Strategy and resource allocation

Strategic planning

Transnet’s strategic planning framework drives capacity planning at five levels, each with its unique context and planning requirements. Overall, planning is aligned across the different levels and geared towards the same outcomes.

While each level addresses capacity planning differently, efforts are fundamentally aligned and geared towards the same objectives.

The Company's Long-term Planning Framework is a critical link between national and provincial masterplans and policy, and the Transnet 4.0 Strategy.

The frameworks informing Transnet’s strategic planning and goal setting are outlined in Figure 4.

At each level, the Company ensures appropriate resourcing that is both aligned with targets, and able to adapt to changing market conditions and other external impacts.

"We see ourselves as a critical player in enabling the bold infrastructure goals that have been set for the African continent."

Mr Thamsanga Jiyane
Chief Officer: Advanced Manufacturing
Transnet long-term planning principles

Provide capacity in line with validated demand to enable and promote economic growth in South Africa and in the region

Adopt sustainability principles as part of development plans, including improved energy efficiency and reducing carbon emissions

Integrate rail, port and pipeline planning within Transnet

Pursue alignment with national road and electricity supply planning

Assume that operational efficiency is optimised first, then consider infrastructure-based capacity solutions

Target rail-suitable freight to shift from road to rail

Benchmark internationally against world-class handling services, new technologies and best practices

Plan to improve South Africa’s global competitiveness by reducing the total cost of freight transport and logistics

Identify opportunities in Africa and leverage the economies of scale in global trade

Provide responsive infrastructure that meets South Africa’s economic needs in line with the New Growth Path and the National Development Plan

United Nations Sustainable Developmental Goals

1. No poverty
2. Zero hunger
3. Good health and wellbeing
4. Quality education
5. Gender equality
6. Peace and justice
7. Responsible consumption and production
8. Affordable and clean energy
9. Industry, innovation and infrastructure
10. Reduced inequality
11. Sustainable cities and communities
12. Climate action
13. Life on land
14. Life below water
15. Peace, justice and strong institutions

Transnet strategic fundamentals

1. Expand the scope of the manufacturing business
2. Geographic expansion Transnet International Holdings (TIH)
3. Product and service innovation

Strategic fundamentals
Interconnected elements of the strategy

**Strategy threats**

- Diversify revenue sources to reduce the risk exposure on commodity demand and associated volatility.
- Manage liquidity and raise cost-effective funding.
- Stringent cost-management and cost optimisation result in the core of Transnet’s operations.
- Efficient management of working capital.
- Generate a return on assets commensurate with capital investment needs.
- Maintain key financial ratios.
- Optimum capital portfolio investment plan that responds to changing environment.

**Agile**

- Build a strong profile by networking with rating agencies, regulators, investors, and other key stakeholders.
- Develop highly competent finance personnel and well-rounded business leaders.

**Admired**

- Deliver cost-effective solutions - benchmark against the market. To deliver a return on investment.
- Meet and exceed customer expectations by delivering projects within agreed commitments.
- Create customer value through specialised advisory services, and capital and non-capital solutions.

**Digital**

- Place ‘digital innovation’ on the Finance Executive Committee’s agenda.
- Use leading data analytics to optimise financial decision-making.

**United**

- Align financial and performance information at Operating Divisional levels for efficient decision-making.
- Collaborate with stakeholders and promote customer-centric delivery to co-create optimal solutions.

**Commercial outcomes**

- Continued financial stability and strength.
- Cost-effective funding.
- Collaborative private-sector participation.

**Transnet 4.0 specific growth imperatives**

- New products and services.
- New revenue streams.

**Financial sustainability**

- Optimise the capital portfolio and create a flexible project resourcing and delivery model to promote capital efficiency.
- Create critical logistics infrastructure and capacity ahead of validated demand for cargo transport and handling services.
- Investigate appropriate routing options for end-to-end logistics delivery.
- Continually enhance the Project Lifecycle Programme methodology.
- Mitigate programme and project risks through:
  - Transnet’s Integrated Assurance Plan.

