2019/20 SOUTH AFRICA YEARBOOK

Transport

Transport

The Constitution of the Republic of South Africa, 1996 identifies the legislative responsibilities of different spheres of government with regards to all modes of transport and its associated infrastructure. The Department of Transport (DoT) is responsible for the legislation and policies for rail, pipelines, roads, airports, ports and the intermodal operations of public transport and freight. The department conducts sector research, formulates legislation and policy to set the strategic direction of subsectors, assigns responsibilities to public entities, regulates through setting norms and standards, and monitors implementation.

The work of the DoT contributes to the realisation of the vision of improved social and economic development articulated in the National Development Plan (NDP), Priority 1 (economic transformation and job creation) and Priority 4 (spatial integration, human settlements and local government) of government's 2019 – 2024 Medium Term Strategic Framework (MTSF). Over the medium term, the DoT plans to give effect to these guiding policies by focusing on building and maintaining national and provincial road networks, providing passenger rail infrastructure and services, and facilitating the provision of integrated public transport networks.

Building and preserving national and provincial roads

To carry out all departmental activities related to the maintenance of South Africa's road network, R102.2 billion was allocated over the medium term in the Road Transport programme. As the South African National Roads Agency (SANRAL) plays a crucial role in the upgrading, maintenance and strengthening programmes of the toll and non-toll portfolios of national roads, transfers to the agency account for an estimated 31.8% (R64.6 billion) of the department's total budget over the medium term, and 63.3% of the department's budget for road transport. Of the allocation to the agency, R35.4 billion over the Medium Term Expenditure Framework (MTEF) period was allocated for maintenance on the national network of non-toll roads, which constitutes an estimated 85% of the agency's national roads portfolio. As part of its planned projects for the non-toll road network, R3.4 billion over the medium term is set to be spent on the construction of the N2 Wild Coast highway and R2.5 billion on the upgrading of the R573 (Moloto Road). Transfers to fund reduced tariffs for the Gauteng Freeway Improvement Project amount to R1.9 billion over the MTEF period.

About 49 000 kilometres (km) of South Africa's tar road network are under the jurisdiction of provincial departments of transport. The bulk of maintenance operations carried out on provincial roads is funded through the Provincial Roads Maintenance Grant, which receives an estimated R36.0 billion in allocations over the medium term. Over the MTEF period, the DoT plans to transfer funds to provinces to maintain the provincial road network by resealing 16 227 lane km, rehabilitating 6 199 lane km, and blacktop patching 3.7 million (square kilometres) km^2. Factors such as the condition of roads, weather patterns and traffic volumes determine allocations for the maintenance of provincial roads.

Investing in passenger rail infrastructure and services

The DoT will continue its efforts to modernise South Africa's passenger rail services through the Passenger Rail Agency of South Africa (PRASA), transfers to which account for an estimated 26.8% (R53.7 billion) of the department's total budget over the medium term. These transfers are expected to subsidise 994 million passenger trips on Metrorail and 1.7 million passengers on long-distance Mainline Passenger Services over the next three years.

The modernisation of the agency's services is intended to improve the reliability of services and increase passenger ridership through focused expenditure on repairs and maintenance as part of the agency's rolling stock fleet renewal programme, as well as improved security. Transfers to the PRASA for the rolling stock fleet renewal programme are expected to increase from R5.8 billion in 2019/20 to R8.3 billion in 2022/23 at an average annual rate of 12.5% as the agency intensifies its implementation of the modernisation programme. Total transfers to the agency, mainly for capital expenditure, are set to increase from R16.5 billion in 2019/20 to R21.6 billion in 2022/23 at an average annual rate of 9.4%.

Towards an integrated public transport network

As hubs of economic activity and growth, South Africa's urban areas must maintain optimal functionality. It is important that integrated, sustainable, affordable and functional transport solutions within these hubs are tailored to suit the needs of present and future urban commuters. To this end, the DoT, through its Public Transport programme, makes allocations to the Public Transport Network Grant. These allocations are expected to increase from R6.5 billion in 2019/20 to R7.1 billion in 2022/23 at an average annual rate of 3.2%. This relatively modest growth rate is reflective of a narrowing of the grant's focus, from 2020/21, to fund the infrastructure and operations of integrated public transport networks in 10 cities as opposed to 13. Included in this are the indirect costs of operating bus rapid transit services in Johannesburg, Tshwane, Cape Town, George, Nelson Mandela Bay and Ekurhuleni. In these cities, the grant is expected to lead to an increase in the number of weekday passenger trips from 196 441 in 2019/20 to 423 145 in 2022/23.

Legislation

For cross-modal functions of public transport and freight, the DoT is guided by the following legislation and policies:

- The Transport Laws and Related Matters Amendment Act, 2013 (Act 3 of 2013), aims, among other things, to amend the Cross-Border Road Transport Agency to collect toll on behalf of the SANRAL.
- The National Land Transport Act, 2009 (Act 5 of 2009), clarifies the concurrent roles and responsibilities of the different spheres of government in relation to public transport. It also consolidates public transport planning, service delivery, regulation and monitoring in the municipal sphere, establishes the national and provincial public transport regulators, and enhances overall transport regulatory functions.
- The incorporation of the Shosholoza Meyl train service and the Autopax long-distance bus services into the PRASA was finalised in the Legal Succession to the South African Transport Services Amendment Act, 2008 (Act 38 of 2008).
- The National Road Traffic Amendment Act, 2008 (Act 64 of 2008) and the Cross-Border Transport Amendment Act, 2008

(Act 12 of 2008), allows for better road-traffic enforcement and improved cross-border regulation.

- The Administrative Adjudication of Road Traffic Offences Act, 1998 (Act 46 of 1998).
- The Civil Aviation Act, 2009 (Act 13 of 2009), was promulgated to harmonise and rationalise safety and security legislation for aviation to ensure compliance with the International Civil Aviation Organisation (ICAO) standards.
- The Air Service Licensing Amendment Act, 2008 (Act 21 of 2008), addresses corporate governance issues relating to the Air Services Licensing Council. The DoT plans to implement the airlift strategy and improve aviation safety and compliance with the standards set by the United States of America Federal Aviation Administration's International Aviation Safety Assessment Programme, and by the ICAO, an organ of the United Nations (UN).
- The Road Accident Fund (RAF) Amendment Act, 2005 (Act 19 of 2005), creates an equitable, affordable and sustainable system for victims of road accidents and their families.
- The RAF (Transitional Provisions) Act, 2012, (Act 15 of 2012), provides for transitional measures regarding certain categories of third parties whose claims were limited to R25 000 under the RAF Act, 1996 (Act 56 of 1996) prior to 1 August 2008.
- The DoT has published a revised version of the Road Accident Benefit Scheme (RABS). The Bill proposed that the RABS Administrator replace the RAF. The new regulations, rules and forms were drafted to enable a better understanding of how the proposed scheme would operate in practice. The RABS Bill provides for a new no-fault benefit scheme and a new administrator called the RABS Administrator, which will replace the current RAF and compensation system administered by it. The RABS Bill forms part of an initiative to replace the third-party compensation system currently administered by the RAF with a new scheme that is reasonable, equitable, affordable and sustainable.

