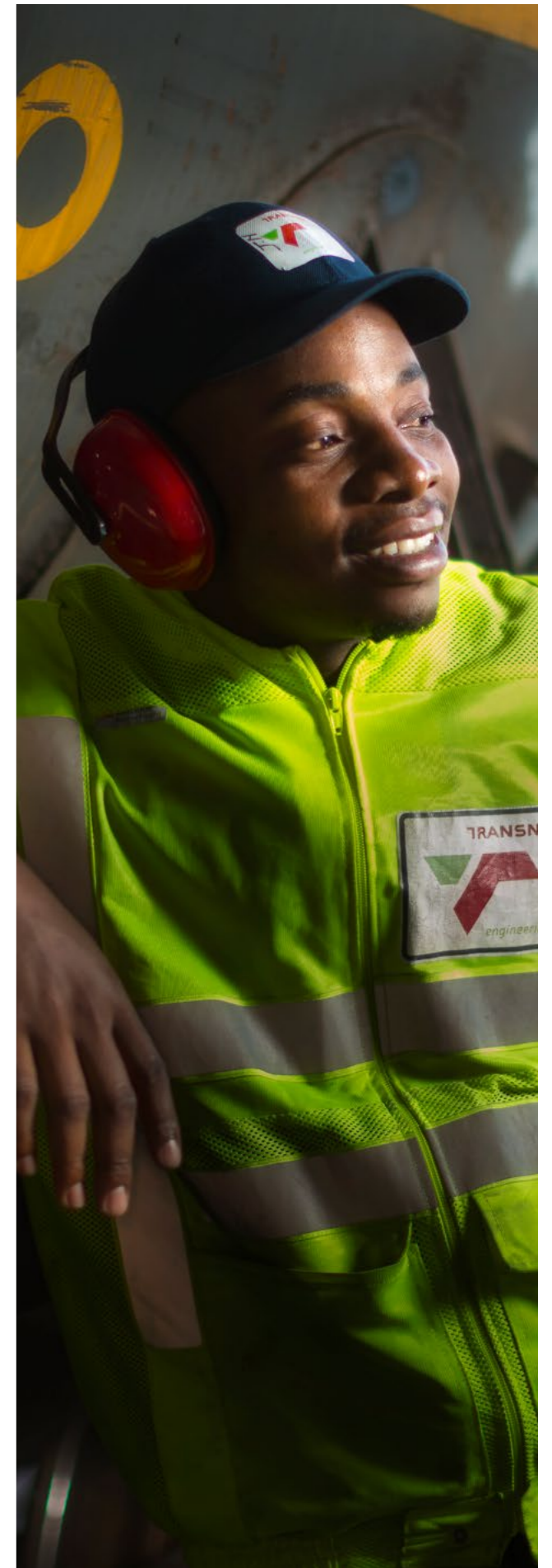
TE actively monitors air quality in the Foundry operations to comply with relevant environmental laws. On 12 February 2024, the Koedoespoort Foundry Business obtained a Provisional Atmospheric Emission Licence (PAEL). The critical conditions of this licence include air quality monitoring, the installation of an emission stack and implementing a previously submitted Mitigation Plan. Meanwhile, Bloemfontein secured an Atmospheric Emission Licence (AEL) from Mangaung Municipality in July 2023 and continues to oversee adherence to the licence conditions. The air quality monitoring activities initiated to establish a three-year baseline and shape the TE Air Quality Management Plan have now been completed across all relevant sites.

**Pollution management**

TE remains committed to managing the environmental impacts of past and present activities, and actively identifies and cleans up contaminated sites. After informing the Department of Forestry, Fisheries, and the Environment (DFFE) about polluted lands, detailed site assessments were conducted in Germiston, Saldanha, Koedoespoort and Ermelo to gauge pollution levels. Germiston received a Monitoring Order to continue observing the soil and groundwater, while Saldanha was issued with a Remediation Order and was mandated to clean up the lead-contaminated site, there has been a delay in appointing a service provider due to procurement challenges. In Koedoespoort, a remediation order was issued in 2019 to remediate contaminated sites. A contractor has been appointed, though commencement has been delayed due to contractual discussions with Supply Chain Management and Legal.