**Capacity creation and maintenance**

- Operate effective supply chain and transportation system.
- Maintain core competencies.
- Exploit emerging technology.

**Operational excellence**

- Build operational readiness and infrastructure reliability by ensuring right skills at the right time, appropriate digital innovation and strong governance capability.
- Provide ‘Project Factory’ support for large and complex programmes.

**Market segment competitiveness**

- Promote an integrated regional infrastructure network that optimises the value chain at market network and industry levels.
- Pursue new business opportunities in existing and new markets by developing new product and logistics solutions.
- Reduce the total cost of logistics as a percentage of transportable GDP.
- Promote end-to-end logistics solutions by partnering with private-sector logistics providers.

**Sustainable Development Outcomes**

- Employment:
  - Measurable direct and indirect employment.
- Skills development:
  - Shared economy.
  - Productive capacity of people within and outside the Company.
- Industrial capability building:
  - Industrial development.
  - For South Africa.
  - Improved competitiveness.
- Investment:
  - Leveraged.
  - Private-sector investment in the country’s freight logistics system.
- Regional integration:
  - Improved freight logistics connectivity on the continent.
- Transformation:
  - Transnet.
  - Equity.
  - Employment.
  - In the Company.
  - Black economic empowerment.
  - Within supplier entities.
- Health and safety:
  - Improved physical and mental health.
  - Safety of employees.
  - Improved physical and mental health.
  - Safety of communities.
- Community development:
  - Measurably improved economic.
  - Social, cultural and environmental.
  - Well-being of communities.
- Environmental stewardship:
  - Enhanced capacity of the natural environment.
  - To meet the resource needs of future generations.

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**Transnet’s Integrated Assurance Plan**

The Integrated Capital Projects/Programme Assurance Plan (ICP/PAF) is designed to optimise capital investment in the railway sector,合理地分配资源,并确保项目和资本投资符合市场需求。
From MDS to Transnet 4.0

As a state-owned company (SOC), Transnet must deliver on national developmental goals, as they pertain to the transport and logistics sector, ensuring that the country remains competitive at the continent and globally. During the mid-2000s, global commodity ‘super cycle’ it became apparent that South Africa’s historical underinvestment in infrastructure inhibited the country from benefiting to the fullest from this upward swing in commodity markets, constraining our overall market competitiveness. The Market Demand Strategy (MDS) was Transnet’s response to this challenge of infrastructure underinvestment, with the MDS positing to create the required long-term capacity ahead of demand by investing through short-term economic cycles.

The MDS was always intended to cater for future demand, anticipating the required capacity we would need as a country and as a business to take advantage of future commodity booms, or even just catering adequately for future economic growth. Transnet also intended that the ramp-up in capacity should happen in the shortest possible window to address the country’s immediate term capacity constraints. At the core of MDS was South Africa’s own aspirations: becoming a key thermal coal exporter, as well as an increasingly important fourth largest supplier of iron ore to China, a leading global manganese exporter, the leading logistics hub for sub-Saharan Africa, and globally, recognised benchmark for container and heavy-haul operations.

The majority share of investment was allocated to General Freight Sector, ensuring that the country remains competitive on the world market, and developments in railway operations, as well as productivity improvements and improved asset utilisation at the ports. Throughout the seven-year cycle, Transnet continuously adapted to cash flow requirements (each flow from operations versus capital investments) to ensure an affordable and realistic funding plan within approved financial parameters. The MDS’ key idea of moving rail-friendly cargo from road to rail would not only lower the cost of doing business in South Africa, through reduced logistics costs, efficiency improvements and cost of transhipments, and moving containers on road, but it would also have marketability for the environment by cutting carbon emissions, with emissions from road freight contributing up to ~90% of overall freight emissions.