Budget

For the 2019/20 financial year, the DoT was allocated R64.2 billion. The department's total expenditure is expected to increase at an average annual rate of 4%, from R64.2 billion in 2019/20 to R72.2 billion in 2022/23. The majority of the department's expenditure is directed towards the PRASA for investments in rail infrastructure, maintenance, operations and inventories; the SANRAL for the upgrading and maintenance of the national road network; and provinces and municipalities for the construction, operations and maintenance of transport infrastructure and services. Over the medium term, transfers account for an estimated 97.7% (R198.7 billion) of the DoT's total budget.

Spending on the compensation of employees is estimated at 0.9% (R1.8 billion) of the department's total budget over the medium term, increasing from R504.9 million in 2019/20 to R635 million in 2022/23 at an average annual rate of 7.9%. This relatively high increase is due to the implementation of job revaluation outcomes for upgrading salary levels 9 to 10 and 11 to 12, and the filling of critical posts.

Due to persistent underspending in previous years, Cabinet has approved total budget reductions of R17.6 billion over the medium term, mainly on capital transfers to the PRASA and the Public Transport Network Grant to municipalities.

During the DoT's budget vote in July 2020, the department allocated R1.135 billion towards taxi relief support. The revised fiscal framework accounts for substantial revenue losses emanating from the economic shock of the COVID-19 pandemic.

The special adjustment budget amounted to a net decrease of R4.6 billion in the department's 2020/21 budget allocation, proposed adjustments to the budget towards the provision for the rapidly changing economic conditions and enable spending on the COVID-19 response.

The adjustments were packaged along two categories. The first proposed reallocation of funds. The reallocation was a consequence of the baseline reduction, which resulted in a downward adjustment to the baselines of the PRASA Rolling Stock Renewal programme to the amount of R1.021 billion; the Provincial Road Maintenance Grant to the amount of R1.756 billion; the SANRAL non-toll capital to the amount of R1.096 billion, and the Public Transport Network Grant to the amount of R1.902 billion.

The allocation for taxi relief support was funded from this baseline adjustment. An amount of R349 million was shifted across programmes from goods and services, and the Taxi Recapitalisation Programme to fund the shortfalls of the department's distressed entities.

The Cross-Border Road Transport Agency received R104 million, the Road Traffic Infringement Agency received R200 million and the Railway Safety Regulator (RSR) received R15.8 million. A total of R25 million was also reprioritised for the procurement of personal protective equipment for the public transport industry.

Entities

Airports Company South Africa (ACSA)

The ACSA was established in terms of the Airports Company Act, 1993 (Act 44 of 1993) and the Companies Act, 2008 (Act 71 of 2008). Listed as a Schedule 2 entity in terms of the Public Finance Management Act, 1999 (Act 1 of 1999), the company owns and operates nine of South Africa's principal airports, including OR Tambo International Airport, Cape Town International Airport and King Shaka International Airport. Over the medium term, the company will continue to focus on airport development, management and maintenance. It anticipates that 67.7 million passengers will depart from these nine airports and 827 581 aircraft will arrive at them over the MTEF period. To support this, total expenditure is expected to increase from R6.7 billion in 2019/20 to R8.8 billion in 2022/23. The company's spending of R13.9 billion over the medium term on capital and infrastructure is expected to be financed through a combination of borrowings (R7.4 billion) and cash reserves. Total revenue over the MTEF period is expected to amount to R27.2 billion, with aeronautical and nonaeronautical revenue comprising 97.6% of this amount. Aeronautical revenue, which includes income from passenger facilitation and airline services, such as charges and tariffs for aircraft parking and landing fees, is expected to amount to R13.4 billion; and non-aeronautical revenue from property rentals, advertising and parking fees is expected to amount to R12.9 billion.

Air Traffic and Navigation Services (ATNS)

The ATNS Company was established in terms of the ATNS Act, 1993 (Act 45 of 1993), with the mandate of providing safe, orderly and efficient air traffic navigational and associated services, in accordance with the standards of the ICAO, to the air traffic management community. The company will, over the medium term, continue to focus on providing safe, efficient and cost-effective air traffic management solutions and related services as it expands its footprint to cover the rest of Africa and the Indian Ocean region. As a result of this focus, an estimated R4 billion of the company's total expenditure over the medium term is earmarked for investment in communication and simulation systems, which are essential to ensuring safety and improved capacity at airports. Total expenditure is expected to increase from R1.7 billion in 2019/20 to R2 billion in 2022/23. The company generates revenue by providing aeronautical services to the aviation industry. Total revenue is expected to increase from R1.8 billion in 2019/20 to R2.1 billion in 2022/23 as a result of a projected increase in tariff fees.

Passenger Rail Agency of South Africa

The PRASA was established in terms of the Legal Succession to the South African Transport Services Amendment Act of 2008, with the primary mandate of providing rail commuter services within, to and from South Africa in the public interest. The agency also provides long-haul passenger rail and bus services within, to and from South Africa.

In its efforts to stabilise operations, over the medium term, the agency will focus on responding to its historic challenge of underspending on capital programmes, with the aim of reducing its persistent operating deficits. Accordingly, to increase the number of passengers using Metrorail and Mainline Passenger Services, the agency plans to continue its Modernisation programme. Over the MTEF period, this entails refurbishing a targeted 1 314 train coaches; upgrading and improving 150 stations; upgrading signalling infrastructure; improving depots; acquiring 166 new train sets; and securing the agency's assets, including all stations. As a result of historic underspending on capital programmes, the PRASA had a cash balance of R18.3 billion at the end of 2018/19, which it plans to use over the medium term on infrastructure for Metrorail and Mainline Passenger Services.

