

# TRANSPORT

# SOUTH AFRICA YEARBOOK 2010/11

MARCH & MAR

# TRANSPORT

The South African Government identified public transport as the key legacy project for the 2010 FIFA World Cup<sup>™</sup>. Over the past few years, a major capital injection into transport-related infrastructure and operations has begun to produce positive results.

As part of preparations for the World Cup, government upgraded its road and rail infrastructure, and airports, and introduced new systems such as the Bus Rapid Transit (BRT) System, also known as Rea Vaya.

In June 2010, the Gautrain moved out of testing and into fully fledged operation. Although the Gautrain was not earmarked as a World Cup project, the date of completion for the route between OR Tambo International Airport and Sandton was fasttracked to be operational just in time to carry World Cup passengers. The Gautrain carried more than 400 000 passengers during its first month of operation.

The Passenger Rail Agency of South Africa (Prasa) used the 2010 World Cup as a springboard to upgrade rail infrastructure to increase mobility and accessibility for commuters.

It built new-generation stations at Bridge City (eThekwini), Moses Mabhida (eThekwini) and Orlando Station in Soweto.

All Airports Company South Africa (Acsa) upgrades at OR Tambo, Cape Town, Bloemfontein, Port Elizabeth and King Shaka airports were completed by June 2010.

Building on the successful delivery of the World Cup transport infrastructure, government aims to take forward the delivery of major projects such as the:

- completion of the new petroleum pipeline
- completion of the Gautrain in 2011/12
- expansion of the BRT System.

The key deliverables of the transport sector include:

- reducing transport costs
- improving safety
- reducing the backlog of road and rail infrastructure
- enhancing accessibility to and affordability of quality public transport in both urban and rural areas
- optimising freight logistics to improve energy efficiency.

The Moloto Corridor is another project that the Department of Transport identified as a priority. The project was registered as a private-public partnership. In 2010, the department released details of a proposed high-speed rapid rail link between Durban and Johannesburg.

# Policy and initiatives National Transport Master Plan

In May 2010, the Department of Transport presented Parliament with a R750-million transport master plan (Natmap), which includes linking Johannesburg to Durban and Polokwane via rapid train networks. The plan includes expanding the Port of Saldanha, doubling the Huguenot tunnel outside Paarl and expanding the Port of Cape Town. Part of Natmap is to form partnerships with the private sector to help fund the projects and lower the burden on taxpayers. Cabinet initiated the Natmap in 2007 to develop and establish a multimodal transport system to meet South Africa's needs up to 2050.

Natmap aims to:

- facilitate long-term and sustainable socioeconomic growth
- promote comprehensive integrated development planning
- act as the infrastructure implementation/ action plan of macro-scale projects for the whole country.

Natmap's goals include:

- maximising the use of existing infrastructure facilities
- developing future infrastructure facilities
- developing an up-to-date and accurate central land-use/transportation data bank.

#### Public Transport Strategy (PTS) and Action Plan (2007 – 2020)

Čabinet approved the PTS and Action Plan 2007 – 2020 in March 2007.

The strategy articulates a vision to shift public transport service delivery away from operator-controlled, commuter-based, intermodal routes to user-oriented, publicly controlled, fully integrated, mass rapid public transport networks. The aim is to provide quality services along priority corridors, remove duplicate services and provide integrated mass rapid public transport networks. This includes transforming the bus and rail services into a public transport system integrated with recapitalised taxi services. The key areas of the strategy consist of:

- · safe and secure operation monitoring by intelligent transport system-control centres
- a car-use competitive public transport option, which enables strict peak-period car-use management
- · electronic fare integration and single ticketing when making transfers
- an integrated feeder service, including walking, cycling, bus and taxi networks.

#### Electronic National Traffic Information System (eNaTIS)

eNaTIS is the official register for all vehicle, driver's licence, contravention and accident data. The purpose of eNatis is to streamline the Department of Transport's motor-vehicle registration services. The system delineates the life cycle of a vehicle from the factory floor to the scrap yard.

In 2009, more than 177 000 000 transactions were performed on eNaTIS. This represents an increase of 12,67% compared to 2008's 157 340 912 transactions. By the end of December 2009, a total of 433 399 043 transactions had been performed on the system since its introduction in May 2007.

Compared with 2008, new vehicle registrations fell by 29,57% in 2009, while used vehicle registrations increased by 0,35%.

At the end of December 2009. South Africa's live vehicle population stood at 9 587 781.

Through eNaTIS, the department is able to eliminate duplicate vehicle registration and cloning.

The Department of Transport also agreed with Mozambigue, Swaziland and Namibia to make eNaTIS available to them to harmonise vehicle registration in the region.

From September 2010, vehicles travelling between these countries are registered on the eNaTIS system. This ensures that none of these countries is used to reregister stolen vehicles, which are taken across South Africa's borders.

#### Black Economic Empowerment (BEE)

The Draft Transport Charter was gazetted in August 2009, as integrated sector codes, in terms of Section 9(1) of the Broad-Based BEE (BBBEE) Act, 2003 (Act 53 of 2003). The gazetting of the transport sector codes means that codes for eight subsectors, excluding the foreign airline component of the aviation subsector, are now final and binding across the spectrum of the national transport industry.



In July 2010, more than 8 000 poor families in the North West benefited from Itirele (do it vourself), a new road-maintenance programme that employs people from poor households in an effort to alleviate poverty and create sustainable

livelihoods, specifically targeting households headed by women in the rural areas. Approximately R60 million had been budgeted for the programme and beneficiaries earned at least R520 a month.

The integrated transport sector codes will come up for review every five years.

Among other areas of development, the transport sector codes commit to:

- training and skills development, to increase the number of black pilots in the aviation industry, as per the Aviation Subsector Code
- achieving a black-ownership target of 35% in the Bus Commuter Service Subsector Code within five years
- empowering workers and pursuing worker rights in the taxi industry, and imparting these individuals with the requisite skills to take up management positions
- ensuring that the taxi industry provides commuters with reliable, safe, affordable, efficient and quality public transport services.

#### Non-motorised transport (NMT)

The promotion of NMT primarily aims to increase transport mobility and accessibility, mainly in rural areas.

The Department of Transport has broadened its Shova Kalula "Pedal Easy" Project into a more comprehensive NMT project that incorporates, among other things, cycling and animal-drawn carts.

The department aims to distribute a million bicycles countrywide by 2015, in line with the resolution and action plan of the African Ministers' Transport Summit held in Addis Ababa, Ethiopia, in 2005.

The Department of Transport issued an "expression of interest" to establish a bicycle manufacturing plant in South Africa to produce bicycles for the Shova Kalula Proiect.

The project forms part of government's action programme and is expected to contribute to its anti-poverty strategy and second-economy interventions.

In 2010, the Shova Kalula Project of implementation was in its fourth phase and aimed to roll out one million bicycles countrywide by the end of 2010.

It is believed that these initiatives improve the mobility of and access to economic opportunities by rural communities.

The Shova Kalula Project also incorporates the establishment of micro-businesses, which sell, repair and maintain bicycles to ensure the sustainability of the project.

# New Partnership for Africa's Development (Nepad)

From a transport point of view, key issues in creating an effectively coordinated African response to global market challenges are market access, mobility and systems integration.

The Department of Transport is contributing actively to the practical realisation of Nepad and the Southern African Development Community (SADC) development goals in several major areas, by promoting:

- efficient and effective maritime transport services
- · passenger rail-systems integration
- road-systems development and infrastructure maintenance.

Government leaders, policy-makers and experts from Africa and overseas met with top executives from the private sector, industry decision-makers, investment bankers and other stakeholders to discuss the continent's most urgent cross-border transport issues affecting road, rail, air, sea routes and ports during the second annual Nepad Transport and Infrastructure Summit (2010) and Africa Expo, in October 2010.