However, it would be short-sighted to lock the MDS’s guiding principles into a time-based seven-year strategic cycle, given that there was no guarantee that another global commodity boom would transpire during the seven-year MDS period from 2012 to 2019. While our investment aspirations to create capacity ahead of demand materialised during the seven-year period, the anticipated commodity growth and associated volumes did not.

As a SOC it is irresponsible to continue to invest in national infrastructure when anticipated economic growth – both domestically and globally – does not materialise. This does not mean that it will never. However, the business must be agile enough to respond to what is, as much as what could be – that is, take the current low-growth path in the short term to remain financially stable, while preparing for possible future high-growth paths to remain economically sustainable.

The MDS is, and potentially always was, a long-term planning blueprint from which to create future growth, rather than simply a medium-term counter-cyclical investment strategy. Transnet has all but closed the capacity gap in freight logistics infrastructure demand and is now poised to springboard its growth and diversification aspirations. Stated differently, whereas the MDS provides us with the organisational philosophy to invest for future capacity of the business, Transnet 4.0 – our strategy platform into the 4th Industrial Revolution – identifies what type of business we need to become to take advantage of future growth. It enables us to look beyond business as usual to identify what type of products and operations we need to build, and which markets we need to enter to drive South Africa – and indeed Africa – global competitiveness in the new 4.0 digital paradigm.

Transnet 4.0 is launching off the firm foundations created by the MDS and requires a fundamental reimagining of the organisation, its operations and culture. Transnet 4.0 is well encapsulated by the mission statement “Solutions Delivered”.

MDS in review: responding to economic dynamics

The MDS is positively characterised by:

- An increase in capacity ahead of market demand through a counter-cyclical investment strategy.
- Growth in rail volumes of 18 million tons between 2012 and 2017.
- Average revenue growth rates of 7.4% per annum over the past five years.
- Maintaining gearing at <50% and cash interest cover of >3.0 times, without Government guarantees; and
- R185.6 billion in capital investment over the past six years, averaging R28.8 billion per year.


“Industry 4.0 environment invites us to familiarise ourselves with the unknown, to anticipate potential challenges to our working environment in future and to strategically capacitate ourselves.”

Mr Sipho Ngema
Group Chief Executive
On the downside, the economic growth ultimately anticipated for the MDS period did not materialise as expected, with investment requirements exceeding available funds for investment, as demonstrated in the graph below.

The period was also tainted by a credit rating downgrade of Transnet’s foreign and local currency ratings, both due to the rating action on the sovereign. As Transnet is viewed to be closely linked to the Government, the downgrades precipitated increased financing costs and a forced slowdown in capital expenditure, aligned with validated demand necessitating a need to supplement investments with capital raised through private-sector partnerships. Albeit Transnet’s financial position, liquidity and solvency have not suffered significant negative impacts, the downgrade—coupled with slow recovery in the macro-economic environment—has made the transition to Transnet 4.0 increasingly urgent.

Financially constrained environment

Adapting to the Transnet 4.0 strategic paradigm: A changing logistics landscape

Transnet has seen volatile commodity prices severely impact freight volumes and revenue in recent years. Despite demonstrating resilience to commodity market volatility, we recognise the need to pursue alternative opportunities to ensure financial sustainability. Indeed, revenue growth and profits have been erratic for many transport and logistics companies over the last 10 years, with revenue increasing but profits not matching up to the rate of revenue increases on average. Return on capital employed (ROCE) and profits are relatively low for many companies in this sector. The use of mobile technology to connect truck drivers to loads has been shown to reduce congestion and reduce distances travelled without cargo on return trips. These advances will result in lower operating costs for trucking. For Transnet, this may present an opportunity for new revenue streams through ‘asset-light’ products and services, such as volume aggregators, forwards or logistics providers for new revenue streams through ‘asset-light’ products and services, such as volume aggregators, forwards or logistics providers.