An estimated R36 billion of the agency's total expenditure of R54.4 billion over the medium term is earmarked for spending on the Metrorail and Mainline Passenger Services programmes, including the Modernisation programme. Total revenue over the MTEF period is expected to be R44.4 billion, of which transfers from the DoT account for an estimated R30.4 billion. Other sources of revenue include the sale of train and bus tickets, rental income from the leasing of properties, on-board sales, and interest earned. Partly due to the non-payment of fares by passengers, total revenue is expected to increase from R14 billion in 2019/20 to R15.8 billion in 2022/23. As a result, the agency's operating deficit is set to increase from R2 billion in 2019/20 to R4.1 billion in 2020/21. Persistent operating deficits are expected to result in the agency's trade and other payables increasing from R11.9 billion in 2019/20 to a projected R29.3 billion in 2022/23.

Road Accident Fund

The RAF is mandated to compensate South African road users for losses or damages caused by motor-vehicle accidents within the borders of the country. The fund receives its revenue from the RAF Fuel Levy, in terms of the Customs and Excise Act, 1964 (Act 91 of 1964). Over the medium term, revenue from the Fuel Levy is expected to increase from R43.9 billion in 2019/20 to R45.4 billion in 2022/23. Due to the fund operating on a pay-as-you-go model and paying out what it is able to with the revenue it has, it has insufficient revenue to meet its liabilities, thereby increasing its indebtedness.

Claims against the fund increased from R66 billion in 2016/17 to R108.3 billion in 2019/20, and are expected to increase to R145.6 billion in 2022/23. As a result, the accumulated deficit is expected to increase from R329.7 billion in 2019/20 to R593.1 billion in 2022/23. To address this systemic challenge, the RABS Bill proposes to transform the fund from a liability insurance scheme to a system based on social security principles. This is expected to result in a more equitable and affordable road accident compensation scheme. In the meantime, the fund is developing a turnaround plan to prioritise, among others, reducing legal fees and transforming the claims management systems and processes.

South African National Roads Agency Limited

The SANRAL was established under its own founding legislation, the National Roads Act, 1998 (Act 7 of 1998), which defines its powers and functions. The agency is responsible for the management of South Africa's national road network, including finance, development, planning, control, operating, design and construction, maintenance and rehabilitation of national roads within the framework of government policy.

South Africa has 750 000 km of roads – the 10th-longest road network in the world and by far the longest in Africa. At the core of this network is the spine – a national network of 22 214 km, which is managed by the SANRAL. It stretches from Beit Bridge in the north to the southern-most parts of the continent, and from Oranjemund to the KwaZulu-Natal coast.

As of 1 April 2019, the SANRAL manages a national road network of 22 214 km. Of this, 19 262 km (87%) are non-toll roads and 2 952 km (13%) are toll roads. These roads are the country's single biggest public asset and critical to South Africa's future economic and social trajectory. These roads facilitate development, commerce, mobility and access.

The SANRAL's overarching objective is to meet the needs of South Africa in terms of its national road network. The accelerated implementation of the NDP will be at the core of government initiatives over the next decade and the quality of the country's primary road network will be critical to the success of the NDP.

This is governed by the four pillars of roads, road safety, stakeholders and mobility as contained in its strategy – Horizon 2030. The strategy includes a transformation policy which has the aim of promoting small, emerging, black construction companies and related industries, while also supporting the transformation of the industry to reflect the demographics of the country.

Over the medium term, the agency will continue to focus on undertaking preventative maintenance to improve and preserve the national road network. As such, the agency plans to resurface 3 300 km and improve 1 500 km of roads, upgrade intersections to interchanges, and build new interchanges and bridges.

Other entities

Cross-Border Road Transport Agency

The agency is a Schedule 3A public entity established in terms of the Cross-Border Road Transport Act, 1998 (Act 4 of 1998). The agency's legislative mandate requires it to advise the Minister of Transport on cross-border road transport policy, regulate access to the market by the road transport freight and passenger industry in respect of cross-border road transport by issuing permits, undertaking road transport law enforcement, and playing a facilitative role in contributing to the economic prosperity of the region. The agency's estimated expenditure for 2019/20 was R225.8 million.

Driving Licence Card Account

The Driving Licence Card Account manufactures credit card-format driving licences based on orders received from driving licence testing centres, and generates its own revenue through the sale of licence cards. The entity's estimated expenditure for 2019/20 was R235 million.

Ports Regulator of South Africa

The Ports Regulator of South Africa performs functions that relate mainly to the regulation of pricing and other aspects of economic regulation, the promotion of equal access to ports facilities and services, the monitoring of the industry's compliance with the regulatory framework, and the hearing of any complaints and appeals lodged with it. The regulator's estimated expenditure for 2019/20 was R37.4 million.

Railway Safety Regulator

The RSR oversees and promotes safe railway operations through appropriate support, monitoring and enforcement, guided by an enabling regulatory framework, including regulations for all rail operators in South Africa and those of neighbouring countries whose rail operations enter South Africa. The regulator's estimated expenditure for 2019/20 was R240.6 million.

Road Traffic Infringement Agency

The agency promotes road traffic quality by providing for a scheme to discourage road traffic infringements to support the prosecution of offences in terms of national and provincial laws relating to road traffic, and implements a points demerit system. The agency's estimated expenditure for 2019/20 was R258.9 million.

Road Traffic Management Corporation (RTMC)

The RTMC pools national and provincial government resources for the provision of road traffic management. This includes cooperative and coordinated road traffic strategic planning, regulation, facilitation and law enforcement. The corporation's estimated expenditure for 2019/20 was R1.5 billion.

South African Civil Aviation Authority (SACAA)

The SACAA promotes, regulates and enforces civil aviation safety and security standards across the aviation industry. The entity's estimated expenditure for 2019/20 was R792.5 million.

South African Maritime Safety Authority (SAMSA)

The SAMSA promotes South Africa's maritime interests, ensures the safety of life and property at sea, and prevents and combats the pollution of the marine environment by ships. Functions of the authority are also defined as per international maritime conventions to which South Africa is a signatory. The entity's estimated expenditure for 2019/20 was R505.7 million.

Rail networks

The purpose of the Rail Transport programme within the DoT is to facilitate and coordinate the development of sustainable rail transport policies, rail economic and safety regulations, infrastructure development strategies; systems that reduce system costs and improve customer service; and to monitor and oversee the RSR and the PRASA; and the implementation of integrated rail services planned through the lowest competent sphere of government.

The South African rail network is the eleventh-largest in the world at 22 298 route km, and total track distance of 30 400 km. Public sector railways comprise three distinct vertically integrated entities, namely the Transnet Freight Rail (TFR) division of Transnet SOC Limited (previously Transnet Limited), the PRASA, and the Gautrain Management Agency. They fulfil distinctly different roles and responsibilities, and have different objectives and service delivery requirements.