The Africa Transport, Trade and Infrastructure Exhibition was held at the same time.

# Public entities and other agencies

The Department of Transport has established different bodies to take over certain elements of government's operational activities. They include the South African National Roads Agency Limited (Sanral), the South African Maritime Safety Authority (Samsa), the Cross-Border Road Transport Agency (CBRTA), the Transport Appeal Tribunal, the Road-Traffic Management Corporation (RTMC), the National Railway Safety Regulator, the South African Civil Aviation Authority (SACAA), the Road Accident Fund (RAF), Air-Traffic Navigation Services (ATNS) and Acsa.

#### South African National Roads Agency Limited

Sanral reports to the Department of Transport and is responsible for the design, construction, management and maintenance of South Africa's national road network, including toll and non-toll roads. Sanral manages the following: 1 573 km of dual carriageway, 550 km of four-lane undivided roads; 14 047 km of two-lane, single roads; 1 288 km of toll roads; and 1 832 km of state toll roads. In 2009, Sanral awarded construction contracts worth R18 billion.

Sanral's responsibilities are to:

- strategically plan, design, construct, operate, rehabilitate and maintain South Africa's national roads
- deliver and maintain a world-class primary road network
- generate revenue from the development and management of its assets
- undertake research and development to enhance the quality of the country's roads
- upon request of the Minister of Transport and in agreement with a foreign country, provide, operate and maintain roads in that country.

Sanral regards innovation and state-of-theart technology as core to its mission, which is clear from its Open Road Tolling (ORT) Project in Gauteng. The ORT Project allows tolling without road users having to negotiate toll plazas. The Intelligent Transport Systems (ITS) used in conjunction with the ORT will contribute to lessening congestion, improving road safety, reducing carbon emissions and limiting the impact of greenhouse gases on the environment.

During 2009/10, actions and programmes were initiated to roll out ITS nationally, with Cape Town and Durban as priorities.

#### South African Maritime Safety Authority

Samsa is a statutory body that reports to the Minister of Transport. Its responsibilities include promoting safety of life and property at sea, preventing marine pollution by pollutants emanating from ships and coordinating overall technical operations. It also develops policy on legal issues, foreign relations, marine pollution and certain specific safety matters.

Samsa's main functions are to:

- provide shipping competence and pollution services in a regional context
- manage marine incidents, casualties and wrecks, and participate in search-andrescue missions
- control standby tugs and pollution stores
- maintain seafarers according to standards of training and staffing criteria
- provide a shipping-administration support service

- · manage the registration of ships
- manage a coastal patrol service
- manage vessel traffic, including navigation aids
- · provide lighthouse services.

Funding comes from, among other sources, levies on ships calling at South African ports, direct user charges and government service fees.

In October 2010, a Samsa centre for seafarers and fishing was launched in Durban. South Africa requires at least 36 000 seafarers based on the over four million tons (Mt) of cargo that the ports handle but there are only 1 800, most of whom are not at sea.

The Centre for Seafarers and Fishing will ensure that the country is able to produce more seafarers through education and training interventions at institutions of higher learning

# Cross-Border Road Transport Agency

The CBRTA was established under the Cross-Border Road Transport Act, 1998 (Act 4 of 1998). Its responsibilities include:

- improving the flow of freight and passengers
- introducing regulated competition in respect of cross-border road transport
- reducing operational constraints for the cross-border transport industry
- enhancing and strengthening the capacity of the public sector in support of its strategic planning, enabling and monitoring functions
- empowering the cross-border road transport industry to maximise business opportunities and to regulate themselves to improve safety, security, reliability, quality and efficiency of services.

# **Road Accident Fund**

The RAF is a public entity that compensates victims of motor-vehicle accidents for bodily injuries and/or loss of financial support caused by the death of a breadwinner. The rights for compensation are prescribed by the RAF Act, 1996 (Act 56 of 1996).

The RAF derives its income from a tax levied on petrol and diesel sold in South Africa.

The RAF received an overhaul in 2010. The overall aim is to provide an effective benefit system, which is reasonable, equitable, affordable and sustainable in the long term. The RAF works closely with community road safety councils to ensure survivors of road collisions receive appropriate postcollision care and compensation. They educate communities, especially the poor, and assist them to access the care that will help them deal with the death of loved ones and any injuries they may have sustained, and to continue leading normal lives.

In February 2010, the department released the draft Road Accident Benefit Scheme. Cabinet approved the RAF draft No-Fault Policy for publication for consultation on 18 November 2009. The draft No-Fault Policy proposes major changes to the motor-vehicle accident compensation scheme for personal injury or death.

The proposed No-Fault Scheme aims to provide compensation that does not depend on the status of the injured or deceased person. It aims to introduce user-friendly claiming procedures and ensure that compensation is received as soon as is reasonably possible.

In addition, by eliminating fault or wrongdoing as a determinant of compensation, a number of people who would previously not have been able to claim, will be entitled to benefits under the proposed scheme.

# South African Civil Aviation Authority

The SACAA was established on 1 October 1998 following the enactment of the SACAA Act, 1998 (Act 40 of 1998). The Act provided for the establishment of a stand-alone authority charged with promoting, regulating and enforcing civil aviation safety and security.

The creation of the SACAA reflected the Government's priorities of policy development, economic restructuring, addressing social inequalities and reducing the burden on the general taxpayer by expanding the application of the "user-pays" system. The setting up of a self-funding authority has resulted in the SACAA becoming more accessible and accountable to its stakeholders.

The SACAA has become a leader in the aviation regulatory sector in the SADC region. The SACAA has hosted dozens of

In September 2010, 21-year-old Mr Juliano Hanse from the Eastern Cape won the Novice Rigid Under-22 Years Category at the 2010 International Driver of the Year Competition in Austria. Hanse was part of a 16-member team that represented South Africa at the competition. This is the first time since the inception of this competition, that South Africa has produced a world champion in this category. regional meetings and conferences since 1994 and is championing regional efforts to harmonise aviation regulations and improve the level of aviation surveillance in SADC member states.

In 2003, South Africa was elected member of the International Civil Aviation Organisation (ICAO) Council, a move that has resulted in the country's participation at the highest forum regarding aviation matters.

The SACAA is fully self-funded, deriving its revenue from a passenger safety charge of R11 for passengers departing on scheduled flights from South African soil (76% of total revenue), a 4c per litre fuel levy on the sales of jet fuel and avgas to mainly non-scheduled and cargo operators by fuel companies (1%), and from direct charges for services rendered by the SACAA staff (user fees) (23%).

The primary purpose of the SACAA is to promote, regulate and support high levels of safety throughout the South African civil aviation industry. The organisation's core activities include, among other things, aviation safety and security and oversight in terms of operations, aircraft, personnel, airports and airspace.

The SACAA is responsible for regulating all individuals or organisations involved in civil aviation in South Africa. Stakeholders include:

- airports
- aircraft owners and operators
- aircraft designers and manufacturers
- aircraft maintenance organisations
- air cargo
- airline operators
- licensed aviation personnel
- aviation training organisations
- air-traffic services units
- air-cargo operators.

In April 2010, the SACAA launched a 15-member committee aimed at advising the authority on medical risks posed by aviation staff. The Aeromedical Committee, comprising 11 permanent members and four non-permanent members appointed by

In June 2010, the Airports Company South Africa (Acsa) announced that it would be expanding its activities in India in the next few years. For the past four years, Acsa had been managing the airport in Mumbai with an Indian partner. Acsa's share of the profit is 10% and Acsa's income from the turnover in the 2009/10 financial year was R22 million. India plans to build a further 12 new airports and Acsa had contributed R166 million to the expansion. the Director of Civil Aviation, includes representatives of the universities of Pretoria, Limpopo and the Witwatersrand and the South African Military Heath Service.