Evolving customer expectations

In addition to having major economic and technological ramifications, the emerging 4th Industrial Revolution promises a systemic transformation of civil society, production, governance structures and human identity. This new digital paradigm will be characterised by a fusion of technologies poised to disrupt almost all industries. Transportation and communication costs are likely to reduce, and logistics and global supply chains will become more effective, with the cost of trade diminishing, at a rapid rate, all of which will drive new markets and economic growth. From a commercial perspective, the customer will be at the centre of all that is conceived, designed and executed, and will inform all efforts, enabled by an ever-expanding landscape of digital technologies and applications.

Our customer surveys have shown that we are still slow to respond to their fast-changing requirements, which is a combined factor of our systems, customer support structures and our organisational culture, all of which need to undergo a fundamental transformation in the context of Transnet 4.0. We are actively leveraging technological advancements to improve operational efficiency and to develop the culture and mindset to be a beneficiary of the changes we are observing. This implies becoming a more technologically aware digital enterprise and includes:

- Exploring opportunities for customer-centric digital products and services (e.g. advanced diagnostic systems on locomotives).
- Harnessing digital capabilities to offer value-added services to our existing customer base.
- Lowering operating costs through digital enablement, project prioritisation and strategic resourcing.

Transitioning to 3PL

We have set ourselves an ambitious goal of transitioning from our current second-party logistics provider (2PL) status to becoming a third-party logistics provider (3PL) in the short to medium term, and will ultimately strive for fourth-party logistics provider (4PL) status in the long term. The 3PL model will offer end-to-end logistics solutions to customers and, while we will continue to intensify our road-rail strategy to move more road freight to rail, our 3PL service offering will extend to addressing rental freight constraints by negotiating alternative modes of transport on behalf of our key customers.

In adapting to the 4.0 industry changes in the logistics sector, Transnet is also exploring future opportunities to acquire small and niche operators in the logistics industry.

Transforming the business

Transnet’s business model, operating structure and leadership team (in place since May 2016) have been fundamentally reinvented to adapt to the new Transnet 4.0 strategic paradigm, which has three main growth areas (illustrated above):

1. Geographic expansion: Accelerate efforts to extend the company’s footprint in the fast-growing regions of Africa, the Middle East and Asia (AMEA).

2. Product and service innovation: Transform from being a business primarily focused on transport and cargo handling towards becoming a fully integrated logistics service provider, offering end-to-end solutions to key partners.

3. Becoming a digitally-driven organisation

- These growth paths will be amplified by using digital technology to drive efficiency and innovation. A core pillar of the Transnet 4.0 strategy is the digitalisation of both its internal and external-facing business processes. This necessitates the rapid incorporation of leading technologies into new products and business processes, and a profound shift in our thinking as an organisation.

- The following drivers will enable this digitalisation going forward:

  1. Operational reliability

Operational reliability

By enhancing digitalisation of our operations, we intend to optimise operational performance and reliability through technologies such as the Internet of Things, Machine Learning and Artificial Intelligence (AI). A digitalised business will drive greater cost and performance benefits, we will continue to refine our customer interactions to ensure more streamlined customer interfaces.
Transnet International Holdings (TIH) focus areas

Through Transnet 4.0 we are enacting Transnet’s regional and indeed global identity. Transnet will drive all international-focused commercial activities through its newly formed subsidiary company, TIH which has been formally incorporated in the Department of Trade and Industry's Companies and Intellectual Property Commission. An inaugural Shareholder meeting to appoint the Board was held on 27 February 2018, with the first meeting held on 13 March 2018. Transnet envisions multiple rail and pipeline projects on the continent, facilitated through TIH. Specific strategies are developed around areas of interest. The regional freight system benefits from deeper integration and enhanced connectivity. Transnet continues to participate in the New Partnership for Africa’s Development (Nepad) Business Foundation, Southern African Railways Association, Port Management Association of Eastern and Southern Africa and other regional forums.

