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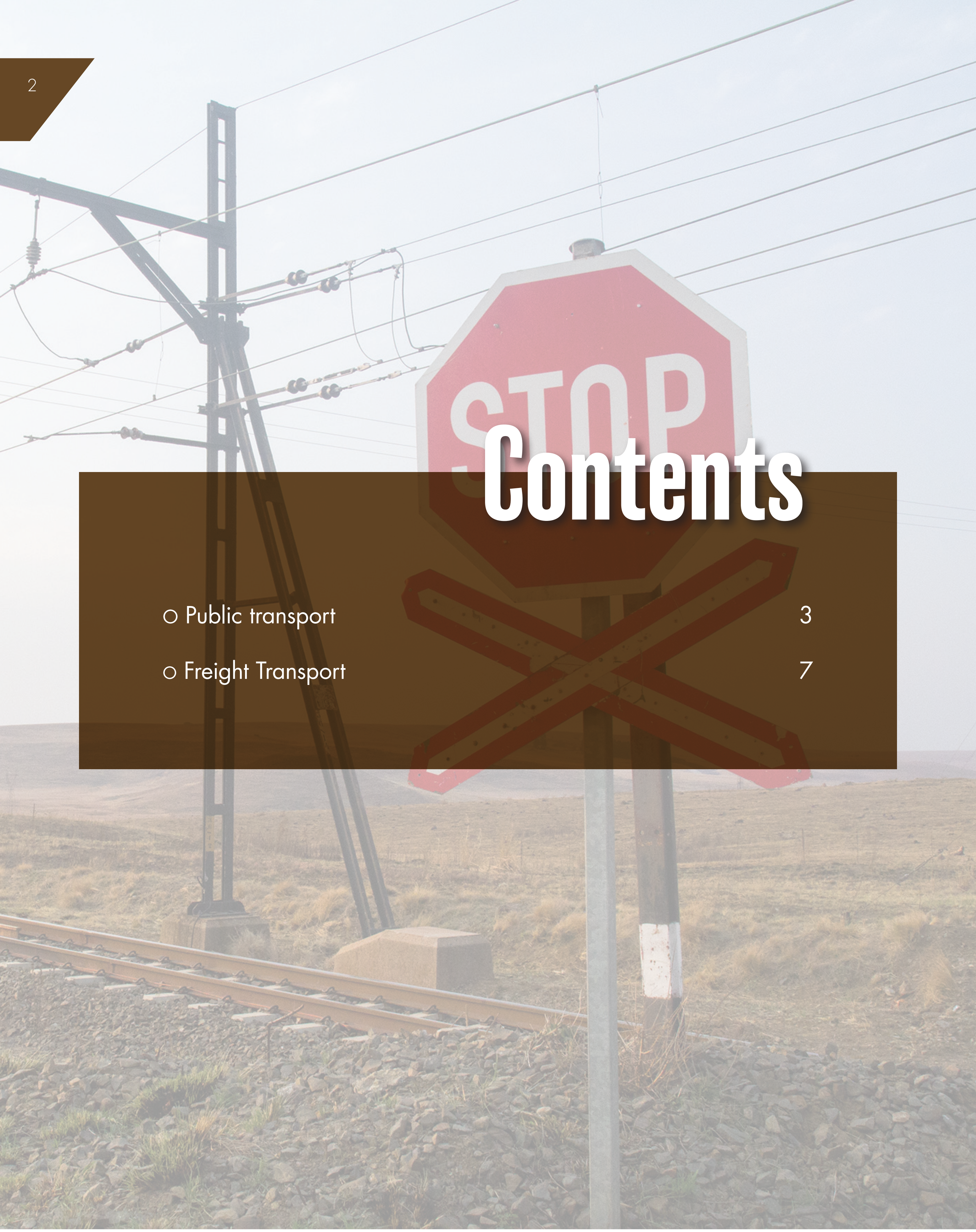

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ROAD & RAIL

BY CHANEL DE BRUYN
CREAMER MEDIA SENIOR DEPUTY EDITOR ONLINE

South Africa's transport sector is in need of billions of rands of investment to ensure that there is adequate infrastructure in place to meet the country's needs and help grow the economy through the efficient movement of goods and people.