# Airports Company of South Africa

Acsa operates South Africa's 10 principal airports, providing airlines with world-class, secure infrastructure. The 10 airports are: OR Tambo International; Cape Town International; King Shaka International; Durban; Bloemfontein International; Port Elizabeth International; Upington International; East London Airport; George Airport and Kimberley Airport.

In 2009/10, Acsa's total revenue grew by 12% to R3,5 billion.

Acsa handles more than 32 million passengers annually. The number is expected to rise to 40 million in 2013.

The 10 airports handle over 98% of the country's commercial air traffic.

# Air-Traffic Navigation Services

The ATNS is responsible for the efficient running of South Africa's air-traffic control systems and maintaining navigation equipment, including the deployment of air-traffic controllers and technical staff.

Its services extend to 10% of the world's airspace and include the provision of vitally important aeronautical information used for all flight-planning purposes as well as search-and-rescue activities and the maintenance of a reliable navigation infrastructure.

The Aviation Training Academy is a wellestablished facility that is used for air-traffic services training and technical training for equipment support, both locally and internationally.

The ATNS does not receive government transfers and derives its funding from its operations.

# Transnet Limited

Transnet is a focused freight-transport and logistics company wholly owned by the South African Government. It comprises the following operating divisions:

- Transnet Freight Rail (TFR) the freight rail division
- Transnet Rail Engineering the rolling stock maintenance business
- Transnet National Ports Authority (TNPA)

   fulfils the landlord function for South Africa's port system

- Transnet Port Terminals manages port and cargo terminal operations in the country's leading ports
- Transnet Pipelines the fuel and gaspipeline business pumps and manages the storage of petroleum and gas products through its network of high-pressure, long-distance pipelines.

Infrastructure investments were expected to create over 300 000 jobs and boost economic growth in four provinces in the country. The utility's projects are expected to contribute just over 4,8% to the country's gross domestic product (GDP) by 2018. Outlining its five-year strategy in March 2010, Transnet indicated that more than R93 billion would be spent on infrastructure expansion and other projects to improve customer services and ensure financial sustainability in future.

In the 2009/10 financial year, Transnet's turnover on rail cargo was R20,8 billion and the income was R7,3 billion; the turnover on pipelines was R1,1 billion and the income was R703 million; the turnover on track engineering works was R8,2 million and the income was R670 million; and the turnover on harbour activities was R12,6 billion and the income was R7,2 billion.

The R93,4 billion Transnet spent on ports, rail and pipelines to fund the acquisition of 304 locomotives, will increase its stock of 72 643 wagons by 10% to improve coal and iron ore freight capacity and the general freight business. The acquisition and installation of 19 new container-handling cranes at South African port terminals will have the greatest impact in KwaZulu-Natal where it is expected to add 18% to the province's GDP and create 143 704 employment opportunities over the next eight years.

In the Northern Cape, Transnet investments were expected to contribute 54% of the province's GDP and create 57 463 work opportunities by 2018.

In Mpumalanga, the parastatal's projects contributed 15% to the province's GDP and created 46 016 work opportunities.

In the Eastern Cape, the projects contributed 14% of the province's GDP and created 62 435 work opportunities.

# Road infrastructure National roads

In terms of the National Roads Act, 1998 (Act 7 of 1998), government is responsible for overall policy, while road-building and maintenance are the responsibility of Sanral. The Department of Transport continues to improve the road network by ensuring that it is well maintained and safe. A new national roads plan is being developed, acknowledging the importance of roads to the economy.

For the next five years, R75 billion will be used for road infrastructure, maintenance and upgrading and an additional R3 billion for the Expanded Public Works Programme (EPWP) for access roads, all of which are attempts by government to alleviate traffic congestion.

The department identified lack of dedicated funding for road maintenance, poor asset management and capacity challenges in municipalities and provinces, and underinvestment in the maintenance of road infrastructure as the causes of poor road conditions.

The department plans to develop a ringfencing mechanism by creating a fund to source additional funding for maintenance.

### **Provincial roads**

In May 2010, the Department of Transport was working with National Treasury to deal with road-maintenance backlogs and challenges at provincial and local level.

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

#### **Municipal roads**

The construction and maintenance of most

President Jacob Zuma opened King Shaka International Airport, north of Durban, in May 2010. Interesting facts about King Shaka International Airport include:

- 4 900 t steel was used to build the passenger terminal – about half the amount of steel used to build the Eiffel Tower in Paris
- there is a choice of 10 car-hire service-providers
- the floor space of the passenger terminal is the same size as 27 soccer fields
- there are 72 counters where passengers can book in for their flights
   the remumping 2.7 km lease
- the runway is 3,7-km long
- there are 6 500 undercover parking bays and 3 000
   sheltered parking spaces outside the airport
- provision has been made for 50 motorists who want to drop off or collect a passenger
- there is provision for 25 taxis
- visitors have a choice of 12 restaurants
- there are 30 shops which sell anything from jewellery to clothes.

roads and streets within the municipal boundaries of cities and towns are the responsibility of the municipality concerned.

#### **Toll roads**

The current toll road network comprises about 19% (3 120 km) of the current national road grid.

Some 1 832 km of these toll roads are managed by Sanral. In its endeavour to continue with the expansion and maintenance of the comprehensive national road network, Sanral will continue with the selective expansion of the toll road network.

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

The three concessioned routes are: the N1/N4 highway, which is operated by Bakwena Platinum Corridor Concession, between Pretoria and Bela Bela and between Pretoria and the Botswana border on the N4; the N3 between Heidelberg in Gauteng and Cedara in KwaZulu-Natal, which is operated by the N3 Toll Concession; and the N4 East, Maputo Development Corridor, which is operated by TRAC. The upgrading of the road between the Belfast and Wonderfontein section of the N4 was completed at the end of August 2009. The single carriageway has been upgraded to a double carriageway in both directions to accommodate increased traffic.

During 2009/10, Sanral spent R605,5 million on 1 900 km of toll roads for operational costs. Capital expenditure on toll roads amounted to R8,2 billion for strengthening and improving roads, and constructing new facilities.

# Public transport

In terms of the Constitution of the Republic

The Road Construction and Maintenance Summit took place at Gallagher Estate, Midrand, Gauteng, in May 2010, focusing on various challenges relating to the construction and maintenance of roads in the country. Some of the highlevel issues the summit addressed were: a renewed focus on asset preservation and maintenance, efficient spending on road infrastructure, the balance between preservation and expansion, road-asset management systems as a tool for optimal decision-making as well as capacity and skills development constraints faced by the sector.

The National Road Maintenance Programme is expected not only to stop the decline of the road infrastructure, but also to create jobs, develop small, medium and micro-enterprises, and contribute to the growth of the country's economy. By the fledge

By the end of 2010, most provinces had fully fledged community road safety councils. These councils empower communities to become key players in their own safety.

of South Africa, 1996, legislative and executive powers in respect of public transport are a provincial competency. National government, however, is responsible for policy-formulation, monitoring and strategic implementation. The Department of Transport continues to administer subsidies for buses and other subsidised forms of public transport.

According to the National Household Travel Survey, 2003, there were about 3,9 million public-transport commuters in mid-2003. The 2,5 million taxi commuters accounted for over 63% of public-transport work trips. Bus services accounted for another 22% of public-transport commuters and the rest were carried to work by train. In addition to the 2,5 million commuters who used minibus taxis as the main mode of travel, there were another 325 000 commuters who used taxis either as a feeder mode to other public-transport services, or as a distribution service from the main mode to their places of work.

The department identified public transport as a key legacy project for the World Cup and beyond. It included world-class airports, upgraded train stations, refurbished coaches and luxury buses, taxis and integrated rapid public transport networks (IRPTNs) such as the BRT System.

Government invested more than R40 billion on public transport infrastructure for the tournament.

The World Cup legacy will ensure that by 2020, more than 85% of any city's population will live within a kilometre or less to an IRPTN feeder or corridor. There are train stations in the vicinity of most World Cup stadiums and the walk from each station to the stadium is less than five minutes.

