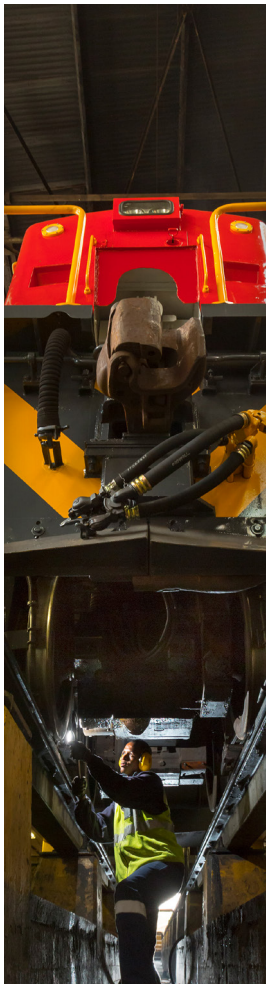
TRANSNET

TRANSNET ENGINEERING 2020



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Highlights

Revenue increased **12,88%** from **R10,5 billion** to **R11,9 billion** in 2020.

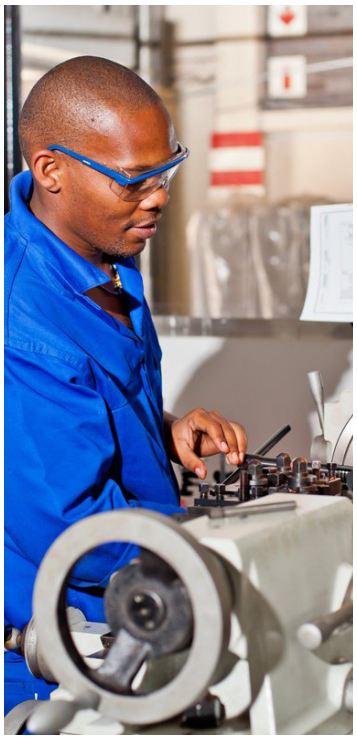
EBITDA increased **209%** from a loss of **R737 million** to a profit of **R805 million** in 2020.

Transnet Engineering's performance against the Shareholder's Compact targets are summarised below:

Key performance indicator	Target 2020	**Actual 2020**
R&D spend (R million)	250	**236**
Number of wagons manufactured	450	**865**
Number of locomotives manufactured	45	**41**

Actual train performance based on reliability and efficiency were well within set targets as follows:

Key performance indicator	Target 2020 %	**Actual 2020 %**
Volume lost due to traction	7,0	**4,9**
Train delays due to traction	40	**22**
Train cancellations	6,0	**4,1**



Business overview

Transnet Engineering (TE or Engineering), an Operating Division of Transnet SOC Ltd, is an advanced manufacturing division of Transnet, with a rich and proud heritage spanning more than 150 years. Using long-refined manufacturing techniques, TE's solutions – underpinned by a strong innovation culture, industry expertise and highly skilled personnel – ensure that customers deliver goods and services with greater speed and efficiency.

Over time, TE has established extensive core capabilities for research, design, testing, manufacturing, remanufacturing, assembly and maintenance of railway rolling stock including locomotives, freight wagons, passenger coaches and port equipment. To this end, TE has positioned itself as the first African independent original equipment manufacturer (OEM) for wagons.

With about 10 000 employees countrywide, 143 depots and six main factories, TE is ideally positioned to serve its key customers locally and globally. TE's vision is to be the preferred brand in rail and related engineering solutions in Africa and across the world. This entails:

- Becoming a world-class OEM of rolling stock and logistics equipment;
- 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.

Engineering's core capabilities position it as a key anchor to Transnet Freight Rail in its pursuit of operational excellence and volume growth and also to Transnet to support the organisation in achieving its mandate of lowering the cost of doing business in South Africa. In addition, delivering on these core capabilities positions TE as a leader in providing rolling stock, port equipment and related services to the growing logistics market in Africa.

The strategically positioned maintenance depots along the key corridors of Transnet Freight Rail's operations enable TE to focus on improving operational efficiencies. This supports Engineering's maintenance approach to avail reliable rolling stock, therefore minimising train delays, cancellations and loss of volumes. With the capacity to maintain approximately 70 000 wagons and 2 500 locomotives annually, TE has established a solid base for a maintenance philosophy that is comparable to global standards. The manufacturing and overhaul activities across its six main plants are geared to provide local and African railway freight operations with additional capacity through new and remanufactured locomotives, coaches and freight wagons. TE has the capacity to manufacture 45 new locomotives, 4 500 new wagons and 100 new passenger coaches per annum.