**Community development (social accountability)**

At the core of TE's corporate social investment philosophy is a commitment to enhancing the lives of vulnerable communities near its operational sites. The division understands that impactful social investment can substantially contribute to nation-building and create positive community change. TE's Corporate Social Investment (CSI) strategy is in line with the Transnet Foundation's objectives, aiming for a measurable impact through sustainable projects that empower these communities. The focus areas are health, sports, employee volunteerism, social infrastructure and education.

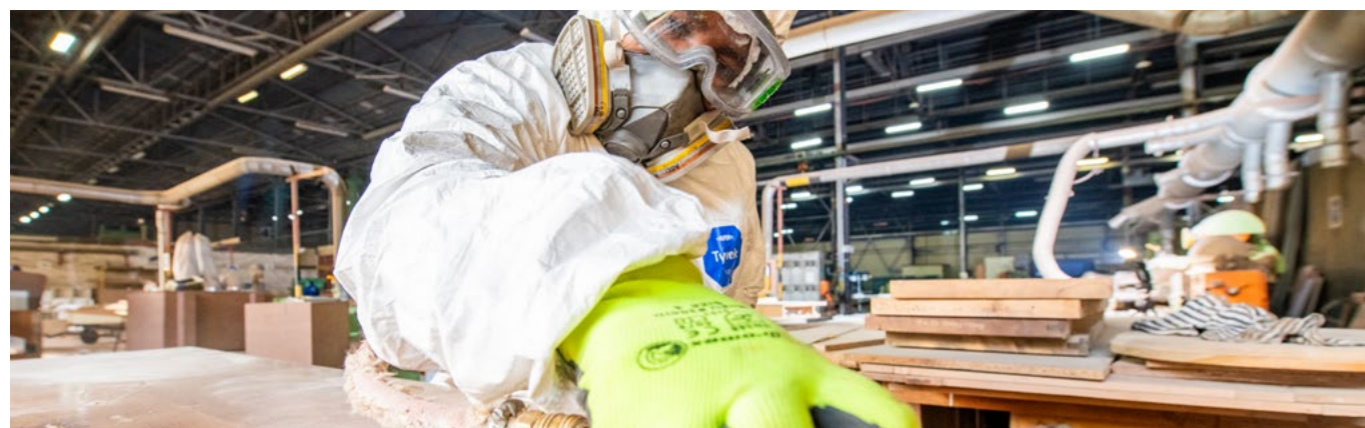




# KEY RISKS AND MITIGATING ACTIVITIES

TE went through a rigorous identification and analysis of risks and opportunities during the 2023/24FY. Below are the top five risks along with the corresponding mitigating measures and opportunities. These will be reviewed in the 2024/25FY.