The IRPTNs developed during the World Cup accelerated improvements in public transport in South Africa, making it the first African country to have such facilities. South Africa's PTS, which comprises a multibillion-rand transport infrastructure plan, is expected to change public transport travel in South Africa.

The PTS aims to accelerate the improvement in public transport by establishing IRPTNs, which will introduce priority rail corridors and BRT systems in cities. The Department of Transport plans to introduce a training academy for the taxi industry and mobilise women in transport as owners and operators. The taxi academy will teach business management and advance driving skills. The minibus taxi industry carries over 60% of South Africa's commuters.

# **Urban transport**

Metropolitan transport advisory boards govern urban areas, which have been declared metropolitan transport areas. Both shortand long-term programmes for adequate transportation development are drawn up by the core city of each area and are revised and adjusted annually.

Nine such core areas exist, namely Johannesburg, Cape Town, Pretoria, Durban, Pietermaritzburg, Port Elizabeth, the East Rand, Bloemfontein and East London.

The planning of transport for metropolitan and major urban areas must be done in accordance with a growth-management plan, and travel modes should not compete with one another.

In urban areas, passenger road-transport services are provided by local governments; private bus companies, which operate scheduled bus services between peripheral areas and city centres; and minibus taxis. The Department of Transport supports provincial departments of transport and public works in constructing intermodal facilities and in their efforts to achieve integration between bus and taxi operations.

The minibus-taxi industry has shown phenomenal growth during the last few years, leading to a decrease in the market share of buses and trains as modes of transport.

# **Rural transport**

The deep rural areas are still isolated from major road and rail routes. However, the Rural Transport Strategy, approved by Cabinet in December 2007, is promoting mobility in such areas.

Rural infrastructure contributes to job creation and improves the socio-economic needs of people in rural areas. It ensures access to schools, clinics and economic opportunities.

The Rural Access Improvement Programme is part of a comprehensive rural transport strategy for South Africa, which addresses challenges in rural development, such as:

- · building bridges and NMT facilities
- developing and implementing the IRPTNs for regular transport services

- developing and upgrading the airport network with a proper road-link infrastructure and services
- revitalising rural railway operations by expanding rail passenger services and freight operations to the rural areas.

Through the EPWP, the department aims to contribute to job creation by implementing labour-intensive projects. The department secured initial funding of R1 billion for rural road infrastructure. The rural infrastructure and services portfolio will be run by an agency, and a project-management team and unit have been appointed to drive this programme.

# Taxi Recapitalisation Programme (TRP)

Government's TRP is underpinned by a strong desire for an integrated publictransport system. The main objectives are to have a taxi industry that supports a strong economy, that puts the passenger first and that meets the country's socio-economic objectives.

Government recognises the critical role played by the industry, and endeavours to ensure its growth and sustainability.

The TRP is not only about scrapping old taxi vehicles, but also about the sustainability and effective regulation of the industry. It is a direct response to the recommendations of the National Taxi Task Team, to consider specific interventions to turn the taxi industry around.

Compliance with the necessary basic requirements include possession of legitimate documentation and securing the appropriate type of vehicles, specifically new taxi vehicles that comply with safety specifications.

The TRP is part of government's broad integrated public-transport network system, which is aimed at forming part of the larger public transport feeder systems.

The United Nations (UN) proclaimed 2011 to 2020 as the UN Decade of Action for Road Safety. Its goal is first to stabilise and then to reduce the global forecast levels of road-traffic fatalities worldwide by rolling out focused programmes

fatalities worldwide by rolling out focused programmes in every country.

This campaign is gathering momentum all over the world. The G20 and the World Bank have endorsed the Decade of Action as did the first Global Ministerial Conference on Road Safety in 2009, which was held in Russia.

The theme for the Decade of Action for Road Safety is *Make Roads Safe* in recognition of the global burden of road fatalities and injuries. By May 2010, more than 38 000 old taxi vehicles were scrapped, with more than R1,7 billion paid out to operators.

# **Bus Rapid Transport**

BRT systems provide an exciting and innovative mechanism for implementing high-quality public transport networks that operate on exclusive right of way, and incorporate current bus and minibus operators with no source of income or jobs.

By June 2010, the BRT was operational in Johannesburg, Pretoria, Bloemfontein, Port Elizabeth and Cape Town. The system was part of 2010 World Cup plans but it is also an immediate legacy of the 2010 World Cup. The BRT System's benefits outweigh its total cost. It addresses congestion, drives economic growth, is world-class and affordable.

Since 30 August 2009, Rea Vaya has become a part of South African public transport culture.

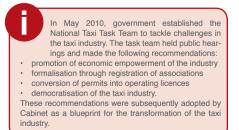
Highlights about Rea Vaya are:

- passenger numbers have increased from 11 800 per day to 34 000 per day
- 1 100 trips are operated daily
- 18 500 km are travelled daily
- · 280 000 litres of diesel are used monthly
- 1 000 people have been employed in the operations
- 307 000 passengers were transported during the World Cup and stadiums were cleared way ahead of FIFA benchmark times.

#### **Road-traffic safety**

There are about 700 000 road crashes in South Africa every year, resulting in the loss of some 18 000 lives and 50 000 serious injuries, at a cost of almost R50 billion.

In February 2010, the Department of Transport hosted the National Road-Safety Summit, during which the National Road-Safety Steering Committee was nominated, comprising delegates from different prov-





The Johannesburg Bus Rapid Transport (BRT) System consists of 90-seater capacity trunk buses and 32-seater feeder buses, which bring people from outer areas to the trunk routes.

Over time, Rea Vaya will cover more than 300 km of trunk routes across the city, and is expected to transport 430 000 passengers daily.

It is expected that business professionals and companies will use the system, moving private vehicles out of the congested roads.

The BRT routes are designed to link up with the inner-city distribution system and various other development nodes and residential areas.

Various public transport interchange facilities along the routes are expected to provide connection to other road-based public transport services in other areas of the city.

inces, with the ultimate objective of establishing the National Road Safety Council.

The RTMC commenced its operations in April 1995 with the main purpose to pool powers and resources to eliminate the fragmentation of responsibilities for all aspects of road-traffic management across the various levels of government in South Africa, and to bring a professional approach and improved confidence into the entire system.

Government has implemented the roadsafety strategy with the RTMC as its lead agency. The World Health Organisation's *Report on South African Road Safety* notes that the country has the necessary legislation in place. This includes, among other things, the wearing of helmets by motorcyclists, the wearing of seat belts, drunken-driving legislation and the setting of speed limits.

The RTMC will continue with the zero-tolerance approach against traffic offenders.

To address this, a comprehensive public media campaign and consultative programme is in process to educate the public about the Administrative Adjudication of Road Traffic Offences (AARTO) Act, 1998 (Act 46 of 1998).

The allocation of demerit points to infringers will be introduced on a national basis.

In October 2010, the department launched a public education campaign to educate drivers about the AARTO Act, 1998. Pilot programmes have been completed in Johannesburg and Pretoria.

The RTMC is expected to ensure that AARTO is successfully implemented. In 2010, the department started training 260 traffic officers who will form part of the National Traffic Law-Enforcement Unit.

Sanral has adopted the Road-Safety Management System, which allows safety considerations to direct decisions on design, construction, maintenance, operation and the management of the road network.

#### **Arrive Alive**

Government's Arrive Alive Road-Safety Campaign aims 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
- forge an improved working relationships between traffic authorities in the various spheres of government.

In January 2010, the December 2009 Arrive Alive Campaign figures were announced:

- more than 600 000 drivers had been stopped and checked across the country
- 1 100 deaths were recorded
- more than 290 000 motorists had been fined for speeding
- 2 517 unroadworthy vehicles were removed.