TE continues to grow its footprint in the African market and beyond. These new areas in Africa are attractive growth markets for the division due to their increased investments in rail. True to its aspirations of becoming the fully-fledged African OEM, TE has successfully researched, designed, manufactured and tested a new purpose-built locomotive, the TransAfrica Locomotive (TAL) . This locomotive was successfully launched in April 2014, attracting impressive commercial interest from local and continental rail players. After successfully completing the dynamic testing and obtaining all rail safety approvals, TAL was subjected to an in-service testing in November 2018 at Pyramid South in Tshwane, Gauteng. In order to gear up for the market, TE is revising its sales strategy and plan for a robust approach that will maximise the opportunities in the market.

In response to the modern OEM approach, TE will continue to develop and strengthen partnerships with other OEMs to enhance its existing skills, capabilities and expertise towards higher value products and solutions. TE aims to deliver high volumes with standardised base offerings that can accommodate customisation. The division strives to strengthen its R&D activities to ensure that it has cutting-edge technologies and capabilities to deliver world-class products and services. Various interventions are being explored to enhance its service offering in this chosen market segment as well as to other adjacent markets that can be serviced with similar innovations.

Internally, Transnet Engineering continues to focus on improving its operational efficiencies to maintain relevant quality standards such as the International Organisation for Standardisation (ISO) and the European Standards (EN). The revitalisation of the continuous improvement approach will be a cornerstone to achieving and maintaining the desired operational standards. TE advocates for a safe working environment in line with Transnet's requirements. Automation of operational processes is key to integration and a seamless service offering to customers. The Operating Division will continue to endeavour to place customer needs at the centre of its business activities by ensuring good quality products, timely delivery and continuous feedback.

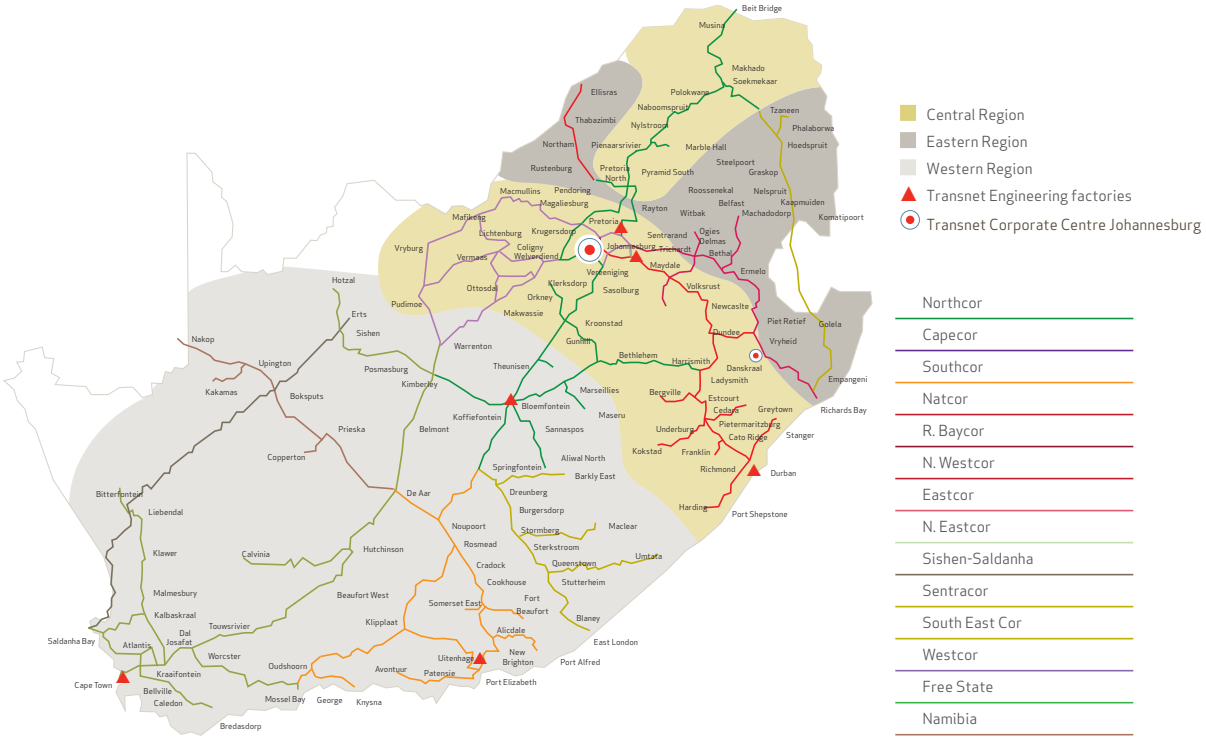
The capability of the workforce enables TE to offer a differentiated value proposition in Africa. The division therefore invests in developing and retaining the best talent that can be versatile in meeting future needs. Development programmes that focus on TE's offerings are implemented and monitored closely.

