SA YEARBOOK 2009/10
TRANSPORT

The South African transport sector employs 584 000 people in the formal and informal sectors, representing 4,3% of the active population.

The core values of the Department of Transport are:

• maintaining fairness and equity in all operations
• striving for quality and affordable transport for all
• stimulating innovation in the transport sector
• ensuring transparency, accountability and accessibility
• upholding the Batho Pele principles.

The transport sector is crucial to the successful hosting of the 2010 FIFA World Cup™.

Government is using the World Cup to revolutionise South Africa's transport system. Transport services and infrastructure are designed to meet the efficiency, safety, quality and cost-effective requirements of the modern era and will be accessible to all, visitors and residents alike.

A total investment of R13,6 billion has been allocated to improve public transportation systems ahead of the World Cup. This was part of an overall investment of R170 billion into the country's transport system in the five-year period from 2005/06 to 2009/10.

Policy and initiatives
Public Transport Strategy (2007 – 2020)

Cabinet approved the Public Transport Strategy 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, unimodal 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 the recapitalised taxi services.

The key areas of the strategy consist of:

• peak frequencies of five to 10 minutes
• off-peak frequencies of between 10 to 30 minutes
• extended hours of operation to between 16 to 24 hours
• 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
• integrated feeder service, including walking, cycling, bus and taxi networks.

2010 Transport Action Plan

The Department of Transport, in consultation with the transport sector, developed the 2010 Transport Action Plan. The plan integrates transport, security, emergency response and socio-economic development.

The broad principles of the 2010 Transport Action Plan are to:

• accelerate existing transport plans and maximise existing transport infrastructure
• improve public-transport services
• accelerate implementation of government's economic and sustainable development policies.

Government is using the World Cup to spur a major revolution in South Africa's transport system through investments in:

• public transport and road infrastructure
• rail upgrades
• intermodal facilities
• Bus Rapid Transit (BRT) systems
• innercity mobility systems
• call-centre systems
• airport-city links
• freight services
• passenger safety
• intelligent transport systems.

The Department of Transport is taking an active lead in the transport plans for 2010, by leading the coordination process, and ensuring that operational planning is conducted in a uniform and consistent manner in all the host cities.

By June 2010, the BRT is expected to be operational in Johannesburg, Pretoria, Bloemfontein, Port Elizabeth and Cape Town.

For 2010, some 2 000 train coaches have been refurbished and major train stations at Cape Town, Nasrec, Mabopane and Doornfontein have been upgraded.

In 2009, the Passenger Rail Agency of South Africa (Prasa) was building new-generation stations at Bridge City (eThekwini), Moses Mabhida (eThekwini) and Orlando Station in Soweto. The country's trains carry between 2 000 and 2 500 passengers a trip and the department

is planning rail usage in unison with the host cities.

All Airports Company South Africa (Acsa) upgrades at OR Tambo, Cape Town, Bloemfontein, Port Elizabeth and La Mercy airports will be complete for the World Cup. At the smaller constrained airports, temporary infrastructure will be installed to process the increased number of passengers.

The Department of Transport will be facilitating the increase in traffic into the country through bilateral air services agreements with a number of countries. There will be additional frequencies on existing routes and sufficient size and number of aircraft will be available for the event.

The existing national signage design guidelines will be extended to ensure consistency between host cities and regional bodies. Shortcomings from the 2009 Confederations Cup, such as inadequate signs at park-and-ride facilities, transportation hubs, railway stations and airports will be addressed.

The BRT system is part of 2010 World Cup plans but 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.

The BRT system will run for 18 hours a day, from 05:00 to 23:00, and the plan is to eventually extend this to 24 hours a day. There will be bus stations every 500 metres, with security officers and CCTV cameras linked to a BRT control room. Once the system is complete, no commuter will walk more than 500 metres to a BRT stop. Minibus taxis will therefore be an integral part of the BRT and the public transport system. Minibus taxis are also an integral part of the 2010 FIFA World Cup™ transport plan.

Shosholoza Meyl, the long-distance rail service will provide additional trains for Polokwane, Bloemfontein, Nelspruit, Rustenburg, Durban and Cape Town.

By the end of September 2009, airport demand was converted into airline schedules and landing slots were allocated to airlines.