Top enterprise risks	Mitigating activities
<p><b>1</b> The inability to determine the steady state of TE, resulting in inadequate planning, under-utilised resources, and high overheads.</p>	<ul style="list-style-type: none"> <li>Develop a five-year business forecast.</li> <li>Structure the Company to a steady state.</li> <li>TE Recovery Plan stream 1, scheduled for completion by the end of March 2024, is recorded as being 73% complete at the time of reporting.</li> <li>The Recovery Plan has largely focused on initiatives to support TFR tonnage where TE's resources have intensified efforts to procure all critical spares, accelerating maintenance and improving the availability of rolling stock. The team is now pushing towards the ambitious goal of reaching 1 650 available locomotives by the end of March 2024, with current availability averaging at 1 534.</li> </ul>
<p><b>2</b> Labour opposition to the transformation of Transnet may result in job losses.</p>	<ul style="list-style-type: none"> <li>Develop an extensive labour engagement plan to ensure that we build trust through transparency, thereby securing support.</li> <li>Present a well-structured business case to labour and engage timeously.</li> <li>Build change and conflict management capabilities to overcome contentious issues.</li> </ul>
<p><b>3</b> The failure to generate sufficient revenue to cover operational and maintenance costs has led to unsustainable debt levels.</p>	<ul style="list-style-type: none"> <li>Establish a steady state.</li> <li>Speed up the sale of operational scrap and identified non-core assets to generate once off revenue.</li> <li>Implement cost containment measures including a soft moratorium on recruitment, a reduction in discretionary spending, and the containment of overtime and leave provisions.</li> <li>Fast-track the appointment of the external business advisor to expedite the reconfiguration of the business model.</li> <li>Re-financing options to be explored, including the identification of unused and obsolete assets for disposal, to generate revenue and improve liquidity.</li> </ul>
<p><b>4</b> Failing to provide materials for operations at reasonable prices and on schedule results in poor customer service and profit losses.</p>	<ul style="list-style-type: none"> <li>Improve demand planning by aligning approved demand plans with budgets within the budgeting cycle, enabling Supply Chain Management (SCM) to promptly engage the market with a clear understanding of the goods and services required to minimise delays, overpricing, and potential fraud.</li> <li>Conduct market research to deepen understanding of the commodity market and demand analysis, which will help in developing and executing a procurement strategy for all critical procurement events.</li> <li>Strengthen SCM capabilities by filling all critical vacancies.</li> </ul>
<p><b>5</b> The increase in the number of safety related incidents and injuries on duty, resulting in TE exceeding its Loss Time Injury Frequency Rate tolerance level.</p>	<ul style="list-style-type: none"> <li>Implement approved safety awareness programmes, including the Visible Felt Leadership initiative led by the Executives.</li> <li>Ensure that safety incidents are reported, investigated, and resolved within 30 days to improve safety management and accountability.</li> <li>Explore potential technological solutions to increase employee engagement and the responsiveness and agility of safety management.</li> <li>Implement the Transnet 10-point safety strategy.</li> </ul>



# OPPORTUNITIES

- Establish a rolling stock leasing company offering flexible financial models to broaden the customer base by reducing upfront costs.
- Work closely with suppliers to enhance the supply chain efficiency and shorten lead times for acquiring crucial materials and components.
- Tap into new bulk commodity mines in Africa by providing customised rolling stock solutions tailored to mining companies' needs.
- Adapt offerings and maintenance services for mining firms that procure their own rolling stock, aligning with market trends.
- Capitalise on the growing demand for rolling stock overhauls, upgrades, and leasing in Africa to expand its service portfolio and establish long-term client partnerships.
- Position TE as a comprehensive solution provider with turnkey products and services for locomotives, wagons and maintenance, simplifying client operations in the rail sector.
- Continuously improving technical skills in manufacturing, maintenance, and port equipment services to uphold high-quality service delivery.
- Form strategic partnerships to access broader markets, resources, innovative technologies, and driving growth and diversification.
- Seek new revenue opportunities and synergies by extending TE's services within Transnet and adjacent industries in South Africa.
- Utilise TE's roles as maintainer, customer to OEMs, and an OEM to diversify revenue streams and strengthen its market position.
- Foster collaborations between state-owned companies to leverage complementary strengths, enhancing business activities and driving economic growth.
- Embrace rail sector reforms that permit third-party access and the establishment of new rail services, opening new revenue avenues, broadening market reach and service diversity.
- Link R&D with commercial products to maximise the benefits of innovation initiatives.







# ACRONYMS

AEL	Atmospheric Emission Licence
CSI	Corporate Social Investment
DFFE	Department of Forestry, Fisheries, and the Environment
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
EPMO	Enterprise Project Management Office
EXCO	Executive Committee
GO	General Overhaul
IoT	Internet of Things
KPI	Key Performance Indicators
MOP	Major Operations Programmes
OEM	Original equipment manufacturer
PAEL	Provisional Atmospheric Emission Licence
R&D	Research and development
RM	Rotating Machine
ROS	Rail Operations Services
RSR	Rail Safety Regulator
SCM	Supply Chain Management
SHE	Safety, Health, and Environment
TE	Transnet Engineering
TFR	Transnet Freight Rail
TNPA	Transnet National Ports Authority
TPT	Transnet Port Terminals
WUL	Water Use Licence

