With 2017 observing the fastest rate of global growth recorded since 2011¹, large parts of the emerging world and resource-rich regions have stabilised due to a continued recovery of commodity prices. Coal prices improved by almost 30.0% and, similarly, metals prices recovered by more than 20.0%. Stabilisation of commodity prices bodes well for Transnet as the transportation and handling of key commodities, such as coal, iron ore and manganese, contribute significantly to our bottom line.

However, these improvements must be viewed within the context of a series of global economic crises, negative shocks and falling commodity prices between 2008 and 2016. Transnet was not immune to these headwinds, which influenced our projections as they relate to profit and capital expenditure. Nonetheless, these challenges, the global economy appears to have entered a cyclical upswing with the International Monetary Fund (IMF) forecasting global growth of 3.9% and developing and emerging market growth of 4.9% in 2018. Contributing factors to the positive outlook is the expectation that advanced economies will grow faster in 2018 and 2019. Accommodative monetary policy in the Euro area and expansionary fiscal policy in the US are driving favourable projections for those regions. Emerging and developing economies should benefit from continued strong growth in emerging Asia and Europe, and from a modest upswing in commodity exporters after three years of weak performance².

Significantly, global growth is not expected to continue at the same pace beyond the next couple of years. The IMF notes that “while upside and downside risks to the short-term outlook are broadly balanced, risks beyond the next several quarters clearly lean to the downside”. These risks emanate, in part, from trade tensions stemming from inward-looking policies as well as geopolitical strain.

At home, national accounts data for the fourth quarter of 2017 surprised on the upside, with a sharp quarter-on-quarter expansion driven by private consumption and fixed investment. In January 2018, manufacturing output expanded for the fourth consecutive month, recording its sharpest increase since June 2016. Indeed, the IMF has forecast South African economy to grow by 1.9% in 2018, which is an improvement on the 1.3% growth rate of 2017. The country’s forecasted growth rate is still well below the sub-Saharan African region’s average of 3.4%. However, with improving business confidence after a period of political uncertainty, the growth rate is expected to keep improving beyond 2018. It still remains unclear at this stage whether the projected improvements in GDP and business confidence will provide sufficient relief from the effects of the downgrade of the sovereign credit rating of South Africa in 2017.

**Strategic considerations**

The world, including South Africa, is facing a 4th Industrial Revolution. According to the World Economic Forum (2017) this evolution follows on the digital technologies of the 3rd Industrial Revolution powered by a wide range of new breakthroughs not only in the digital realm (such as artificial intelligence) but also in the physical realm. These new automated technologies bring advanced robotics, new forms of automated vehicles, quantum computing, etc.

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“Transnet 4.0 brings with it opportunity, challenge and change. If we don’t jump in, we will be left behind.”
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Mr Gert de Beer
Chief Business Development Officer
Outlook

With the expected global recovery not materialising as anticipated during the MDS period, the Company was compelled to recalibrate and rezone its capital expenditure as per the changing market conditions, changing from investing ahead of demand to investing based on valid end demand

The 2019 financial year marks not only the conclusion of the original MDS planning horizon but also the introduction of our new Transnet 4.0 Strategy which, at its core, is Transnet’s response to the emerging 4th Industrial Revolution. This evolving paradigm is characterised by a fusion of technologies and digital applications poised to disrupt almost all industries, while transforming systems of production, governance and management at all levels of the value chain. Transnet 4.0 will use the MDS as a base to reposition Transnet for new growth and competitiveness in the fast-evolving technology-driven context of the Industrial Revolution as we continue to provide capacity ahead of demand.

Transnet expects to invest a further R103.7 billion in capital over the next five years to 2023. In 2019 we will see a shift in the balance of ‘sustaining’ and ‘expansion’ capital expenditure with the pendulum swinging towards sustaining investment. At the inception of the MDS in 2011, this split was ‘expansion’ at 58.0%, versus ‘sustaining’ at 42.0%. The capital expenditure split is now expected to shift to 34.0% and 66.0% respectively in the coming financial year, which will result in more effort being placed in maintaining and enhancing current operations.

While our primary focus remains volume growth of the core business in the long term, Transnet is also seeking new growth paths to compensate for low-growth expectations and instability in its traditional market segments. Accordingly, organic growth of the current freight transport and handling divisions will still account for the bulk of this growth as we target improved connectivity, density and capacity of an increasingly integrated port, rail and pipeline network. The accelerated development of logistics and industrial zones, contraction of intermodal terminals, will be a key component of this, providing critical infrastructure to complement and feed the network.

In tandem, we will improve operational efficiency and reliability, and innovate around new revenue streams to grow market share in both domestic and regional markets, particularly in integrated logistics, the development of logistics hubs and clusters, natural gas midstream infrastructure. manufacturing products and digital businesses. Private-sector partnerships will be a key enabler and driver of these new ventures.