The DoT has developed a business case which was approved by the National Treasury. This paved way for the revitalisation of the commuter rail network in South Africa. The Modernisation programme covers selected metropolitan areas and includes the upgrading of the signaling system, stations, construction of a rail manufacturing plant and the manufacturing of 3 600 new trains.

The total spending in the Rail Transport programme is expected to increase at an average annual rate of 9.4% from R16.5 billion in 2019/20 to R21.7 billion in 2022/23 over the medium term.

Through the PRASA, the DoT will continue its efforts to modernise South Africa's passenger rail services to improve the reliability of services, increase passenger ridership, improved security provision as well as repairs and maintenance. The spending focus over the medium term in this programme will be on developing the National Rail Bill for submission to Cabinet, developing the National Rail Policy, developing the Branch Line Framework Model for private sector participation, as well as regulating and enhancing rail safety and security by submitting the draft Railway Safety Bill to Cabinet.

Transnet SOC Limited

Transnet is a focused freight-transport and logistics company wholly owned by the South African government. Its divisions include, the TFR, Transnet Rail Engineering, Transnet Port Terminals, Transnet Pipelines and Transnet National Ports Authority.

The Transnet Port Terminals operates 45 cranes in seven ports across the country and plans to buy 39 new ship-to-shore cranes. Container capacity is also being created in other terminals, such as the Durban Ro-Ro and Maydon Wharf Terminal, through the acquisition of new equipment, including mobile cranes and various infrastructure upgrades.

The port is said to be the deepest container terminal in sub-Saharan Africa and will accommodate the new generation of giant container ships that regularly visit the country's shores.

Given its positioning and size, the Ngqura Trade Port will go a long way in boosting South Africa's trade with other countries in the region and is expected to support the country's new growth path. The planning of the Ngqura Trade Port has been integrated with that of the Coega Industrial Development Zone.

The bulk handling capacity at Ngqura, Richards Bay in KwaZulu-Natal, and Saldanha in the Western Cape will also come in for major expansion.

The TFR is the largest division of Transnet. It is a world-class heavy haul freight rail company that specialises in the transportation of freight.

Its technological leadership goes beyond Africa as well as within Africa, where it is active in some 17 countries.

The TFR has positioned itself to become a profitable and sustainable freight railway business, assisting in driving the competitiveness of the South African economy.

The company is made up of the following business units:

- Agriculture and Bulk Liquids
- Coal
- Container and Automotive
- Iron Ore and Manganese
- Steel and Cement
- Mineral Mining and Chrome.

Forming an integral part of the southern African economy, Transnet:

- moves 17% of the nation's freight annually;
- exports 100% of the country's coal;
- exports 100% of the iron ore;
- 30% of the core network carries 95% of freight volumes;
- has annual revenues of over R14 billion;
- will invest R35 billion in capital over the next five years; and
- has 38 000 employees countrywide.

The company maintains an extensive rail network across South Africa that connects with other rail networks in the sub-Saharan region, with its rail infrastructure representing about 80% of Africa's total.

Gautrain

The Gautrain is an 80-km long mass rapid transit railway system that links Johannesburg, Pretoria and the OR Tambo International Airport.

It was built to relieve traffic congestion in the Johannesburg-Pretoria traffic corridor and offer commuters a viable alternative to road transport, as Johannesburg had limited public transport infrastructure.

The Gauteng 25-Year Integrated Transport Master Plan will ensure integration of transport with spatial patterns, as well as the integration between various transport modes to transport people effectively.

The Gautrain ferries more than 60 000 people a day (including weekends) or 1.2 million people a year.

The Gautrain Management Agency is planning to extend the rail route by 150 km over the next 20 years, including routes through Randburg, Fourways, and Soweto. This expansion is expected to create 211 000 jobs.

A feasibility study that included demand modelling to determine transport needs for Gauteng in 2025 and 2037, indicated that the "cost of doing nothing" in the province will lead to major road congestion in 2037, at which stage cars will travel at an average of 15 km/h due to the doubling of car growth.

The feasibility study identified the following main links and stations of the Gautrain rail network extensions:

- On the link between Jabulani via Cosmo City and Samrand to Mamelodi, stations include Roodepoort, Little Falls, Fourways, Sunninghill, Olievenhoutsbosch, Irene, Tshwane East and Hazeldean.
- The link between Sandton and Cosmo City has a station at Randburg.
- On the link between Rhodesfield and Boksburg there will be a station at East Rand Mall and possible link-up with the OR Tambo International Airport Midfield terminal development.
- A future link from Cosmo City to Lanseria Airport.

In October 2019, the Gautrain Management Agency introduced a contactless bank card to tag in and out at stations, including buses and parking to ensure easy acces to commuters on the go.

Passenger rail safety

The National RSR Act, 2002 (Act 16 of 2002), is the enabling legislation for setting up the independent RSR, reporting and accountable to the Minister of Transport.

The mandate of the RSR is to:

- oversee safety in railway transport, while operators remain responsible for managing the safety of their operations;
- develop an appropriate regulatory framework through the development of regulations and standards for safe railway operations;
- monitor and ensure safety compliance by conducting audits, inspections, safety assessments and occurrence investigations;
- collect and disseminate information relating to safe railway operations;
- promote the harmonisation of the railway safety regime of South Africa with the Southern African Development Community (SADC) railway operations; and
- promote improved safety performance to support the use of rail.

In pursuance of this mandate, the RSR has, in collaboration with the railway industry and the South African Bureau of Standards, developed a series of standards to ensure a common and consistent approach to railway safety in areas such as safety management, technical and operational requirements, and the management of human factors.

A key to the successful regeneration of the railway system in South Africa, and the subregion, is the interoperability of the railways.

This implies consistent standards and common usage of technology where railway infrastructure is used by more than one operator.

The RSR and the railway industry continue to collaborate in developing the overarching broad technical and operating standards.

The need for harmonisation of safety standards within the SADC region is of strategic importance. The RSR is facilitating efforts to adopt and align the current railway safety standards by regional railway operators through the Southern African Railways Association (SARA).

Since the RSR's creation, there has been increased awareness of safety in railways, improvements in safety management and accountability, and standardisation of safety management systems among railway operators in South Africa and regional railways operating into South Africa. The permit system employed by the RSR ensures the standardisation of safety management systems.

Through its SARA membership, the RSR plays a leading role in regional safety issues. The RSR played a central part in developing the Regional Safety Policy Framework and safety standards and in updating the *Handbook on the Transportation of Hazardous Materials by Rail.*

Since the reintroduction of the railway police, there has been a significant drop in crime on trains and at train stations.