In April 2010, the RTMC and the Department of Transport announced the road incident figures for Easter 2010:

- There were 105 road deaths compared with the 197 during the corresponding period in 2009
- 120 000 vehicles were pulled off the roads
- 32 692 fines were issued for various offences
- 215 unroadworthy vehicles were removed
- 654 motorists were arrested 554 for drunken driving.

As part of the National Rolling Enforcement Plan (NREP) that the department announced in September 2010, 1 053 million vehicles and drivers were stopped and checked and thousands of fines issued for various traffic offences during October 2010. The NREP marks the start of a major law-enforcement drive reflecting government's commitment to reducing road carnage in South Africa by half in accordance with the millennium development goals (MDGs).

#### Cross-border transport Multilateral

Cross-border road transport is underpinned by ground-breaking multilateral and bilateral agreements between South Africa and several of its neighbouring countries under the auspices of the CBRTA and the SADC Protocol on Transport, Communications and Meteorology, including the Southern African Customs Union (Sacu) Memorandum of Understanding.

The SADC and Sacu documents encourage, among other things, good neighbourliness between member states, and the facilitation of the unimpeded flow of goods and passengers between and across their respective territories.

#### Rail transport

In 2010/11, the Department of Transport developed a comprehensive Rail Investment Programme for South Africa's passenger rail system, which required a balance between refurbishing existing stock, acquisition of new stock and the construction of new corridors.

Through the Natmap, the department identified three high-speed rail projects, namely:

- Johannesburg to Durban
- Johannesburg to Cape Town
- Johannesburg to Musina.

Prasa aims to recapitalise its fleet over the next 18 years and there is a R98-billion financial allocation for new rolling stock.

The department aims to develop rail as part of a worldwide rail renaissance, necessitated by rapid urban migration, economic development and the emergence of mega-cities. In geographically spread countries with long-distance commuting on a daily basis, rail transport presents the best option.

During 2009/10, the department invested over R40 billion in passenger-rail infrastructure and services in South Africa, including R25 billion in the Gautrain Rapid Rail Project and almost R1,3 billion on rehabilitating Prasa coaches and signalling systems.

A sustained programme over a 20-yearperiod is expected to create certainty and enable input-manufacturers to re-tool their factories, creating sustained local industrial activities. The rail development plan template has four outcomes, namely:

- urban transit systems
- long-distance transit systems
- key strategic freight corridors
- rural access and mobility.

Part of the department's rail plan is to identify critical inputs through a cost-benefit analysis based on its competitive advantage and through the creation of economies of scale. This approach is important to create sustainable jobs and economic growth. Long-distance commuter services such as the Moloto, the Durban to Johannesburg and the Durban to Gauteng corridors were identified for development.

The Durban to Gauteng Corridor is the busiest corridor in the southern hemisphere both in terms of value and tonnage. It also forms the backbone of South Africa's freight transportation network.

It facilitates economic growth for the country, the region and the continent. The 2050 Vision for the Durban to Gauteng Corridor was adopted in September 2010. Market research for the high-speed rail began in October 2010.

#### Passenger rail safety

The Department of Transport is implementing the National Rail Passenger Plan, which charts the way for the future of passengerrail services in South Africa.

The following different options have been proposed:

- full recovery, where the entire rail network would be restored
- a limited system, where all but efficient lines/routes would be closed
- priority rail corridors, where the socioeconomic planning objectives would be balanced on existing rail strengths.

The National Railway Safety Regulator (RSR) Act, 2002 (Act 16 of 2002), is the enabling legislation for the setting up of 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 SADC railway operations
- 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 (SABS), 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, as well as human factors management.

A key to the successful regeneration of the railway system in South Africa, and indeed 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 Railway Association (Sara).

Since the RSR's creation, there has been an 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 role 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.

#### Gautrain

Construction on the Gautrain began in September 2006. The R25-billion rapid rail link is a state-of-the-art rapid rail network that comprises two links, namely a link between Pretoria and Johannesburg and a link between OR Tambo International Airport and Sandton, which was opened in June 2010. It facilitated the movement of people during the 2010 FIFA World Cup<sup>™</sup>. Apart from the three anchor stations on these two links, seven other stations will be linked by about 80 km of rail along the proposed route.

When finished in mid-2011, the 80-km regional express train will link Pretoria with Johannesburg, running at speeds of up to 160 km/hour and enabling commuters to make the trip in 42 minutes.

The three anchor stations are located at: OR Tambo International Airport, Pretoria and Johannesburg. The seven other stations are located at Rosebank, Sandton, Marlboro, Midrand, Centurion, Hatfield and Rhodesfield (Kempton Park).

The Pretoria, Hatfield and Centurion Gautrain stations are expected to be ready and operational by June 2011.

The initial minimum frequency between Johannesburg and Pretoria will be six trains per hour per direction, and it will operate about 18 hours a day. This public transport service will include dedicated, exclusive bus services to transport passengers to and from stations.

The Gautrain system will have 24 train sets, each consisting of four cars, which is equivalent to 96 rail cars designed to run at an operational speed of 160 km per hour. Of the 96 rail cars, 10 are specially customised for use on the airport link, and contain additional features such as extra luggage space and wider seats. The other 86 rail cars are designed for commuter services.

In September 2010, the Gautrain celebrated carrying one million train passengers since opening Phase One of the project. Within days of opening, in time for the World Cup, the Gautrain carried almost 80 000 passengers a week. After the World Cup the service stabilised at nearly 50 000 passengers a week.

# Passenger Rail Agency of South Africa

Prasa is tasked with transforming the country's public transport system. The agency was established by the consolidation of state-owned passenger rail entities, a roadbased bus passenger carrier and an assetmanagement entity.

The agency creates a platform from which its business units, including Metrorail, Shosholoza Meyl, Autopax and Intersite, deliver high-quality and low-cost transport services.

Prasa transports more than 645 million passengers per year across Metrorail (95%), Shosholoza Meyl (2,5%) and Autopax via 468 stations in cities and throughout the country.

The presence of buses within Prasa gives it the kind of flexibility to respond effectively to passenger demands with the real option to provide feeder and distribution services.

Ahead of the 2010 FIFA World Cup<sup>™</sup>, Prasa invested R7 billion in the refurbishment of 2 000 coaches, 780 of which were dedicated to the tournament. Some R1,4 billion was invested in the acquisition of 570 new buses for Autopax, most of which were chartered by FIFA. The buses transporting the 32 participating teams were supplied by Prasa.

Prasa built and upgraded 50 stations throughout the country, including Doornfontein, Cape Town, Orlando, Khayelitsha, Nasrec and Moses Mabhida. More than 4 000 railway police and around 2 000 security personnel were deployed in trains and stations.

### Freight transport

In 2008, freight transport activity increased by 4% in ton-kilometres shipped and 2% in tons shipped, which is just over 1,6 billion tons shipped on the four transport typologies in South Africa. Road transported 1,4 billion tons of freight at an average transport distance of 185 km. Rail transported 204 Mt at an average transport distance of 640 km.

The National Freight Logistics Strategy is being implemented and seeks, among other things, to integrate the first and second economies, and support the integration of marginalised local economies with the main logistics corridors.

The key objective is to reduce the costs of doing business and remove inefficiencies placed on businesses and their long-term sustainability.

The Department of Transport, in close cooperation with the provincial road-traffic authorities, is implementing the National Overload Control Strategy to protect road infrastructure, improve road safety and ensure seamless movement of cargo. The department has also developed guidelines in cooperation with the SABS as part of promoting self-regulation in the heavy-vehicle industry. This is aimed at fostering a partnership to ensure proper load management, vehicle road worthiness and driver fitness.

# **Transnet Freight Rail**

TFR, the largest operating division of Transnet, has as its primary purpose the transportation of rail freight. Core freight activities account for about 95% of its revenues. It is a world-class heavy haul freight rail company that specialises in the transportation of freight.