Going forward, the success of Transnet 4.0 will, in great part, depend on our ability to create new revenue streams that leverage Transnet’s digital capability, expertise and platforms to deliver technology and business solutions for the African market, firstly for the regions of East Africa and the South African Development Community (SADC) region, and later extending to the greater sub-Saharan African region. Again, strategic partnerships and collaborations with sector specialists in the freight logistics environment will accelerate new business ventures as new revenue growth.

We have considered several megatrends in the transport and logistics industry sector, together with risks and opportunities.

Read more:
Transnet’s business model

Megatrends affecting the logistics sector
Figure 15

<table>
<thead>
<tr>
<th>Opportunities we are pursuing in the logistics sector</th>
<th>Rollout new value-added services to customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversification into logistics value-added services</td>
<td>Rollout new value-added services to customers</td>
</tr>
<tr>
<td>Industry consolidation</td>
<td>Transnet to partner/acquire small/ niche South African logistics players</td>
</tr>
<tr>
<td>Digitisation of operations</td>
<td>Digitised value-added services to customers and lowering operating costs</td>
</tr>
<tr>
<td>The ‘ubiquisation’ of freight</td>
<td>New Transnet business offering ‘asset light’ products and services</td>
</tr>
</tbody>
</table>

Global Industry 4.0 megatrends
Figure 16

<table>
<thead>
<tr>
<th>Connecting and computing power</th>
<th>Enabled real-time asset and service quality monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytics and intelligence</td>
<td>Optimised resource planning and predictive maintenance</td>
</tr>
<tr>
<td>Human-machine interfaces</td>
<td>Improved safety, accountability and capability building</td>
</tr>
<tr>
<td>Digital-physical transformation</td>
<td>Improved manufacturing productivity and inventory management</td>
</tr>
</tbody>
</table>

‘Moving into 4.0, a key operational issue will be visibility of performance. You have to be able to see where the hold-ups in your logistics system are and find out why at the click of a button.’
Mr Mlamuli Buthelezi  
Chief Operating Officer

Five growth clusters will drive Transnet 4.0, with the potential for significantly increasing revenue over the next five years:
Figure 17

<table>
<thead>
<tr>
<th>Freight solutions</th>
<th>World-class, customer-centric end-to-end freight solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Added capabilities and partnerships to enhance general freight positions (GFP)</td>
</tr>
<tr>
<td></td>
<td>Africa dimension – port and rail concessions</td>
</tr>
<tr>
<td></td>
<td>Foster regional trade</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced manufacturing</th>
<th>Africa’s own rail, ports and transport OEM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Customer-focused packaged, asset lifecycle solutions</td>
</tr>
<tr>
<td></td>
<td>(design, finance, building, maintain, replace)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure and spatial solutions</th>
<th>Logistics ecosystems to enable and accelerate economic growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Port and inland hubs</td>
</tr>
<tr>
<td></td>
<td>Optimise local, national and regional freight logistics network</td>
</tr>
<tr>
<td></td>
<td>Split core and leveraged</td>
</tr>
</tbody>
</table>

As we embark on Transnet 4.0, we will need to balance our investment in traditional infrastructure, such as rail, pipeline and ports, with our investment in other revenue diversification opportunities, as well as technological innovation and digital enablement within our operations. Figure 17 outlines this perspective as we transition from the current functional portfolios of the remaining MDS horizon in the short term, towards greater focus on our advanced manufacturing business, as well as our growth aspirations through geographic expansion, new markets and digital innovation within the logistics value chain.

“Transnet 4.0 is essentially about growth and diversification, so even if a person is hardly touched by technology in their job, any efficiency and improvement that facilitates our growth and diversification is part of 4.0.”

Mr Khaya Ngema  
Group Executive Strategy
Key strategic investment focus areas for operations

1. Coal and mineral system
   - Unlock Waterberg and Manganese coal reserves for Eskom power stations, domestic industries and export markets.
2. General freight business and rolling stock
   - Potential freight volumes increasing by 13% per year by 2025.
3. Manganese
   - South Africa holds more than 75% of the world’s medium- to high-grade manganese ore reserves and is a sustainable, lucrative supply market to Europe and China.
4. Ports
   - Construction of 11 accumulator tanks and associated corridors at the Durban and Richards Bay Terminals.
5. Pipelines
   - Expansion: R43.1 billion
   - Sustaining: R36.3 billion

Operations and Specialist Units

R145.4 billion

- Freight Rail
  - R82.0 billion
- National Ports Authority
  - R26.3 billion
- Port Terminals
  - R25.8 billion
- Pipelines
  - R8.4 billion
- Property
  - R15.0 billion
- Group Capital
  - R18.0 billion
- Corporate Centre
  - R1.3 billion

End-to-end logistics

Procurement logistics

Revenue logistics

Distribution logistics

Production logistics

1. Centralised management
2. Service level management with integrated events, rectification workflow and ticketing
3. Customer self-service portals
4. Automated provisioning
5. Bandwidth reports and billing calculation

Five key functional portfolios

1. Coal and mineral system
   - Unlock Waterberg and Manganese coal reserves for Eskom power stations, domestic industries and export markets.
2. General freight business and rolling stock
3. Manganese
4. Ports
5. Pipelines