Civil aviation

The DoT's Civil Avialtion programme exists to facilitate the development of an economically viable air transport industry that is safe, secure, efficient, environmentally friendly and compliant with international standards through regulations and investigations; and to oversee aviation public entities. Plans are underway to develop a business case for a government-owned national aviation academy.

South African Airways (SAA)

The SAA is the leading carrier in Africa, serving 56 destinations, in partnership with South African Express Airways (SA Express), Airlink and its low-cost carrier, Mango, within South Africa and across the continent, and nine intercontinental routes from its Johannesburg hub. It is a member of the largest international airline network, Star Alliance.

The airline's core business is the provision of passenger airline and cargo transport services, together with related services, which are provided through the SAA and its four wholly owned subsidiaries:

- SAA Technical,
- Mango,
- Air Chefs, the catering entity of the SAA, and
- South African Travel Centre.

In Dember 2019, the Board of the SAA adopted a resolution to place the airline under business rescue as a mechanism to restore confidence in the company and safeguard its good assets, as well as help to restructure and reposition the entity into one that is stronger, more sustainable and able to grow and attract an equity partner. It was the government's desire that the restructured airline would mark the beginning of a new era in the South African aviation – which would bring in millions more tourists into the country; help create more jobs in tourism and related sectors of the economy; and work with other African airlines to underpin and service the integration of African markets and improve intra-African trade and travel.

The business rescue would incorporate existing lenders to the SAA, providing R2 billion as post commencement finance guaranteed by government and repayable out of future budget appropriations in order for the business rescue process to commence, and to enable the SAA to continue operating.

The business rescue would also incorporate the following:

- government, through the National Treasury, providing an additional R2 billion of post commencement finance in a fiscally neutral manner;
- the prevention of a disorderly collapse of the airline, with a negative impact on passengers, suppliers and other partners in the aviation sector;
- providing an opportunity to critically review the cost structure of the airline, while simultaneously attempting to retain as many jobs as possible; and
- providing a structured opportunity to reorganise the state aviation assets to make them better positioned to be sustainable and attractive to an investment partner.

A business rescue practitioner was chosen to take charge of the business and perform the function of operating the airline with the assistance of management. In February 2020, the government set aside R16.4 billion to repay guaranteed debt for the struggling airline which has incurred net losses of over R32 billion since the 2008/09 financial year.

In January 2020, the Development Bank of Southern Africa provided R3.5 billion – with an immediate draw-down of R2 billion – to the SAA to assist the national carrier in addressing its liquidity challenges. The money was to repay the airline's guaranteed debt and to cover debt-service costs.

The Companies Act of 2008 prescribes that the primary function of a business rescue process is to develop and implement a rescue plan with the view of fundamentally restructuring the business affairs and other liabilities of a company in distress, in a manner which maximises the likelihood for it to continue to exist on a solvent basis.

If this is not possible, the second option is to dispose of assets so that the company in distress can obtain better returns for its creditors and shareholders than they would otherwise receive from the liquidation of the company.

SA Express

The SA Express is a domestic and regional passenger and cargo carrier. Although the airline is operationally independent of the SAA, its flights are incorporated within the strategic alliance with Airlink and the SAA.

It became the first airline in the country to adopt a new method of taxiing after landing that burns less fuel and cuts fuel emissions.

This simple, but unusual, method of using only one engine to taxi off the runway to the terminal after landing, cuts the amount of fuel burned by an average of 20 litres (l) on every landing.

A flight from Johannesburg to Bloemfontein typically uses 1 000 l of fuel, so saving 20 l is a reduction of 2%, helping the airline to become more cost-efficient. The SA Express offers connectivity between primary and secondary domestic destinations in South Africa and five other SADC countries.

The airline was placed under business rescue in February 2020. The SA Express is unable to settle either short or long-term obligations as they become due. Cumulative losses amount to R1.2 billion over the past 10 years.

Resources

Roads

Roads are a crucial component of South Africa's transport system and economy. The purpose of the DoT's Road Transport programme is to develop and manage an integrated road infrastructure network, regulate road transport, ensure safer roads, and oversee road agencies.

The department continues to ensure efficient and effective investment in the road network to implement the Road Infrastructure Strategic Framework for South Africa, in line with the S'hamba Sonke Road Programme and other related road infrastructure asset management programmes.

Besides funding allocated to the SANRAL for the maintenance of the national road network (non-toll portfolio), the DoT is providing implementation support to provinces (maintenance and upgrading projects) and municipalities (planning support). The plans, going forward, are to introduce more labour intensive methodologies for road projects through appropriate design and construction methods to increase job creation.

Plans include partnering with poor communities with people who can be employed for routine road maintenance and construction activities through the Contractor Householder Programme.

In its efforts to reduce crashes on the country's roads, the DoT will, during the medium term, introduce the National Road Traffic Amendment Bill, which seeks to reduce the blood alcohol limit to zero, with the result that no one on the road should be operating a motor vehicle while under the influence of alcohol and drugs.

To carry out all departmental activities related to the maintenance, development and management of an integrated road infrastructure network and to ensure safer roads, an amount of R102.7 billion was allocated over the medium term in this programme.

National roads

The government is responsible for overall policy, while the SANRAL is responsible for road-building and maintenance. The DoT continues to improve the road network by ensuring that it is well maintained and safe.

Provincial roads

Provincial governments are responsible for planning, constructing and maintaining roads and bridges, except those falling under the SANRAL or local governments. The DoT helps provincial and local governments to improve and develop the state of their roads.

Municipal roads

The construction and maintenance of most roads and streets within the municipal boundaries of cities and towns is the responsibility of the municipality concerned.

Toll roads

The toll-road network comprises about 19% (3 120 km) of the national road grid. The SANRAL manages some 1 832 km of these toll roads.

In its endeavour to continue the expansion and maintenance of the comprehensive national road network, the SANRAL will continue the selective expansion of toll roads.

About 1 288 km of the tolled sections of national roads have been concessioned to private companies to develop, operate and maintain.

The N12 freeway was recently upgraded at a cost of R485 million. It entailed the rehabilitation and upgrading of the N12 from Eldorado Park to the North West border, with the entire section of the road developed into a dual carriageway.

The 20-month project involved the resurfacing of the freeway, clearing of drainage structures, replacing missing steel grids, reinstatement of road markings, erecting new road signs and replacing guard rails.

The N12 freeway serves as a critical freight link between Gauteng and North West, including the Western Cape. It also services the mining, agriculture and tourism sectors.