Where we operate

Engineering 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, Uitenhage, Durban, Bloemfontein, Johannesburg and Pretoria.

These plants serve as regional centres for their satellite depots and provide them with support services. There are 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

Transnet Engineering currently complies with approximately 70 legislations as well as various regulations and supervisory requirements. These 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.

Operational performance

Core initiatives

- Continue to extend its maintenance services to Transnet's other Operating Divisions to ensure that they leverage the available technical knowledge embedded in Engineering
- Expand its customer base for maintenance and services to increase revenue streams both locally and in the rest of Africa by marketing its maintenance capability and forging closer collaboration with Transnet International Holdings
- Run efficient operations, introducing stringent cost-control measures and creating more value for customers within the manufacturing and maintenance operations
- Leverage on its R&D capabilities and focus on partnerships to enhance its product offerings
- Commercialising the TAL remains a key focus for Engineering to capture its intended market

Overview of key performance indicators

Key performance area and indicator	Unit of measure	2017/18 Actual	2018/19 Actual	2019/20 Target	**2019/20 Actual**	2020/21 Target
Financial sustainability						
EBITDA margin	%	2,7	(7,0)	3,3	**6,8**	1,5
Operating profit margin	%	(1,3)	(11,3)	(0,6)	**(1,4)**	(4,7)
Gearing	%	88,4	103,5	104,8	**112,1**	120,3
Net debt to EBITDA	times	45,9	(20,1)	26,4	**19,7**	100,0
Return on total average assets	%	(0,9)	(6,5)	(0,5)	**(1,0)**	(3,0)
Asset turnover	times	0,7	0,57	0,9	**0,7**	0,7
Cash interest cover	times	(3,6)	0,80	1,0	**(0,5)**	0,6
Total revenue	R million	11 250	10 524	12 973	**11 879**	10 997
– External	R million	2 467	1 657	1 754	**875**	331
– Internal	R million	8 783	8 867	11 220	**11 004**	10 646
Capacity creation and maintenance						
Capital expenditure	R million	273	301	510	**306**	575
Planned maintenance	R million	223	199	198	**183**	251
Operational excellence						
Train cancellations due to traction						
General freight business	%	3,11	3,17	≤ 6,0	**3,8**	≤ 6,0
Export coal	%	8,22	5,7	≤ 6,0	**5,2**	≤ 6,0
Export iron ore	%	1,45	1,9	≤ 6,0	**2,3**	≤ 6,0
Net volume lost due to traction						
General freight business	%	3,12	4,1	≤ 6,6	**4,0**	≤ 6,6
Export coal	%	14,82	11,7	≤ 6,6	**9,3**	≤ 6,6
Export iron ore	%	5,46	1,3	≤ 6,6	**3,5**	≤ 6,6
Traction delays						
General freight business	%	5,07	16,6	≤ 36	**20,4**	≤ 36
Export coal	%	23,47	41,5	≤ 36	**22,6**	≤ 36
Export iron ore	%	8,79	17,5	≤ 36	**21,35**	≤ 36
Human capital						
Employee turnover	%	8,5	5	6	**4,1**	6
Employee headcount	permanent	10 838	10 370	10 786	**9 851**	9 737
Revenue per employee	R million	0,96	1,01	1,2	**1,2**	1,1
Transformation						
Total blacks	%	80,8	81,7	90,0	**82,4**	91,0
Total females	%	23,0	23,6	35,0	**24,4**	45,3
Total people with disabilities	%	1,6	1,9	3,3	**2,0**	3,3
Skills development						
Apprentice trainees	headcount	200	223	200	**246**	200
Technician trainees	headcount	87	83	30	**68**	30
Engineering undergraduate trainees	headcount	12	28	20	**20**	20
Sector specific	headcount	570	279	250	**260**	250
Training spend	% of personnel cost	2,60	2,39	2,50	**2,52**	3,50
Risk, safety and health						
Cost of risk	% of revenue	1,05	2,4	4,5	**1,7**	4,4
DIFR	rate	0,66	0,66	0,69	**0,82**	0,72
Regional integration						
Africa sales revenue	R million	2 100	166	254	**363**	104
Industrial capability building						
R&D costs	R million	147	275	304	**236**	236