The South African National Roads Agency Limited (Sanral) is responsible for improving, maintaining and managing 94% of the country's 22 214 km national road network and plans are for the network under its management to eventually increase to 35 000 km. The agency has, however, warned that available public-sector funding for the development and maintenance of roads is insufficient to keep pace with the growth of the national road network, which it believes will eventually negatively affect the quality of the network and, thus, also impact on vehicle operating costs, travelling time and road safety.

Sanral has proposed that the network under its control be increased to only 25 000 km to ensure that its budget is sufficient to cover the necessary upgrades. The roads agency has drafted a long-term strategy, Horizon 2030, which is aimed at ensuring the appropriate use of National Treasury allocations, its own revenue generation and private financing to fund its development and maintenance requirements, which it expects will average between R30-billion and R40-billion a year until 2030.

Currently, allocations from the National Treasury are used to fund the development, upgrade, repair and maintenance of about 87% of the national road network, with the remainder funded from toll revenues. The National Treasury has allocated R36.50-billion for the upgrade, strengthening and maintenance of the nontolled national road network over the three years to 2021/22.

While funding for the nontolled national road network is already under pressure, the nonpayment of toll fees by many users of roads upgraded as part of Phase 1 of the Gauteng Freeway Improvement Project (GFIP) is further exacerbating the problem. During the 2017/18 financial year, Sanral had, for the first time in its history, been forced to transfer R1.67-billion from its nontoll to its toll portfolio. This was followed by the transfer of another R5.70-billion from the nontoll to the toll portfolio in March 2019 to ensure that the roads agency did not default on debt repayments to investors.

Many Gauteng road users have refused to pay the e-tolls implemented as part of the GFIP, resulting in significant revenue losses for Sanral. Many organisations and individuals continue to call for e-tolls to be scrapped, a notion that carries the support of the Gauteng provincial government. While the ruling African National Congress has also reportedly stated its support for the scrapping of e-tolls, this is yet to be officially implemented by the national government. Finance Minister Tito Mboweni has, meanwhile, criticised the scrapping of e-tolls, pointing out that the National Treasury has limited funds to spend on infrastructure.

Further, should it be decided to scrap e-tolls on the GFIP, Sanral would have to immediately repay R45-billion in debt to Austrian company Kapsch.

Picture by Creamer Media

PUBLIC TRANSPORT

Many commuters in South Africa use minibus taxis as their main form of transport, owing to its affordability; however, concerns remain about the roadworthiness of some of the vehicles, and safety, as a result of violence between rival taxi organisations.

To improve vehicle safety, the Department of Transport launched a programme in 2006 to incentivise about 135 000 taxi owners to have their unroadworthy vehicles scrapped and buy new vehicles. Only about half of the targeted vehicles had been scrapped by 2017 and government has now launched a Revised Taxi Recapitalisation Programme to ensure that the remainder of the targeted vehicles are scrapped and to help transform the industry. Under the revised programme, the scrapping allowance has been increased to R124 000, compared with the previous allowance of R91 100 per vehicle.

The revised programme will also be used to change the way in which the taxi industry operates. Minibus taxis are individually owned and routes are managed through taxi association and councils, but government believes this contributes to violence among competing taxi industry members. Government is instead advocating for a collaborative ownership operating model through cooperatives and the corporatisation of the industry, which it hopes will eliminate competition among taxi drivers and owners and, thus, also improve commuter safety.

Former Gauteng Roads and Transport MEC Dr Ismail Vadi is also in favour of corporatisation, which he believes will improve customer satisfaction and profitability, as well as the working conditions of taxi drivers.

The taxi industry is, meanwhile, calling on government to subsidise this mode of transport, as it does with bus and train commuter transport services. This may, however, prove to be difficult, given the informal nature of the taxi industry.

Traditional bus services that compete with the minibus taxi industry are also under financial strain, despite receiving subsidies from government.

Further, government no longer seems as keen to continue with the roll-out of bus-rapid transit (BRT) systems in South Africa, given their high capital costs, low ridership numbers and subsidy requirements. The country's low urban density and the lack of incentives to use public transport rather than private vehicles to travel to and from work contribute to the low ridership figures. Government is, therefore, placing greater emphasis on the creation of Integrated Public Transport Networks (IPTNs), which incorporate rail and taxi services, in major cities. The National Treasury has allocated R22.30-billion through the public transport network grant to fund IPTNs in 13 cities across the country in the three years to 2021/22.