Government is coordinating a national communication programme through the Department of Transport's web page, which has a link on the FIFA website. This programme will ensure maximum and appropriate promotion of public transport. The information and messages will be consistent and complementary nationally, provincially and for host cities. These will include information on airports and air travel, intercity travel, city and provincial transport, the national road network, vehicle hire and charter, what to expect at stadiums, park-and-ride sites and trip planners. Electronic brochures will be supported by newspapers, radio and TV campaigns to publicise this information.

For 2010, Johannesburg plans an additional 63 km of BRT infrastructure with an additional 78 stations and an additional 637 buses, linking Soweto, the central business district (CBD), Sandton, Sunninghill, Alexandra, Roodepoort, etc. The city has committed an additional R2 billion worth of infrastructure for this purpose. This is in addition to the June 2009 Phase 1a system, which will continue operations in 2010.

For 2010, Cape Town plans to deploy a BRT trunk and feeder system comprising 25 trunk stations and 139 feeder stops, using 156 vehicles carrying 115 000 passengers a day and serving the CBD, stadiums and hotel precincts, airport and West Coast areas, including Mamre, Atlantis, Table View, Du Noon, Milnerton and Century City. Cape Town has committed R508 million to six infrastructure contracts and another R1 billion expected to be spent by April 2010.

Nelson Mandela Bay plans to implement an integrated network across the entire city with R900 million worth of infrastructure committed until 2010.

Tshwane is planning to have the first of two BRT lines running in 2010. This will run from Mabopane to the CBD and comprise 37 km of BRT lanes, 17 stations and a fleet of 58 BRT vehicles carrying 40 000 passengers a day. For the 2010 event, Tshwane plans to use special shuttle ser-

> The Rea Vaya (Rea Vaya means "we are going") Bus Rapid Transit (BRT) system was officially launched by the Minister of Transport, Mr Sibusiso Ndebele, on 30 August 2009 in Johannesburg. It represents a major turning point in how the country deals with congestion, pollution and greenhouse gases as a result of transportation.
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> Among other things, the BRT system consists of 90-seater capacity trunk buses and 32-seater feeder buses, which will 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.
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> The BRT routes are designed to link up with the interinnercity distribution systems and various other development nodes and residential areas. Various public-transport interchange facilities along the routes will provide connection to other road-based public transport services servicing other areas of the city.

vices running on temporary dedicated lanes from the CBD to the stadium precinct. It plans to spend R2 billion on infrastructure by March 2011 and has contracted the South African National Road Agency Limited (Ltd) (Sanral) to manage the infrastructure programme on the city's behalf.

Just after 2010, Tshwane plans to complete its second BRT line from the CBD to Mamelodi via Menlyn, which will comprise 33 km of BRT lanes, 28 stations and 90 BRT buses.

Electronic National Traffic Information System (eNaTIS)

In April 2007, the Department of Transport replaced the 14-year-old National Traffic Information System with the eNaTIS, which uses state-of-the-art technology.

The eNaTIS stores, records, manages and enforces the requirements of the National Road Traffic Act, 1996 (Act 93 of 1996), and the national road-traffic regulations.

It provides for the registration and licensing of vehicles, and manages and records applications for and authorisation of driver's and learner's licences.

The eNaTIS is also a law-enforcement tool that is used to ensure that details of stolen vehicles are circulated to prevent the irregular or fraudulent re-registration of such vehicles.

The South African Bureau of Standards (SABS) is linked to the eNaTIS, ensuring that only vehicles that meet South Africa's stringent safety standards are allowed to be registered.

The eNaTIS provides the following immediate advantages:
- centralised road-traffic management data
- eliminating fragmented small systems
- reducing queues due to the implementation of online transactions
- improved system security
- lower operating costs
- convenient, easy interaction by members of the public
- rapid deployment of new software.

In 2008/09, the department received R140,9 million from transaction fees collected at driving licence testing centres.

Following the effect of the municipal strike at the end of July 2009, eNaTIS transaction volumes normalised during August and two new record totals were recorded as a result of the overflow from the preceding month: 63 726 vehicle licensing transactions and 589 420 user transactions were recorded on 4 August.

In April 2009, the National Land Transport Act, 2009 (Act 5 of 2009), was signed into law by former President Kgalema Motlanthe. For the first time, there is legislation that clearly outlines the functions of national, provincial and local government with respect to land transport.

The Act has far-reaching implications for municipalities, particularly the metros and secondary cities, as well as provinces. It includes a significant shift of powers and functions in relation to especially public transport to municipalities, including subsidies and operating licence functions.

The total transaction count rose by 1,06% in August 2009 as compared to the previous month, and by 14,76% compared to August 2008.