The project had a strong economic empowerment component, with over 350 workers, particularly women and youth, as well as more than 20 local subcontractors from communities along the route.

The N2 Wild Coast Toll Road Project recently revised a route spanning 410 km from East London to the Mtamvuna River Bridge. The recent upgrade on the N1 highway, between Pretoria and Bela-Bela, is expected to increase the design life of the road by ten years.

Other upgrades on the 395 km of network under Bakwena's control include adding 70 km of dual carriageway on the N4 between Pretoria and Rustenburg in a R1.5-billion project. Bakwena has already added 35 km of dual carriageway on the N4, with the upgrade to be completed by 2020/21.

Bakwena is also spending R230 million on selected plaza and interchange upgrades.

Civil aviation

South Africa's nine major airports are:

- OR Tambo International Airport in Gauteng,
- Cape Town International Airport in the Western Cape,
- King Shaka International Airport in KwaZulu-Natal,
- Bram Fischer International Airport in the Free State,
- Port Elizabeth International Airport in the Eastern Cape,
- Upington International Airport in the Northern Cape,
- East London Airport in the Eastern Cape,
- George Airport in the Western Cape, and
- Kimberley Airport in the Northern Cape.

Airlift Strategy

The Airlift Strategy introduced structured regulatory measures for increasing tourism growth in South Africa. In particular, this strategy is based on aviation policy directives and contributes to the county's growth by:

- aligning with the Tourism Growth Strategy and industry;
- prioritising tourism and trade markets; and
- unblocking obstacles to growth through regulatory mechanisms, and bilateral and multilateral air-services negotiations.

The overall objective of the Airlift Strategy is to increase aviation's contribution towards sustainable economic growth and job creation. This requires the creation and maintenance of an enabling framework, within which both suppliers and consumers of air-transport services may exercise reasonable flexibility and choice.

The strategy enhances the prospects of South Africa as a preferred air-travel destination and synchronises the basis for bilateral air-services negotiations with other priorities.

The strategy also provides specific guidelines for various unique markets, with emphasis on the needs of intra-African air services, and aims to improve the regulation of particularly the supply side of air-transport services.

The DoT also developed the Airlift Implementation Plan, which provides a clear framework and capacity targets to be met.

Airlines

Several domestic airlines, as well as a number of smaller charter airline companies, operate in South Africa.

The SAA, British Airways (BA)/Comair, SA Express, SA Airlink and Interair operate scheduled air services within South Africa and the Indian Ocean islands. In addition to serving Africa, the SAA also operates services to Europe, Latin America and the Far East.

Other airlines operating in the country are Kulula and Mango. Scheduled international air services are also provided by Air Afrique, Air Austral, Air Botswana, Air France, Air Gabon, Air Madagascar, Air Malawi, Air Mauritius, Air Namibia, Air Portugal, Air Seychelles, Air Tanzania, Air Zimbabwe, Eswatini Airlink, Alliance Express, BA, Cameroon Airlines, Delta Airlines, El Al Israel Airlines, Egyptair, Emirates, Ethiopian Airlines, Ghana Airways, Iberia, KLM, Kenya Airways, LAM Mozambique Airlines, LTU International Airways, Lufthansa, MK Airlines, Malaysia Airlines, Martinair Holland, Northwest Airlines, Olympic Airways, Qantas, Royal Air Maroc, Saudi Arabian Airlines, Singapore Airlines, Swissair, Taag, Thai International, Turkish Airlines, Uganda Airlines, United Airlines, Varig, Virgin Atlantic, Yemenia, Zambian Air Services and Zambian Skyways.

Freight transport

Africa's road access rate is only 34% compared with 50% in other geographical zones. However, roads remain the dominant mode of transportation, accounting for more than 90% of passenger and freight transport in Africa, compared with around 50% of freight in Europe.

Pipelines

South Africa consumes about 25 billion l of petroleum products a year. Transnet Pipelines transports almost 50% of all refined petroleum products in the country for the emerging and major oil companies of South Africa. The Tarlton storage and distribution depot is a vital conduit in the supply of fuel to Botswana. The company plans to enhance this service.

Transnet Pipelines transports all the crude requirements for the inland refinery at the National Petroleum Refiners of South Africa, from where almost 70% of their refined products and 80% at Secunda are transported through the pipeline network to the final markets.

Transnet Pipelines owns, maintains and operates a network of 3 000 km of high-pressure petroleum and gas pipelines.

Investment in the pipeline sector is ongoing. Construction on a R5.8 billion fuel pipeline between the Mozambican Port of Matola in Maputo and Kendal in South Africa started in 2009. The 450-km pipeline transports up to 3.5 millilitres (ml) a year and is expected to prevent potential fuel shortages in South Africa.

The pipeline facilitates the importation of petrol and diesel from Mozambique, which has extensive natural gas and coal reserves, but no oil reserves. Of the pipeline's total capacity of 3.5 ml of fuel and diesel, a maximum of 1.5 ml is diverted to Mbombela. The remainder is transported to Kendal.

More than 60% of South Africa's liquid-fuels demand lies within the Durban-Johannesburg corridor. The Durban-Johannesburg pipeline was no longer adequate for the transportation of the required volumes of petroleum products from the coast to the inland regions.

Maritime transport

The DoT's Marine Transport programme exists to implement the Comprehensive Maritime Transport Policy (CMTP) to ensure promotion and coordination; as well as infrastructure and industry development and achieve compliance through monitoring, evaluation and oversight, and collaboration with maritime related public entities namely; the Ports Regulator; National Ports Authority; the SAMSA industry and international bodies.

Marine transport encompasses all forms of transport by sea, intermodal links and inland ports. It serves a large degree for the freight market, and in the South African context, offers no significant passenger-carrying ability.

The DoT is responsible for South Africa's maritime administration and legislation – the SAMSA controls on its behalf in terms of the SAMSA Act, 1998 (Act 5 of 1998).

The broad aim of the SAMSA is to maintain the safety of life and property at sea within South Africa's area of maritime jurisdiction, and to ensure the prevention of marine pollution by oil and other substances emanating from ships.

The Department of Environment, Forestry and Fisheries (DEFF) is responsible for combating pollution and uses Kuswag coast-watch vessels to perform this function. The SAMSA is responsible for introducing and maintaining international standards set by the International Maritime Organisation (IMO) in London, United Kindom, with respect to:

- ship construction;
- maritime training and training curriculums;
- watch-keeping;
- certification of seafarers;
- manning and operation of local and foreign ships;
- maritime search-and-rescue;
- marine communications and radio navigation aids; and
- pollution prevention.