Meanwhile, the Passenger Rail Agency of South Africa (PRASA), is responsible for providing commuter rail services across the country, but years of underinvestment has contributed to unreliable service delivery, higher

Picture by Creamer Media

operating costs and a weak operating model. Its operating costs are said to be increasing at a faster rate than its income, which includes the revenue it generates and the subsidies it receives from government. The State-owned company expects to have a cash shortfall of R6.70-billion by the end of 2019/20 and that this will increase to about R12.80-billion by the end of 2021/22.

PRASA has embarked on a rescue plan to improve its operational and financial performance. As part of this, it expects it will need to invest about R6.60-billion to improve the reliability and availability of rolling stock and other infrastructure over a five-year period. The rescue plan is aimed at improving its subsidiary Metrorail's service levels, which are currently below 50% of that achieved in 2008/9, to 65% of that achieved in 2008/9 during 2019/20, and to 80% of service levels achieved in 2008/9 by 2021/22.

The entity also continues to progress its R173-million modernisation programme, which includes a rolling stock fleet-renewal programme, perway improvements and a signalling programme, as well as depot and station modernisation projects. As part of the rolling stock fleet-renewal programme, Gibela Rail Transport Consortium is delivering 600 new X'trapolis Mega trains manufactured at a purpose-built factory in Dunnotar, Gauteng, to PRASA for use in the Metrorail business over a 15-year period.

PRASA had sought to acquire new trains for its Main Line Passenger Service division in 2013, but corporate governance failures led to the procurement of trains that were unsuitable for use on South Africa's rail lines. The boards of directors that have since taken over responsibility have been seeking to recoup R2.60-billion in funds paid to the supplier of the unsuitable trains. The Constitutional Court in May 2019 denied the supplier's application for leave to appeal an earlier Supreme Court of Appeal judgment, which confirmed a High Court judgment that it repay the funds to PRASA.

In Gauteng, the Gautrain Management Agency (GMA), which manages the Gautrain, is working with the Gauteng provincial government on the proposed expansion of the rail service, but ridership numbers on the existing service were negatively impacted on by several factors during the 2017/18 financial year. The GMA has attributed a 3.80% year-on-year decrease in train passenger trips during 2017/18 to South Africa's slowing economic growth, as well as capacity constraints on the Gautrain during peak travel times and rivalry among taxis and e-hailing services operating near Gautrain stations.

Ridership figures, however, affect the patronage guarantee, or grant, payable by the provincial government to the GMA for operating the system, as it is used to cover the remaining operating costs of the system that could not be funded from passenger fees. For 2017/18, the provincial government paid the GMA a patronage guarantee of R1.57-billion, compared with the R1.35-billion paid to the GMA in 2016/17. The higher grant paid to the GMA has attracted criticism from the Congress of South African Trade Unions, which considers the provincial government's subsidising this form of public transport as unfair, as it is considered a system that services the wealthier citizens, rather than the poorest citizens, who use alternatives, such as taxis, which do not receive a subsidy from the State.

The GMA is seeking ways of increasing its ridership numbers, including increasing the frequency of trains and the length of trainsets during peak periods, reconfiguring the seating in train carriages to provide more room for standing passengers, promoting off-peak use and extending the Gautrain's operating hours.

Train schedule changes

To improve the convenience of the Gautrain service, the GMA introduced a new train schedule in May, with the afternoon peak period on the northbound route from Park station to Hatfield station now starting at 14:38, compared with the previous start at 15:28.

The morning departure times on the southbound route from Hatfield station to Park station are now also earlier, with the first train from Hatfield station departing at 05:05.

Further, the morning departure time for trains travelling from OR Tambo International Airport to Sandton now starts at 05:19. These trains now also stop at the Rhodesfield and Marlboro stations, which have earlier train departure times of 05:22 and 05:29 respectively.

Source: *Engineering News*

The GMA has, however, decided not to reissue a previous tender for the procurement of 12 new four-car trains for the Gautrain system. A previous tender for the procurement of the trains failed to attract a compliant bid. The GMA and system operator, Bombela, are preparing a business case to acquire a smaller number of train sets while the larger procurement is deferred to 2026, when there is an opportunity to combine this with a larger recapitalising of the system.

As part of efforts to increase ridership numbers, the GMA introduced its midibus taxi service on a further three routes in October 2018. The Gautrain midibus taxi service was first introduced in 2011 and complements the Gautrain bus service by covering additional feeder routes to and from its stations. The midibus taxi service is expected to eventually be rolled out across the entire Gautrain network, with routes to be chosen carefully to allow for integration with other public transport services.