TFR has about 25 000 employees. 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.

The company is proud of its reputation for technological leadership beyond Africa

as well as within Africa, where it is active in some 17 countries.

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

TFR operates freight trains serving customers in the following major segments:

- mining: coal, iron ore, manganese, granite, asbestos, chrome and non-ferrous metals
- manufacturing: chemicals, fuel and petroleum, fertiliser, cement, lime, iron steel and scrap
- agriculture and forestry: grain, stockfeed and milling, timber, paper and publishing, and fast-moving consumer goods
- containers and automotive: intermodal wholesale, automotive and industrial.

In 2009, TFR handled 177 Mt of freight, including critical cargo such as iron ore, coal and containers. Transnet will be investing R54,6 billion of its total five-year capital investment plan of R93,4 billion in rail infrastructure and in acquiring and upgrading rolling stock.

#### **Civil aviation**

The 2010 FIFA World Cup<sup>™</sup> was perhaps one of the most aviation-heavy world cups in the history of FIFA.

Through the Acsa, the Department of Transport invested R20 billion in the airports development programme. This included

After the completion of the R5-billion Bridge City initiative, townships such as Phoenix, Inanda, Ntuzuma and KwaMashu outside Durban, KwaZulu-Natal, will enjoy the benefits of a better public-transport system, increased access to economic opportunities and job creation.

To complement this initiative, the Department of Transport aims to establish an extensive transport system in and around the Bridge City precinct, as part of a national passenger rail plan.

Through the Passenger Rail Agency of South Africa, more than R350 million was invested in the underground Bridge City rail station. The rail extension is expected to serve 40 000 commuters per day and handle 14 000 passengers in peak hours. More than R360 million was invested on new roads, road upgrades and public amenities within and surrounding the Bridge City precinct to further augment the R750-million shopping mall within this precinct.

This project is a catalyst for economic growth and integration of local communities, and has created more than 60 000 job opportunities.

Further development of surrounding areas include a new rail link with a terminal station at Bridge City, a bus or taxi intermodal facility at the station, a new halfdiamond interchange on the M25, and the uBhejane road extension. the OR Tambo International Airport Central Terminal Building upgrade, the Cape Town International Airport Terminal upgrade, the Bloemfontein International Airport runway rehabilitation and airport upgrade as well as the King Shaka International Airport.

Traffic levels at airports were significantly higher with the Aeronautical Information Management Unit processing large numbers of flights. Air traffic was nearly double the daily average that South African airports normally handle. Passenger processing systems at all airports were significantly improved. The ATNS also played a critical role in terms of aircraft movements in and out of airports.

For most of the morning of 11 July 2010, ahead of the World Cup final between Spain and the Netherlands, an aircraft was touching down every two minutes at OR Tambo International Airport. On 11 July and 12 July 2010, OR Tambo facilitated more than 1 400 aircraft movements, carrying well over 160 000 passengers. The total number of aircraft handled between 1 June and 12 July at the three main international airports amounted to 58 045, namely: OR Tambo (35 964), Cape Town (14 600) and King Shaka (7 481).

#### Airlift Strategy

Cabinet approved the Airlift Strategy in July 2006 to introduce effectively structured regulatory measures for increasing tourism growth for 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
- unblocking obstacles to growth through regulatory mechanisms, and bilateral and multilateral air-services negotiations.

In particular, the strategy supports the MDGs and the objectives of Nepad to increase African connectivity and access through the accelerated implementation of the Yamoussoukro Decision of 1999 on the liberation of intra-Africa air-traffic services.

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 airtransport 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 department also developed the Airlift Implementation Plan, which provides a clear framework and capacity targets to be met. The Airlift Strategy is expected to promote the provision of adequate air-service capacity and infrastructure to cater for the projected growth in air movements within South Africa, and between South Africa and its key international partners.

#### Airlines

Major domestic airlines operate in the country, as well as a number of smaller charter airline companies.

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

Other airlines operating in the country are Kulula, Mango and 1time.

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, Airlink Swaziland, Alliance Express, BA, Cameroon Airlines, Delta Airlines, El Al, 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 Atlan-

One of the world's leading aircraft manufacturers, Airbus France, has signed a contract with South African Airways for the lease of six new planes in a long-term partnership. The six planes, valued at \$1 billion, will be leased to South Africa for 10 years starting in January 2011. tic, Yemenia, Zambian Air Services and Zambian Skyways.

#### South African Airways

SAA is by far the largest air carrier in Africa, with the OR Tambo International Airport being on the busiest routes in Africa. Nearly 75% of air-traffic activity in Africa takes place in the region.

SAA is the only non-stop service from the USA to South Africa, with daily departures from Washington DC, and a daily direct service from New York. The airline upgraded its in-flight entertainment on these flights, increasing the number of movies available from 15 to 44, ranging from global blockbusters to more culturally diverse options that include South African and Hindi choices. There are a number of channels with TV programmes and music from many different genres on offer.

Each seaton board includes a personal, ondemand entertainment system with a full range of upgraded content. Travellers in premium class enjoy 180-degree flat-bed seats. SAA's local network includes connections to more than 20 South African destinations and more than 20 cities across the rest of the continent. As a Star Alliance member. SAA also offers its customers 975 destinations in 162 countries and 18 100 flights daily, including convenient connections from more than 30 cities in the USA through code-share services with Star Alliance member United Airlines. Members of United Airlines' Mileage Plus, US Airways' Dividend Miles and Air Canada's Aeroplane programmes can earn and redeem miles on all SAA flights.

In May 2010, SAA ordered five additional Airbus A320 aircraft, increasing an earlier commitment from 15 to 20 planes. The aircraft will be delivered from 2013.

In September 2010, SAA released its financial results and reported a group profit of R596 million. These results were achieved despite an exceptionally tough year for the aviation industry globally. SAA reported a bottom-line profit of R581 million, a 45% improvement from the previous year's net profit of R402 million. During 2008/09, some 6,7 million passengers flew SAA, representing a 2,4% decrease from 2007/08. Domestic and international passenger numbers decreased by 6% and 5% while regional passenger numbers decreased by 9%. Cargo tonnage also declined by 14%.

In May 2010, SAA was voted the best airline in Africa for the eighth consecutive

year. SAA was also named winner of the category Staff Service Excellence Africa in the Skytrax World Airline Awards<sup>™</sup>. The awards are based on results from 17,94 million questionnaires completed by 100 different nationalities of airline passengers between July 2009 and April 2010, involving more than 200 airlines worldwide.

Over the years, SAA has received several awards, making it the most awarded airline in Africa. Some of the Skytrax awards include:

- in 2008, SAA received the Best Airline in Africa and Best Cabin Crew in Africa awards
- in 2009, SAA was ranked as being among the world's top-15 international airlines for both its Business and Economy Class products and service
- in 2009, SAA was ranked 11th for its Business Class product.

# **Ports**

South Africa has nine commercial ports, of which the ninth Port of Ngqura was opened in October 2009. The country's ports handle over 430 Mt of varied cargo types, carried over 9 000 ships each year.

Commercial ports play a crucial role in South Africa's transport, logistics and socioeconomic development. About 98% of South Africa's exports are conveyed by sea. The National Ports Regulator was established in terms of the National Ports Act, 2005 (Act 12 of 2005). Its primary function is the economic regulation of the ports system, in line with government's strategic objectives to promote equity of access to ports and to monitor the activities of the TNPA. The regulator also promotes regulated competition, hears appeals and complaints, and investigates such complaints.

The TNPA is the largest port authority on the continent. It owns and manages South Africa's ports at Richards Bay, Durban, East London, Port Elizabeth, Mossel Bay, Cape Town, Saldanha and Nggura.