The Johannesburg user group performed the most transactions (886 032) followed by Ekurhuleni (770 347), Pretoria (724 006), Cape Town (591 329) and Durban (325 444).

Black Economic Empowerment (BEE)

The Draft Transport Charter was gazetted 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.

The integrated transport sector codes will be 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 of and pursuing worker rights in the taxi industry and imparting these individuals with the requisite skills to enter into 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 Project.

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

A total of 26 100 bicycles were distributed during 2008/09 and the department intends distributing 15 000 by April 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.

In August 2009, the Department of Transport received the completed prototypes of non-motorised modes of transport from the SABS.

This followed a meeting of designers from South Africa and 16 other international countries, which also included local communities.

A number of innovative NMT prototype designs were on exhibition during the official handover event, including refurbished donkey carts, bicycles, load-bearing tricycles, single and double axle donkey carts and wheeled platform trolleys.

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
- rail-systems integration

- road-systems development and infrastructure maintenance.

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 Sanral, the South African Maritime Safety Authority (Samsa), Cross-Border Road Transport Agency (CBRTA), Transport Appeal Tribunal, Road-Traffic Management Corporation (RTMC), National Railway Safety Regulator, the South African Civil Aviation Authority (SACAA), Road Accident Fund (RAF), Air-Traffic Navigation Services (ATNS) and Acsa.

South African National Roads Agency Limited

Sanral is an independent, statutory company responsible for the design, construction, management and maintenance of South Africa's national road network, including toll and non-toll roads.

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 is responsible for the existing national road network of 16 170 km, at an estimated value of over R40 billion. This is expected to grow to 20 000 km in 2010.

In 2009, Sanral and local governments started implementing the Intelligent Transport System (ITS) Project, whereby technologies are used to

The Gauteng Freeway Improvement Project (GFIP) is planned to be completed in time for the 2010 FIFA World Cup™.

The GFIP aims to provide an interconnected network of inner and outer ring roads as a solution to the traffic congestion experienced in Gauteng. The 185 km of new toll infrastructure will see the N1 to Pretoria, Johannesburg ring roads and the R21 to Pretoria become electronic tolling zones. Roads will be operated on the user-pays principle after October 2010.

manage traffic and provide road users with traffic conditions on a real-time basis.

The pilot ITS Project aims to:
- improve incident management
- reduce congestion
- increase road safety
- provide information to public-transport role players for public transport management
- evaluate the effectiveness of ITS technologies with a view for possible further deployment.

These aims will be achieved by deploying several forms of ITS technology, including a centralised network management centre, closed circuit television cameras, variable message signs, loops and other traffic detection and traffic information devices, as well as continuous monitoring of the systems and their impact on improved road-network operations.

Sanral plans to roll out the system to cover some 2 300 km of existing toll roads in South Africa, including the N2 Tsitsikamma toll road, the N17 East toll-road extension, the N1 South and R30 Bloemfontein-Kroonstad road, the N1 Polokwane bypass, the Marianhill extension and the Dube Trade Port interchange.

Sanral awarded a 30-year concession to Trans African Concessions (TRAC) to build and operate the N4 route between Pretoria and Maputo. The route will provide a high-mobility alternative to through traffic, especially heavy vehicles using the N4 through the CBD of Nelspruit.

The route forms part of an important link for traffic from Mozambique, Swaziland, Nsikazi and Nkomazi to the 2010 Mbombela Sport Stadium, located west of Nelspruit.

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-and-rescue 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.

Cross-Border Road Transport Agency

The CBRTA regulates and controls cross-border passenger, freight and road transport. It also facilitates the establishment of cooperative and consultative relationships and structures between public and private-sector institutions, with an interest in cross-border road transport.

The CBRTA fosters investment in the cross-border road-transport industry and provides high-quality cross-border freight and passenger road-transport services at reasonable prices. The agency works on a cost-recovery basis and any profits from cross-border permit fees are ploughed back into the system through a price reduction on permits in the following financial year. It encourages small-business development in the industry.

The CBRTA is also involved in collecting, processing and disseminating relevant information; providing training and capacity-building; and promoting entrepreneurship, focusing on small, medium and micro-enterprises with an interest in cross-border road transport.

The functions of the agency include:
- advising the Minister of Transport on cross-border transport matters and assisting in the process of negotiating and renegotiating cross-border road-transport agreements on request
- regulating the road-transport industry's access to the cross-border road-transport market
- undertaking road-transport law enforcement.