Financial performance review

Salient features		Year ended 31 March 2020 R million	Year ended 31 March 2019 R million	% change
Revenue		**11 879**	10 524	12,9
– Internal		**11 004**	8 867	24,1
– External		**875**	1 657	(47,2)
Operating expenses		**11 074**	11 261	(1,7)
– Energy costs		**224**	217	3,2
– Maintenance		**183**	199	(8,0)
– Materials		**4 098**	4 241	(3,4)
– Personnel costs		**5 705**	5 598	1,9
– Other		**864**	1 006	(14,1)
Profit from operations before depreciation, derecognition, amortisation and items listed below (EBITDA)		**804,39**	(737)	(209,2)
Depreciation, derecognition and amortisation		**(975)**	(450)	116,8
Profit from operations before items listed below		**(170)**	(1 186)	(85,7)
Impairments and fair value adjustments		**(284)**	(158)	79,7
Net finance costs		**(1 391)**	(1 085)	28,2
Profit before taxation		**(1 846)**	(2 431)	(24,0)
Taxation		**607**	393	54,5
Profit after taxation		**(1 239)**	(2 037)	(39,2)
Total assets (excluding CWIP)		**17 702**	18 178	(2,6)
Profitability measures				
EBITDA margin[1]	%	**6,8**	(7,0)	(13,8)
Operating margin[2]	%	**(1,4)**	(11,3)	(9,9)
Return on total average assets (excluding CWIP)[3]	%	**(1,0)**	(6,5)	(5,5)
Asset turnover (excluding CWIP)[4]	times	**0,66**	0,57	15,8
Capital investments[5]	R million	**306**	301	(1,7)
Employees				
Permanent employees	number	**9 851**	10 370	(5,0)
Revenue per employee	R million	**1,21**	1,01	19,8

[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

Transnet Engineering's total revenue for the year increased by 13% to R11,9 billion (2019: R10,5 billion). Internal revenue (about 99% from Freight Rail) increased to R11,0 billion (2019: R8,9 billion) while external revenue decreased by 47,28% to R875 million (2019: R1,7 billion). Stringent cost-control strategies resulted in a marginal decrease of 1,7% in operating costs to R11,1 billion (2019: R11,3 billion). These cost-control efforts increased EBIDTA to R805 million (2019: R737 million loss). TE recorded a negative return on invested capital (return on total average assets) during 2020 of -1,0% (2019: -6,5%).

Looking ahead

- Engineering plans to maximise its external revenue by:
  - Commercialising key projects emanating from the division's R&D capabilities;
  - Identifying and reviewing opportunities to diversify to other manufacturing activities which are not entirely within rail; and
  - Applying invigorated customer-centric approaches to meet and exceed customers' expectations.
- Engineering will continue to focus on cost-control measures that will benefit the operations.

Operational performance

Operational efficiency and productivity

Train cancellations due to traction across all lines were well within the target of 6% (GFB: 3,8%; export coal: 5,2%; and export iron ore: 2,3%).

The net volumes lost due to traction for GFB and export iron ore were well within the target of 6,6% (GFB: 4,0% and export iron ore: 3,5%). Export coal was 9,3% against the target of 6,6%.

Traction delays were also within target, and Engineering will continue its efforts to reduce these delays even further. While Engineering 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 increase its efforts towards operational efficiencies that will ensure on-time delivery of quality products and services to customers, improve throughput and enhance customer satisfaction.
- TE will continue to expand its customer base for maintenance and services and increase its revenue streams.
- TE will use relevant technology to offer improved maintenance and services to its customers.

Capacity creation and maintenance

Capital investment of R306 million for the year was 1,66% lower than the prior year (2019: R301 million).

Looking ahead

Engineering aims to execute a balanced portfolio of projects that cover R&D initiatives, support revenue generation in Africa and position the Operating Division for entry into new markets. TE also plans 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 will be used 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.

Sustainable developmental outcomes

Human capital (employment and transformation)

- Engineering achieved a reduction of permanent employee headcount to 9 851 against the target of 10 786.
- Black employees represented 82,4 % of the total employee base (target: 90%).
- Female employees represented 24,4% of the total employee base (target: 35%).
- People with disabilities represented 2,0% of the total employee base (target: 3,3%).

Skills development

- **Training spend as a percentage of labour costs:** 2,52% was spent against the 2,5% target.
- **Artisan (apprentices) trainees:** 246 apprentices were recruited (target: 200).
- **Engineering trainees:** In total, 20 full-time bursaries were issued, meeting the target of 20.
- **Technician trainees:** A total of 68 apprentices (phase 1 and phase 2 students) were recruited (target: 30).
- **Sector-specific training:** 260 employees were trained (target: 250).
- **Employees trained against the Industrial Development Plan:** 4 799 employees were trained against the target of 6 720.