The TNPA provides suitable infrastructure as a conduit for the country's imports and

As a result of interventions implemented over the past two years – including the creation of the General Aviation Safety Initiative and the appointment of the Advisory Safety Panel, which ensures that investigations are concluded faster – there was a decrease of 15% in the number of aircraft accidents during 2009/10, compared to 2008/09. Fatal accidents decreased by 54% and fatalities

decreased by 70% from the previous year.

exports. As port landlord, it is responsible for:

- developing and managing port properties
- developing, advising and implementing national port policies
- providing and maintaining port infrastructure (i.e. breakwaters, seawalls, channels, basins, quay walls and jetties), and the sustainability of ports and their environments
- coordinating marketing and promotional activities for each port.

The TNPA also has a control function, which includes:

- providing vessel-traffic control and navigational aids
- licensing and leasing terminals to operators
- monitoring the performance of port operators
- ensuring the orderly, efficient and reliable transfer of cargo and passengers between sea and land.

Based on the White Paper on the National Commercial Ports Policy (2002), the vision for South African ports is to become a system of ports, seamlessly integrated in the logistics network, that is jointly and individually self-sustainable.

This will be achieved through the delivery of high levels of service and increasing efficiency for a growing customer base. It will result in the enhancement of South Africa's global competitiveness and facilitate the expansion of the economy through socially and environmentally sustainable port development. The TNPA business consists of the following divisions:

# **Trade and Logistics**

This division is the strategic business arm of the TNPA. It is responsible for customerrelationship marketing, in combination with technology and human resources (HR).

#### Landlord Services

Landlord Services ensures the planning, development and optimal use of port property and infrastructure, as well as a safe, secure and healthy port environment.

The division consists of property, engineering, and planning and development. Landlord Services has traditionally been the TNPA's major revenue earner, initially through wharfage, and currently through cargo dues.

#### **Maritime Services**

Maritime Services includes improving

efficiency in shipping services, dredging navigational waterways, and ensuring a safe shipping environment through vesseltracing services, pilotage and lighthouse services.

The ports provide:

- pilotage, tug and berthing services
- bulk-handling installations to handle dry and liquid bulk, complemented by storage facilities
- container-handling facilities
- multipurpose terminals for the handling of break bulk and containers
- access to rail and road links
- ship-repair facilities
- · feeder services.

#### **Lighthouse Services**

Lighthouse Services operates 45 lighthouses along the South African coastline.

The TNPA has vessel-traffic systems in all ports, ensuring improved safety of navigation within the port and port limits, and enhancing the service provided to the port user.

#### Marine Services

Marine Services operates 24 large tugs, eight work boats, four pilot boats and 14 launches in South Africa's commercial ports. The ports of Durban and Richards Bay provide 24-hour services.

#### Portcon International

This division provides a consultancy and training service appropriate to ports operating within the African context.

#### Port and Corporate Affairs

This division is responsible for the efficient and profitable running of the ports as service-delivery platforms.

#### Deepwater ports

South Africa's new deep-water harbour, the Port of Ngqura near Port Elizabeth, launched operations in October 2009, when its first commercial customer, the *MSC Catania*, docked at the port.

The port is an integral part of the Coega Industrial Development Zone. The 300metre long and 13-metre deep ship was used to test vessel operators' skills in offloading and handling containers with an average of 19 containers handled per hour.

The Ngqura Port, which lies at the mouth of the Coega River in Algoa Bay, is a deepwater port with a depth of between 16 and 18 metres. The improved infrastructure will relieve container congestion in the South African port system, while attracting additional transhipment cargo. The Ngqura Container Terminal will have the capacity to accommodate "ultra-mega" ships carrying 6 000 to 10 000 20-foot equivalent units, a measure used for capacity in container transport.

The port is considered the most modern harbour in Africa. Although sub-Saharan Africa has a number of smaller ports, these are only suitable for medium-sized ships. It will not only boost the economy of the Eastern Cape; but is also an important development for trade in South Africa and the rest of Africa.

The port development will also directly create employment in the region.

It also holds positive secondary benefits for other product groups such as agriculture, fishing, construction, transport (including storage), financial and business services, electricity and gas as well as wholesale and retail business.

Rail operations at the new port have also received a stamp of approval. In September 2009, TFR ran a test train on the Ngqura mainline, and was declared safe for operations.

The rail route will connect the new port to the City Deep Rail Terminal in Johannesburg in Gauteng via Beaconsfield in the Northern Cape. Transnet has refurbished 400 container wagons and will use its 7E locomotive fleet for traffic on the line, which has a designed capacity of six trains per day, each with 50 wagons.

The Port of Richards Bay is South Africa's leading port in terms of cargo volumes,

In September 2010, Airports Company South Africa (Acsa) and several local airlines launched a new system that allows passengers to make online or mobile flight bookings and print their own boarding passes.

According to Acsa, the system for domestic flights is working well, while international travellers will be able to use the new 2-D barcode (the new standard in air travel that has been adopted by the International Air Transport Association), when the Department of Home Affairs approves it.

The system is being rolled out in phases at South African airports.

Passengers will no longer have to queue at the airport to check in, as their seat will be assigned at the time of booking, while they can also print their boarding pass on any home laser or ink-jet printer. Airlines will offer a 2-D barcode printing service at their check-in counters for passengers who are not able to print their pre-booked boarding pass. handling in excess of 80 Mt of cargo annually.

The port covers a surface area of 2 157 ha on land and 1 495 ha on water, making it the biggest port in South Africa in terms of size. It also offers easy access to South Africa's national rail network.

One of the port's inherent strengths is its deep-water infrastructure, with a maximum permissible draught of 17,5 m. This, coupled with the high-tech state-of-the-art terminal infrastructures, allows for highspeed, high-volume cargo handling and a fast turnaround of vessels.

The port with its immediate region has become a popular call for international cruise ships because of the close proximity to game parks and the iSimangaliso Wetlands Park.

The facilities at Richards Bay's Port comprise a dry-bulk terminal, a multipurpose terminal and the privately operated coal terminal. Other private operators within the port include several wood-chip export terminals and a bulk liquid terminal.

Richard's Bay Dry Bulk Terminal is a unique terminal that handles a variety of commodities on its conveyor system.

To avoid contamination, every belt, transfer point, rail truck and vessel loader/ unloader is washed thoroughly before the next product is handled. A high-volume woodchip loader has made this terminal one of the world's best and most efficient woodchip-loading facilities.

Saldanha Port, situated on the West Coast, is the deepest and the largest natural port in southern Africa. The port is unique in that it has a purpose-built railroad serving a bulk-handling facility, which is connected to a dedicated jetty for the shipment of iron ore. Saldanha also serves as a major crude-oil importation and transhipment port. It is the only iron ore-handling port in South Africa.

#### Hub ports

The Port of Durban is a full-service general cargo and container port. It is the most conveniently situated port for the industrialised Durban/Pinetown and Gauteng areas and cross-border traffic.

The Port of Durban is one of the busiest in southern Africa. It has a surface land area of 1 854 ha. The container terminal is the largest such facility in the southern hemisphere and is geared to expand in terms of cargo handling.

It is especially effective as a hub port for cargo to and from the Far East, Europe and



Among its major investments for 2009/10, Transnet named its R2.8-billion upgrading of Durban Harbour, which included the entrance channel being deepened and widened. Before, it could only accommodate ships slightly over the 4 000 20-foot equivalent unit (TEU) capacity, but now those of 8 000 TEU can dock there.

A further R4,4 billion was pumped into the Cape Town Container Terminal Expansion Project, which has boosted capacity from 700 000 TEU in 2007 to 900 000 TEU. There are plans to increase capacity even more to 1,4 million TEU. Cape Town's berth 601, the first of its four berths to be expanded, has already been deepened to 15,5 m to accommodate larger vessels.

the Americas, serving South Africa, as well as west and east African countries. The port is also the premier port for a wide range of commodities, including coal, mineral ores, granite, chemicals, petrochemicals, steel, forest products, citrus products, sugar and grain.