The SAMSA has an operations unit, a policy unit and a corporate support division to handle all financial, human resources and information technology issues.

Other functions include registering ships, establishing a coastal patrol service and managing marine casualties and wrecks.

The SAMSA is steadily improving its capacity to monitor safety standards of foreign vessels. Numerous ships calling at South Africa's major ports are inspected, and those not complying with internatiomanal safety standards are detained until the deficiencies are corrected.

The South African Marine Corporation, Unicorn Lines and Griffin Shipping are the country's predominant shipping lines. Their fleets of container, oil tanker, general cargo and bulk cargo vessels operate not only between South African ports but as cross-traders to other parts of the world.

Comprehensive Maritime Transport Policy

South African's length of the coastline is estimated to be approximately 3 000 km. In South Africa, the greatest challenge has been the absence of a maritime transport policy that is required to provide guidance to the industry. The much awaited Maritime Transport Policy will create certainty in the transport sector and the logistics market.

There are over 89 464 merchant ships trading internationally, transporting different types of cargoes and registered, in 150 nations, thus growing marine international trade by 4% per annum. South Africa currently has four ships on its ship register and there is commitment to grow the register through the creation of a conducive environment and providing incentives to ship-owners as an encouragement to set up offices and possibly register under the South African flag.

The DoT maintains a single emergency towing vessel that is available to respond to emergency incidents, which is mainly deployed in the Western Seaboard. This exposes certain areas of the coastline, especially of the Indian Ocean, to risks from ships oil pollution in the event of accidents or incidents. The DoT is working on a long term strategy to enhance capacity and capability for oil pollution surveillance and response.

The development of the Ports Economic Participation Framework, which is prioritised for the remaining period of the MTSF, will lay a firm legal basis for the effective implementation of the relevant provisions of the Ports Act, 2005 (Act 12 of 2005). In order to increase the direct contribution of the maritime transport sector to the economy, revitalisation of merchant shipping through the development of a private sector driven national shipping carrier(s) and promotion of coastal shipping services for specific cargoes is very essential.

Following the approval of the CMTP by Cabinet, the DoT has embarked on the process of developing a Maritime Transport Strategy 2030.

The CMTP serves as the embodiment of government's commitment to the growth, development and transformation of South Africa's maritime transport sector. It represents South Africa's long term vision, the underpinning philosophy and principles that inform its development and the direction that government has committed to take the sector to reach its full potential.

As a priority, the DoT will also be establishing the Maritime Transport Sector Development Council to drive the sector growth and development initiatives. Through this initiative, a transforming and inclusively growing maritime transport economy that leverages South Africa's competitive advantage in geographic position, nature and heritage; supported by people, innovative insfrastructure and service excellence, will be built.

South African Maritime Training Academy (SAMTRA)

The SAMTRA, at Simon's Town in the Western Cape, provides advanced training to the broader maritime sector, including the merchant navy, harbour-craft operations, the fishing industry and the South African Navy.

The South African Merchant Navy Academy, General Botha, established at Granger Bay, is integrated with the Cape Peninsula University of Technology (CPUT), with a similar training facility at the Durban University of Technology (DUT).

Deck and engineering students and officers complete their academic training at the CPUT and DUT, while lower classes of certificates are offered at the Northlink College, situated in the Duncan Dock area in Cape Town. This training institution also caters for deck, engine-room and catering department ratings.

The SAMSA is responsible for setting all standards of training certification and watch-keeping on behalf of the DoT, while the Maritime Education and Training Board is responsible for accrediting all maritime courses.

Other maritime training organisations offer a wide range of courses that have been developed within the South African maritime industry. These are situated mainly in the ports of Cape Town and Durban and, to a lesser degree, Port Elizabeth.

As part of an initiative to reduce the vacancy rate of at least 45 000 jobs in the maritime industry, 12 Further Education and Training (FET) colleges across the country started to offer courses aimed at equipping young people for a career in the industry.

The FET colleges will meet at least 80% of the industry's skills demands, producing artisans such as riggers, welders and boiler makers. Annually, between 1 200 and 1 600 students enter the maritime industry after completing their studies.

Ports

Along its 3 000 km-long coastline, South Africa has eight commercial seaports: Richards Bay, Durban, East London, Ngqura, Port Elizabeth, Mossel Bay, Cape Town and Saldanha.

South Africa is situated on a major sea route, which facilitates the safe and secure movement of about 500 megatonnes (Mt) of crude petrochemical sea trade. This represents over 30% of the world's petrochemical production, on board over 5 000 tanker voyages of very large crude carriers per year.

The commercial ports are crucial to South Africa's transport, logistics and socio-economic development. About 98% of South Africa's exports are conveyed by sea.

The Port of Durban is the busiest container terminal in Africa and the second busiest in the southern hemisphere, following Melbourne, Australia. The Ports Authority alone employs 6 200 people at the Durban Port, with an estimated 30 000 people employed indirectly.

Richard's Bay is the busiest port in South Africa by tonnage and is one of the top two coal-handling ports in the world. Richard's Bay focuses on bulk cargo handling while the Durban Port focuses on general cargo. It has also been earmarked for expansion projects with R3.7 billion set aside for mobile and quayside equipment, as well as weighbridges. Safety-critical, environmental and legal-compliance projects will also be carried out.

Cape Town, located at the southern-most point of Africa, is ideally positioned as a hub terminal for cargo to South America and the Far East. West/East Africa cargo has grown substantially, making the Cape Town Container Terminal the terminal of choice for trans-shipment cargo. The terminal handles 3 161 vessels per year for a gross tonnage of 44 501 297.

The Port Elizabeth Container Terminal is one of the three specialised container-handling facilities along the South African coastline. The terminal currently handles 1 271 ships with a total gross tonnage of 25 756 823.

Safety of travellers

Arrive Alive

The government's Arrive Alive Road-Safety Campaign has become an important part of the DoT's road safety projects and awareness efforts, especially during critical periods for road traffic management such as the Easter long weekend and the December holidays.

At the end of 2015, it was announced that the RTMC could not use the Arrive Alive campaign anymore, as it had been registered as a brand. The safety campaign remains in place, operating under the name 365 Days of Road Safety Programme, which focuses on creating awareness all year round.

The goals of the campaign are to:

- reduce the number of road-traffic accidents in general, and fatalities in particular, by 5% compared with the same period the previous year;
- improve road-user compliance with traffic laws; and
- forge improved working relationships between traffic authorities in the various spheres of government.

The campaign emphasised that the reduction in road deaths was urgent and non-negotiable.

The RAF pays out about R15 billion to victims of road accidents every year.