Rail

The sector’s primary aim is to grow cross-border volumes and enable regional integration, focusing on the:

• Maputo Corridor (South Africa, Zimbabwe; Mozambique; 
  East/West Corridor (South Africa, Namibia, Botswana, 
  Lesotho) and 
  North/South Corridor (South Africa, Zimbabwe, 
  Democratic Republic of Congo, 
  Tanzania)

It is anticipated that rail operators will execute unified rail system per corridor as no boundaries exist between the countries involved. The region in cross-border volumes is the largest potential revenue driver of the Transnet International Strategy.

As economic growth in Africa continues, the need for a cost-efficient, modal shift in transportation becomes more urgent, and the demand for rolling stock and associated maintenance will increase. Engineering already operates in this space and is well positioned to meet increased demand. The capacity of off-the-shelf manufacturing facilities is easily increased by initiating additional facilities. The development of the TransAfrica Locomotive is expected to satisfy a market need at a competitive price.

The basis of Transnet’s geographic expansion for the ports sector lies in port concessions, which remain lucrative in the region. The low incidence of distressed or cancelled contracts demonstrates that this route has achieved the desired outcome. Locating Transnet in South Africa, approximately 65% of the relevant port containers are shipped through terminals operated by the private sector. While port concession opportunities are limited, Transnet is well positioned to compete in this area.

Pipeline

The discovery of new oil and gas reserves in Africa has resulted in a significant demand for new pipeline infrastructure capacity and new build project opportunities. Oil and gas commodity prices remain low and, in some instances, below project costs for laying a range of new-build pipelines. Numerous new build opportunities are targeted by the private sector. While port concession opportunities are limited, Transnet is well positioned to compete in this area.

Close to home, Transnet has a position to support the midstream infrastructure enabling the development of the gas value chain with qualified private sector operators. Partnerships to form a Natural Gas Network, a infrastructure backbone bargain offer a route forward (2021-22) the organisation will focus on leading, design, finance, build and operation of a new liquefied natural gas (LNG) import infrastructure, consisting of a regasification and storage terminal and integrated gas transmission pipelines.

Port infrastructure

We envisage new port sites along South Africa’s coast with sustainable opportunities for future port development. Ports will harness the value of leading-edge emerging digital technologies. Durban’s container capacity planning will be revised and a more conservative rate of import options will be devised for natural gas through the port system. This development will also concomitantly consider the potential port and pipeline infrastructure requirements to import and distribute gas in South Africa, including Floating Storage and Regasification Units power stations and land-based power generation.

Pipeline and gas infrastructure

Transnet will identify new pipeline, terminal and storage investment opportunities in South Africa. We envisage improved improved planning across the liquid fuel system as a result of better engagement. 

Pipeline and gas infrastructure: 

 Maintain flexibility to respond to changing technological and economic conditions 

 Respond to environmental opportunities and constraints 

 Develop regional integration 

 Port system-wide capital investment 

 Align with planning initiatives of key stakeholders

Our point of departure: long-term sustainability

Our point of departure draws from our view of long-term sustainability. As a SOC, we cannot defer on our developmental mandate. Hence, our sustainable developmental outcomes form part of the essential blueprint for our new strategic direction. This means we need to consider our local suppliers’InProgress aspirations, acknowledge the new ways in which many ‘new economy’ enterprises and youth entrepreneurs work and so they can benefit from our enterprise development programmes, involve our communities in our move to ‘digitalisation’ and consider developing the technologies and skills we will need 30 years from now.

The skills, experience and investment support that private-sector partnerships will bring to our geographic expansion strategy will also be invaluable, particularly as this is related to port concession opportunities in the region with approximately 60% of all container ships outside South Africa being routed through terminals operated by the private sector. We also need to consider Transnet’s relationship with resources and energy. A key force for innovation in Transnet 4.0 will be to explore new revenue opportunities in the energy sector and ensure our commitment to the modal shift of freight from road to rail.