The Port of Durban is South Africa's largest port in terms of value cargo handled as well as the number of vessel arrivals per year. It is estimated that the port and its related industries contribute in excess of 20% of Durban's GDP. Durban contributes almost 55% of the KwaZulu-Natal GDP, which in turn is about 15% of the South African GDP. The maritime industry in Durban contributes between 1.5% and 2% of the national GDP. This is a contribution to the local GDP of between R25 billion and R35 billion, according to Port of Durban statistics.

The Port of Cape Town is the other hub in South Africa. It offers multipurpose dry, and liquid and dry terminals, as well as fully serviced dry docks.

The port is renowned for its deciduous fruit and frozen-product exports. A major fishing industry is also based here. The Port of Cape Town is strategically positioned and ideally situated to serve as a hub for cargoes between Europe, the Americas, Africa, Asia and Oceania. The port provides a complex network of services to its clients and a favourable environment for all stakeholders, maximising benefits to the local and national economy. Integrated intermodal cargo systems, ship repair, bunkering facilities and the reefer trade are examples of these services.

#### Multipurpose ports

The Port of Port Elizabeth, with its proximity to heavily industrialised and intensively farmed areas, has facilities for handling of all commodities - bulk, general and container cargo.

Being situated at the centre of the country's motor-vehicle-manufacturing industry, the port imports large volumes of containerised components and raw material for this industry.

The bulk of exports comprises agricultural products. Apart from agricultural produce, manganese ore, motor-vehicle-industry-related products and steel are exported.

The container terminal has maintained the highest handling rates in Africa in recent years and is accredited to International Standards Organisation 9002. Located mid-way between Cape Town and Port Elizabeth, the Port of Mossel Bay has in the past specialised in serving the local inshore and deep-sea fishing industry, as well as limited commercial cargo. However, it now serves the oil industry as well as other client-orientated marine cargo.

This port is the only South African port that operates two offshore mooring points within port limits. Both mooring points are used for the transport of refined petroleum products.

The Port of East London is situated at the mouth of the Buffalo River on South Africa's east coast, and is the country's only commercial river port.

It boasts a large container terminal and grain elevator, and it is the largest exporter of maize.

With a world-class R80-million car terminal, the port has become one of the major motor-vehicle export and import terminals in South Africa.

Through Transnet, government is investing close to R50 billion on rail- and portinfrastructure improvement.

# **Pipelines**

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

Continued investment is also being made in the pipeline sector.

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-long pipeline transports up to 3,5 MI 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 MI of fuel and diesel, a maximum of 1,5 MI is diverted to Mbombela (formerly, Nelspruit) while the remainder is transported to Kendal.

More than 60% of South Africa's liquid fuels-demand lies within the Durban-to-Johannesburg Corridor. The Durban-to-Johannesburg Pipeline became inadequate to transport the required volumes of petroleum products from the coast to the inland regions.

The Department of Energy in its Energy Security Master Plan included the construction of a bigger new multiproduct pipeline between Durban and Johannesburg (NMPP) by Transnet. The National Energy Regulator of South Africa awarded Transnet the licence to build the 24-inch trunk-line pipeline, including the 16-inch inland network and two terminals in December 2007. The trunk line is expected to be completed by September 2011 and operational by December 2011.

#### Maritime affairs Maritime administration, legislation and shipping

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

The Department of Transport is responsible for South Africa's maritime administration and legislation, which Samsa controls on its behalf in terms of the Samsa Act, 1998 (Act 5 of 1998).

The broad aim of 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 Environmental Affairs is responsible for combating pollution and uses Kuswag coast-watch vessels to perform this function. Samsa is responsible for introducing and maintaining international standards set by the International Maritime Organisation (IMO) in London, with respect to:

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

Samsa has an operations unit, a policy unit and a corporate support division to handle all financial, HR and information technology issues.

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

Samsa is steadily improving its capacity to monitor safety standards of foreign vessels. A considerable number of ships calling at South Africa's major ports is inspected, and those not complying with international safety standards are detained until the deficiencies are corrected.

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

South Africa signed an agreement to establish the subregional Maritime Rescue Coordination Centre (MRCC) in South Africa and subregional maritime subcentres in the Comoros, Madagascar, Mozambique and Namibia. South Africa also contributed R100 000 to be used in the operations of the International Maritime Security Fund.

#### Training

The South African Maritime Training Academy at Simonstown 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, with a similar training facility at the Durban Institute of Technology.

Deck and engineering students and officers complete their academic training at the Cape Peninsula University of Technology and the Durban Institute of Technology, while lower classes of certificates are offered at the Training Centre for Seamen, situated in the Duncan Dock area in Cape Town. This training institution also caters for deck, engine-room and catering department ratings.

Samsa is responsible for setting all standards of training certification and watchkeeping on behalf of the Department of Transport, 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.

#### Search-and-rescue services

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

South Africa is responsible for a huge SAR area, representing about 10% of the globe and about 28,5 million km<sup>2</sup> in total. To manage this vast area, the South African area is divided into two SAR regions, namely the aeronautical and maritime SAR regions.

The Aeronautical SAR Region covers South Africa, Namibia, Swaziland, Lesotho and associated flight information regions. The Maritime SAR Region stretches about halfway between South Africa and South America on the western side, 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.

Search-and-rescue 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 search-and-rescue services within their territories to ensure that assistance is rendered to persons in distress.

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 manner across a wide area. Collaboration also reduces the overall cost of search-and-rescue operations.

SADC approached ICAO and the IMO to consider funding the training requirements identified for the region. Together with the Department of Environment Affairs, the Department of Transport is planning to create search-and-rescue capacity at the Antarctic region.

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

Voluntary organisations such as the 4x4 Rescue Club, the Mountain Club of South Africa, Hamnet and the National Sea Rescue Institute are also members of Sasar.

The ARCC Centre is an operational facility of 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.

#### 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 MRCC.

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. Various laden, very large crude-oil carriers have been assisted to safety, their cargo safely transferred by means of shipto-ship transfers, and the affected vessels repaired or temporarily repaired to enable them to proceed to other ports for permanent repairs.

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.

The Department of Transport has been developing a small vessel policy to address security and safety in the maritime sector, which was expected to be tabled in Parliament in 2010/11.

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.

# **Acknowledgements**

Airports Company South Africa Acsa Annual Report 2008/09 **BuaNews** Business Day Department of Transport Estimates of National Expenditure 2010, published by National Treasury National Household Travel Survey, 2003 National Ports Authority of South Africa Passenger Rail Agency of South Africa, Annual Report 2009/10 Pretoria News Road Accident Fund Sabinet SACAA Annual Report 2009/10 Sanral Annual Report, 2009 Sapa South African Rail Commuter Corporation Transnet Freight Rail Limited

- www.acsa.co.za www.arrivealive.co.za www.atns.co.za www.buanews.gov.za www.cbrta.co.za www.enatis.com www.engineeringnews.co.za www.gautrain.co.za www.gov.za www.iol.co.za www.itweb.co.za www.mediaclubsouthafrica.com www.mg.co.za www.news24.com www.politicsweb.co.za
- www.polokwane.org.za www.ports.co.za www.sa2010.gov.za www.saa.co.za www.samsa.org.za www.samral.co.za www.sanral.co.za www.shine2010.co.za www.spoornet.co.za www.tradeinvestsa.co.za www.transnet.co.za www.transnet.co.za www.transport.gov.za www.transport.gov.za

# Suggested reading

Louw, B. 2008. The Gibson brothers of the Red Star Line. Welgemoed: JBZ Louw.
 Rorke, WB. 2007. Trek Airways: a South African adventure. London: Athena Press.
 Ross, G. 2007. The romance of Cape mountain passes. Cape Town: New Africa Books.
 South Africa. Department of Transport. Moving South Africa: a transport strategy for 2010: report and strategy recommendations.