The DoT intends to harmonise road traffic law enforcement and establish a single traffic police unit. As part of efforts to alleviate the scourge of road accidents and incidents, the department continues to work tirelessly to ensure that law enforcement is declared an essential service to guarantee availability of traffic officers 24/7 on the roads. Anti-fraud and corruption operations will continue to be intensified at all public and private driver learning testing centres and driving schools around the country.

UN Decade of Action for Road Safety 2011 – 2020

South Africa is a signatory to the UN Decade of Action for Road Safety 2011 – 2020. The UN General Assembly resolution proclaiming a Decade of Action for Road Safety 2011 – 2020 was tabled by Russia and co-sponsored by more than 90 countries.

The initiative aims to save lives by halting the increasing trends in road traffic deaths and injuries world-wide.

It is based on the following pillars:

- Building road safety management capacity.
- Improving the safety of road infrastructure and broader transport networks.
- Further developing the safety of vehicles.
- Enhancing the behaviour of road users.
- Improving post-crash response.

As part of the campaign, the government is targeting the reduction in fatalities by 50% in 2020.

South Africa's efforts are focused on four key areas:

- fatigue or driver fitness;
- drinking and driving;
- use of seat belts; and
- pedestrian safety.

A key aspect of the integrated Road Safety Management programme is increasing pedestrian safety. In planning and design, the SANRAL provides for interventions such as traffic calming, safe stopping areas for public transport, and pedestrian bridges. The DoT also engages communities adjacent to national roads to find solutions to pedestrians' needs.

To contribute to safety on the roads, the SANRAL has developed a database of projects that need to be implemented in areas that are hazardous to pedestrians. The solutions range from pedestrian bridges, pavements, road safety education and traffic calming measures.

When it comes to managing safety on freeways, the SANRAL's incident management system, supported by central coordination centres, embraces interaction between emergency services and law enforcement agencies on all declared national routes.

Maritime safety

An estimated 7 000 vessels pass around South Africa's coastline annually, of which many are laden tankers carrying in excess of 30 Mt of crude oil. South African weather conditions present regular challenges to vessels, often resulting in distress calls to the Cape Town-based Maritime Rescue Coordination Centre (MRCC).

Piracy constitutes a serious challenge to the development and stability of the SADC member states, given the importance of the region's international seaborne trade and its vital contribution to regional food stocks and economic development.

Threats of piracy are of particular concern to the SADC, whose coastline and shipping lanes are extremely vulnerable to maritime crime. As the SADC's coastal area does not fall within patrol areas of the international anti-pirate forces, the SADC will have to take responsibility for its own maritime security.

The threat around the Horn of Africa and SADC waters detrimentally affects the SADC's trade and economy.

The SADC's Maritime Strategy entails a regional partnership with all member states contributing within their means. Not all members necessarily have the essential maritime and military capabilities, but they still contribute in other ways by providing land-based equipment such as radar and soldiers to patrol coastlines and islands.

The SADC has established robust rules of engagement for anti-piracy, which are largely consistent with those of other regions and task forces.

Regarding the legal framework, SADC member states are expected to:

- ratify or accede to international maritime conventions/treaties/regimes and the incorporation of these into their national law;
- put in place comprehensive legal regimes at national level, consistent with international law, to prosecute pirates;
- stop the practice of "catch-and-release" of pirates since it allows experienced pirates to execute more sophisticated acts of piracy;
- strengthen and harmonise regional and domestic legal frameworks for arrest, awaiting trial detention, prosecution and imprisonment or repatriation of pirates; and
- take responsibility for its own maritime security in cooperation with other regions, task forces, navies and role players.

The MRCC enables South Africa to exercise its responsibilities to the international community by employing state-of-the-art search-and-rescue infrastructure and services.

South Africa has a well-established pollution prevention strategy, and is ready to respond in case of threats to the environment or to provide assistance to vessels at risk.

South Africa acts in terms of the Indian Ocean Memorandum of Understanding (MoU) on Port State Control and has a similar agreement with the states of West Africa in the form of the Abuja MoU.

Search and rescue services

The Southern African Search and Rescue Organisation (Sasar) has been in existence since 1957. It was formalised through the enactment of the South African Maritime and Aeronautical Search and Rescue (SAR) Act, 2002 (Act 44 of 2002). The Act gave the organisation a statutory mandate to coordinate all SAR activities within South Africa's area of responsibility.

South Africa is responsible for a huge SAR area, representing about 10% of the globe and about 28.5 million km^2 in total. To manage this vast area, the South African area is divided into the aeronautical and maritime SAR areas.

The aeronautical SAR region covers Lesotho, Namibia, South Africa and Eswatini, and associated flight information regions.

The maritime SAR area stretches about halfway between South Africa and South America on the western side, and about halfway between South Africa and Australia on the eastern side. It also borders on Namibia, Angola, South Africa and Mozambique on the northern side and then extends to the south pole.

Relevant operational structures and substructures were established for Sasar to execute its mandate successfully.

The Aeronautical Rescue Coordination Centre (ARCC) and the MRCC are the primary structures responsible for the execution of Sasar's statutory mandate. The ARCC and the MRCC are based at the ATNS and SAMSA.

The SAR only works when several countries and all stakeholders collaborate across borders. This culture of collaboration dates back to 1959 when the Convention on International Civil Aviation first made provision for cooperation between states.

According to this provision, states will individually or in cooperation with other states, arrange for the establishment and prompt provision of the SAR services within their territories to ensure that people in distress get assistance.

Regional cooperation also uses scarce resources and helps nations to avoid duplicating efforts and facilities.

Through this collaboration, services are provided for poor states in a uniform way across a wide area. Collaboration also reduces the overall cost of the SAR operations.

The SADC approached the ICAO and the IMO to fund the training requirements identified for the region.

In collaboration with the DEFF, the DoT is also planning to create the SAR capacity in the Antarctic region.

The DoT, the South African National Defence Force, Telkom, Portnet, the SAMSA, the SACAA, the ATNS, the South African Police Service, the Independent Communications Authority of South Africa, the SAA and the Department of Cooperative Governance and Traditional Affairs are members of the Sasar and contribute their services and facilities.

Voluntary organisations such as the 4x4 Rescue Club, the Mountain Club of South Africa, Hamnet (the national amateur radio emergency communication network) and the National Sea Rescue Institute are also members of the Sasar.

The ARCC Centre is an operational facility of the Sasar that promotes the efficient organisation of search and rescue services and coordinates aeronautical search and rescue operations. This plays a significant role in improving the safety of South African airspace.