The main source of income for the CBRTA is fees charged for cross-border permits.

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 pays out numerous claims each year in respect of accidents caused by recklessness; and inconsiderate, negligent, aggressive and drunken driver behaviour.

On 1 August 2008, the RAF Amendment Bill was promulgated. The legislative amendments to the original RAF Act, 1996 will replace the compensation system that promoted inequality and threatened the sustainability of the fund with a system that is more equitable, fair and transparent for the victims of road accidents.

All claims in respect of accidents that occur from 1 August 2008 onwards will be administered under the new Act. Claims in respect of accidents that occurred prior to this date will continue to be dealt with in terms of the original Act. The key amendments in this regard include, among other things, the following:

- Claims are limited to a maximum of R160 000 per year for loss of income, or R160 000 per year for each deceased breadwinner in the case of a claim for loss of support. This amount will be adjusted quarterly in line with inflation.
- "General damages" refer to compensation for pain and suffering, disfigurement and scarring, loss of pleasures of life (such as where the injured can no longer participate in sport), loss of life expectancy and emotional shock resulting from injury sustained in the accident. The RAF's obligation in terms of general damages will be limited to compensation for serious injuries, which will be assessed in accordance with the prescribed method.
- Tariffs for emergency medical treatment will be based on private-sector rates negotiated between the RAF and medical service-providers. This means that in case of emergencies, even the indigent victims of accidents can be treated at private hospitals because the hospitals will be paid at private-sector rates. However, in cases other than emergencies, the tariffs applicable in the public sector will apply.

The statutory limit of R25 000 per person in respect of claims from passengers in the offending car will fall away, meaning that passengers in the offending car will have the same rights to compensation as other victims.

South African Civil Aviation Authority

Established in 1998, the SACAA is an independent regulatory entity tasked with regulating the civil aviation industry in South Africa.

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 oversight in terms of operations, aircraft, personnel, airports and airspace. The SACAA achieves this through various ways, such as by developing relevant legislation that supports and ensures delivery on this mandate and by overseeing all personnel and operators within the industry to ensure compliance with applicable regulations and standards.

South Africa is a signatory state to the International Civil Aviation Organisation (ICAO) Convention of 1944 and it is expected to meet its international obligations in terms of the ICAO standards and recommended practices.

The SACAA is subjected to various audits by the ICAO to ensure compliance to these standards and recommended practices.

The SACAA is financed through a combination of user fees, aircraft passenger safety charges, a fuel levy on general aviation and government funding, specifically for the investigation of aircraft accidents and serious incidents.

The SACAA is responsible for regulating all individuals or organisations involved in civil aviation in South Africa, including:

- 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.

The SACAA endeavours to ensure that South Africa continues to be rated among the top aviation countries worldwide through excellent performances in international audits, such as those conducted by the ICAO, Federal Aviation Administration and Tourism Satellite Account.

The SACAA increased its oversight capacity to address aircraft safety. Until October 2008, the industry's accident rating was considerably low, until a spate of aircraft accidents occurred. The

only common thread linking these accidents was human error, which was difficult to address.

The SACAA has created a new safety advisory panel, which will investigate the root causes of accidents, with a particular emphasis on the human factor. It will also publish accident reports, at least preliminary ones, within three months.

Another safety entity is the Recreation and Aviation Administration South Africa (RAASA), which will oversee the recreational aviation sector on SACAA's behalf.

The duties of the RAASA include issuing licences to fly light sport aircraft and national pilot licences for micro-lights, gyroplanes and light sport aircraft. RAASA started carrying out its official duties in February 2009.

The SACAA continues to place priority on the need to have regional integration with the intention of ensuring the safety of African skies. The SACAA is enthusiastic about assisting other countries on the continent with setting up their respective civil aviation organisations. The SACAA firmly believes that the continent needs to work hand-in-hand to tackle challenges that face the aviation industry, including:

- developing and retaining highly skilled personnel
- harmonising regulations
- developing infrastructure
- doing away with ageing aircraft fleet
- instilling a culture of voluntary compliance by role players.

Airports Company of South Africa

Acsa has embarked on a R20-billion infrastructure development programme, in anticipation of the increase in the number of passengers travelling to South Africa by 2010. Acsa handles more than 32 million passengers annually.

The number is expected to total 43 million in 2010. At the end of 2011/12, the 10 airports under the Acsa network should facilitate 44,4 million passengers and handle 611 631 aircraft landings.