A proposed expansion of the Gautrain system by a further 150 km is also expected to result in greater integration with existing public transport services in the province, particularly with PRASA's Metrorail. The Gauteng provincial government has approved legislation for the establishment of the Gauteng Transport Authority (GTA), which will be responsible for the planning, integration and enforcement of public transport operations across the province, including the Metrorail system, the Gautrain, bus-rapid transit systems and taxi operations. GMA CEO Jack van der Merwe has been appointed for a six-month period to lead the establishment of the GTA.

A decision on the proposed Gautrain expansion is expected to be made in the second half of 2019, subject to the approval of the National Treasury.

FREIGHT TRANSPORT

The majority of freight in South Africa is transported by road rather than rail, and government is promoting the shift to transfer more rail-friendly cargo off the country's roads. It states in its draft Roads Policy, published for public comment in March 2018, that there needs to be a better balance between road and rail freight transport to improve freight efficiencies, and reduce damage to the country's road infrastructure. Government plans to strengthen logistics corridors to promote intermodalism.

Transnet, whose Transnet Freight Rail (TFR) subsidiary operates the country's long-distance freight rail network, has, through its Market Demand Strategy (MDS), aimed to support government's efforts to transfer more rail-friendly cargo back onto the rail system. The group reported in its 'Integrated Report 2018' that its road-to-rail efforts had yielded 147 661 off-road trips, amounting to about 178-million kilometres. This represents about 1 335 trucks having been permanently removed from the country's roads.

One of the biggest investments for TFR in recent years has been the procurement of 1 064 new locomotives for its general freight business (GFB). TFR had awarded contracts to original-equipment manufacturers (OEMs) GE, China North Rail, China South Rail and Bombardier Transportation for the supply of 599 electric and 465 diesel locomotives for the GFB, but allegations of tender regularities have emerged.

Picture by Creamer Media

As a result of the allegations, Transnet is reviewing its contracts with three of the four OEMs (GE has already delivered all 233 diesel locomotives it had been contracted to deliver) and is seeking to reduce the number of locomotives to be procured to 953 by 2025, instead of the initially planned 1 064. Transnet had planned to meet with the three OEMs in April and May to negotiate potential settlement agreements. At this stage, it is unclear what the outcome of such a process may have been. Transnet is also considering possible civil claims against companies and individuals that might have benefited from the alleged corruption.

Meanwhile, Transnet's planned 30-year rail infrastructure investment is expected to reach R167-billion and its planned 30-year rolling stock infrastructure investment R283-billion.

Transnet believes it has closed the capacity gap in freight logistics infrastructure demand through the MDS and is now focusing its attention on its new Transnet 4.0 strategy, which is aimed at helping the group prepare for the Fourth Industrial Revolution and the resultant future growth opportunities.

Three major growth areas have been identified under the Transnet 4.0 strategy, one of which entails the establishment of an advanced manufacturing capability as an OEM for Africa in rail, ports and transport.

In terms of its manufacturing capability, Transnet launched its diesel-powered TransAfrica Locomotive – suitable for use on branch lines and in the yard for shunting, as well as on old rail tracks designed to carry light-axle loads – in April 2017. The locomotive is suitable for use on the narrow, or Cape gauge, railway lines that are operational across Africa.

Management changes

Mohammed Mahomedy has taken over as acting CEO of Transnet. He was appointed to the position in early May 2019, after the State-owned group's board decided not to extend the six-month contract of Tau Morwe, who had been brought out of retirement to take up the role of acting CEO, following the dismissal of former CEO Siyabonga Gama in October 2018. In mid-May, the group reported that Mark Gregg-Macdonald had been appointed to succeed Mahomedy as acting CFO.

Source: *Engineering News*

Further, Transnet and its subsidiaries have also developed an autonomous prototype special inspection device (SID) that can be used to detect obstacles such as livestock or humans on railway tracks, defects on the track in front of trains and cable theft or overhead traction issues. The SID, which is in the testing phase, was developed in collaboration with the Council for Scientific and Industrial Research. Transnet plans to industrialise the SID and introduce it to other rail operators.

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This brief was compiled by Chanel de Bruyn – Creamer Media Senior Deputy Editor online.

Creamer Media (Pty) Ltd
tel +27 11 622 3744
email subscriptions@creamermedia.co.za

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