Advanced manufacturing

R3.4 billion

1. Prototyping, testing and commercialisation of rolling stock and equipment
2. New programmes that will drive the next wave of commercialised products

Five-year capital investment by commodity %

- General freight
  - R58.0 billion
  - 34.0%
- Maritime containers
  - R12.2 billion
  - 7.5%
- Break-bulk
  - R17.3 billion
  - 10.7%
- Coal
  - R10.1 billion
  - 6.3%
- Iron ore
  - R10.3 billion
  - 6.3%
- Manganese
  - R10.5 billion
  - 6.4%
- Rail products
  - R8.8 billion
  - 5.4%
- Automotive and other
  - R17.1 billion
  - 10.6%

Five-year investment portfolio R163.7 billion

Figure 18
Conclusion and medium-term planning horizon

Overall, the short-term global economic outlook is positive. We are cautiously optimistic that the South African economy is in steady recovery and that our domestic business environment is improving, further reducing the general level of liquidity in the debt markets. Transnet has identified several measures that could be implemented to mitigate a potentially constrained funding scenario. By way of example, this may include reducing capital investments in the short term by prioritising and optimising capital projects, cost-containment initiatives, operational efficiency improvements and securing diversified and new revenue streams.

Medium-term planning horizon: Transitioning to Transnet 4.0 (Critical KPIs)

<table>
<thead>
<tr>
<th>Financial sustainability</th>
<th>2017</th>
<th>2018</th>
<th>2019 Short term</th>
<th>2021 Medium term</th>
<th>2023 Medium term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue (million)</td>
<td>65 478</td>
<td>72 887</td>
<td>80 048</td>
<td>101 152</td>
<td>119 375</td>
</tr>
<tr>
<td>EBITDA (million)</td>
<td>27 517</td>
<td>32 515</td>
<td>37 936</td>
<td>44 421</td>
<td>53 626</td>
</tr>
<tr>
<td>Net profit after tax (million)</td>
<td>2 785</td>
<td>4 851</td>
<td>5 916</td>
<td>8 983</td>
<td>13 395</td>
</tr>
<tr>
<td>Gearing (%)</td>
<td>44,2</td>
<td>43,4</td>
<td>43,5</td>
<td>43,0</td>
<td>40,9</td>
</tr>
<tr>
<td>Cash interest cover (times)</td>
<td>2,9</td>
<td>3,0</td>
<td>2,5</td>
<td>2,9</td>
<td>3,3</td>
</tr>
<tr>
<td>Cash flow from operations (million)</td>
<td>25 104</td>
<td>22 958</td>
<td>21 215</td>
<td>30 015</td>
<td>37 759</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capacity creation and maintenance</th>
<th>2017</th>
<th>2018</th>
<th>2019 Short term</th>
<th>2021 Medium term</th>
<th>2023 Medium term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight Rail (million)</td>
<td>15 737</td>
<td>17 599</td>
<td>16 387</td>
<td>17 851</td>
<td>14 570</td>
</tr>
<tr>
<td>National Ports Authority (million)</td>
<td>2 020</td>
<td>1 054</td>
<td>2 636</td>
<td>5 025</td>
<td>7 295</td>
</tr>
<tr>
<td>Port Terminals (million)</td>
<td>1 208</td>
<td>1 365</td>
<td>2 722</td>
<td>4 280</td>
<td>7 082</td>
</tr>
<tr>
<td>Pipelines (million)</td>
<td>1 785</td>
<td>1 544</td>
<td>1 338</td>
<td>2 941</td>
<td>3 656</td>
</tr>
<tr>
<td>Engineering/Advanced Manufacturing (million)</td>
<td>941</td>
<td>275</td>
<td>764</td>
<td>33 275</td>
<td>38 137</td>
</tr>
<tr>
<td>Overall capital investment (million)</td>
<td>21 438</td>
<td>21 781</td>
<td>25 645</td>
<td>33 275</td>
<td>38 137</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market segment competitiveness</th>
<th>2017</th>
<th>2018</th>
<th>2019 Short term</th>
<th>2021 Medium term</th>
<th>2023 Medium term</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Freight Rail</td>
<td>29,4</td>
<td>34</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Addressable Market Share (RAMS) (%)</td>
<td>24,6</td>
<td>24</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Intermodal RAMS (%)</td>
<td>22,1</td>
<td>24</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
</tbody>
</table>

Capacity creation remains a strategic fundamental for Transnet, both in terms of our own competitiveness and in contributing to wider economic growth. As a State-owned Company, Transnet will continue to play its role in creating transport infrastructure capacity as well as maintaining and improving the reliability of existing services to continue building positively towards a growing and inclusive economy.

Going forward, Transnet 4.0 aims to mitigate our exposure to ‘boom and bust’ cycles in commodity markets through diversification and product innovation and also chart new growth paths that are sensitive to the realities of an operational landscape that is modernising at an accelerated rate.