Regional integration

TE achieved Africa sales revenue of R363 million (2019: R166 million) against the target of R254 million. This 119% improvement was mainly due to a higher demand for wagons combined with accelerated marketing initiatives in the region. Wagons contributed over 98% of cross-border revenue during the year under review.

Industrial capability building

R&D expenditure of R236 million (2019: R275 million) was below the operational target of R304 million for the financial year.

Environmental stewardship

Engineering is committed to ensuring environmental compliance and minimising adverse impacts where it operates. This is facilitated by implementing and monitoring various environmental initiatives including waste management, energy efficiency, water management and pollution management.

Waste management

TE has started implementing its Waste Management Improvement Plan, with the primary objective being to improve waste management practices across the organisation. This will reduce the amount of waste that goes to landfill, which will ultimately reduce waste management costs. The implementation of this plan has resulted in some waste streams being diverted away from landfill and going through environmentally friendly treatment options like reuse and recycling. In turn, this has translated into lower waste management costs. The implementation will continue until significant change is 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 2,5% improvement in electricity savings and 29% improvement in fuel savings during the year under review. The improvement in electricity savings was a result of less operational activities in three of the six centres, namely Uitenhage, Salt River and Germiston. Higher energy consumption in Koedoespoort, Bloemfontein and Durban was due to high electricity-consuming machinery in the respective plants coupled with high production schedules. Fuel savings are attributed to a reduction in mileage covered by the in-service fleet.
- Opportunities for further energy savings are in the planning stages. Initiatives include the installation of a solar PV system in Kilnerpark and Uitenhage. Other initiatives include the replacement of the current heating, ventilation, air conditioning and lighting systems with energy-efficient systems.

Water management

- Water audits and assessments were completed for the Uitenhage (UTH), Bloemfontein (BFX) and Salt River (SRX) regions. The findings report raised concerns on the condition of the water reticulation infrastructure; this was communicated to the relevant department for consideration.
- In addition, ground water monitoring was completed with the aim of confirming the level of contamination within the identified sites. This detected major pollution issues including acid contamination at Germiston Centre and hydrocarbon contamination at Swartkops. These pollution issues will be attended to during the 2020/21 financial year.
- A suitable service provider was appointed to conduct monthly effluent monitoring and ad hoc portable water sampling to ensure compliance with the local bylaws and effluent monitoring permits.

Pollution management

- In an effort to clean up and remediate asbestos contaminated sites, a service provider was appointed to conclude the feasibility assessment report, outlining different remediation options for each site in Koedoespoort. This report was submitted to the Department of Environment, Forestry and Fisheries (DEFF) in November 2019. The DEFF issued the remediation order on 27 January 2020. The remediation activities will commence during the new financial year and will be executed in phases, starting with Site 5, which is highly contaminated.

Community development (social accountability)

TE focuses its resources on the following areas to ensure maximum impact of its socio-economic development interventions:

- Education
- Socio-economic infrastructure development
- Employee volunteerism
- Sports
- Health

Key risks and mitigating activities

The overall risk architecture segregates risk into strategic, tactical and operational levels. The top risks in the table below were identified during the year under review with appropriate mitigating plans:

	Identified risks	Mitigating plans
1	**Operations (manufacturing)** Limited profitability of the manufacturing business	• Implemented monthly mitigation plans to monitor the risk • Continuous reskilling and upskilling of employees in line with the flexible workforce project
2	**Operational efficiency and productivity risk** Unprofitable execution of existing order book due to procurement regime	• Reviewed the procurement regime and timelines to ensure timeous availability of material and spares • Ongoing engagements with the regulatory bodies to prevent the adverse impact
3	**Pricing and competitiveness** Uncompetitiveness of TE as a result of local content	• Reviewed TE's pricing approach to ensure that it remains competitive • Collaborated with relevant stakeholders to source products locally • Implemented initiatives aimed at surveying and introducing new products into the local and international markets

Opportunities

- Intensifying efforts on cross-border sales to enhance revenue streams
- Commercialisation of already developed innovative products such as port equipment and locomotive condition monitoring systems
- Further diversification of maintenance services streams, such as rail maintenance, will offer sustainable growth in the near future
- Employee safety and security measures will be further reinvigorated through various interventions, including awareness campaigns

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
R&D	Research and development
SOC	State-owned company
TAL	TransAfrica Locomotive
TE	Transnet Engineering