The 10 airports handle over 98% of the country's commercial air traffic. In the 2008 financial year, this network processed more 291 000 aircraft landings from nearly 50 international destinations, connecting Africa with other continents.

Major airport developments are taking place at OR Tambo, La Mercy, Cape Town, Polokwane and Bloemfontein.

In the last five years, Acsa paid dividends in excess of R2 billion to its shareholders, 74,6%

of which went to the main shareholder, the South African Government. The Government also received an additional R1,3 billion in taxes from Acsa in the period. In the 2007/08 financial year, commercial revenue grew by 23% to R1 342 billion.

Airports

Acsa owns and operates South Africa's 10 principal airports, including the three major international airports in Johannesburg, Cape Town and Durban. Acsa also has a 35-year concession to operate the Pilanesberg Airport near Sun City in North West. The other six airports are in Bloemfontein, Port Elizabeth, East London, George, Kimberley and Upington.

Acsa's three core activities are:

- airport services, including the development of airport infrastructure, such as providing and maintaining runways, taxiways and aprons; terminal facilities; and aviation security, fire and rescue services
- retail and advertising activities, including the provision of space within terminals to appropriate retailers; providing other sites to operations such as car-hire firms and banks; and space for advertisers
- property activities, including providing retail and office premises, and car-parking facilities, as well as functioning as commercial landlords.

Air-Traffic Navigation Services

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

The company's college is a well-established facility that is used by several African countries for air-traffic services' training and technical training for equipment support.

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

A joint operations' centre at the OR Tambo International Airport is the nerve centre of all airport communications and operations. From here, all activities related to maintenance and building management are coordinated. The centre serves as a control office, crisis-control centre for emergencies and an information technology (IT) centre.

Transnet Limited

Transnet is a focused freight-transport and logis-

tics 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 gas-pipeline business pumps and manages the storage of petroleum and gas products through its network of high-pressure, long-distance pipelines.

The initiatives in the transport sector reflect the priorities government has set for itself. Transnet will be spending R80 billion in capital expenditure on its ports, port operations and its freight rail network over the next five years, of which R40,8 billion is being spent on upgrading freight rail infrastructure and rail engineering. The upgrading of the freight rail infrastructure is key to the objective of shifting more freight from the road network to the rail network as well as finding the balance between road and rail in respect of the transportation of goods.

Transnet is converting its passenger coaches to a stainless steel body structure that will reduce costs and extend the lives of coaches. In 2008, it converted 342 out of 4 500 suburban coaches and it was planning to increase the number to 500 in 2009.

The stainless steel interiors and seats make the coaches vandal-proof and graffiti can be washed off the coach walls. The new coaches have safety features such as doors that cannot open while the train is moving, and windows that only open half-

way. The overhaul includes design modifications that will minimise rust and corrosion.

The company's "green" commitments mean that it recycles the scrap from the overhaul and sells it to metal dealers or steel mills.

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 three years, R70 billion will be used for road infrastructure, maintenance and upgrading and an additional R3 billion for the Expanded Public Works Programme for access roads, all of which is an attempt by government to alleviate traffic congestion.

Provincial roads

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 roads and streets within the municipal boundaries

of cities and towns are the responsibility of the municipality concerned.

Toll roads

The "user-pay" principle is an equitable means of raising funds for improving the national road network.

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

About 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 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 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 is operated by the N3 Toll Concession; and the N4 East, Maputo Development Corridor is operated by TRAC. The upgrading of the road between the Belfast and Wonderfontein section of the N4 was expected to be completed at the end of August 2009. The single carriageway has been upgraded to a double carriageway in both directions to accommodate increased traffic.

Public transport

In terms of the Constitution of the Republic 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 of Transport is moving fast towards an integrated public transport system. This is necessary to ensure efficiency and move the country closer to the status of a developed economy. The integration of taxis, buses and rail transport in all municipalities is one of the priorities.

The transport modes must be integrated to deal with the challenge of the last mile. The last mile refers to people not being able to get home because, for instance, they arrive at a train station when the taxis and buses have already stopped operating.

This could be avoided through better integration of the various modes. Distances between these modes must also be cut down drastically.

The department is implementing integrated ticketing to facilitate the movement of various transport modes in municipalities. The integrated rapid public transport networks are in eight major cities, namely Johannesburg, Pretoria, Cape Town, Durban, Polokwane, Port Elizabeth, Nelspruit and Bloemfontein

Urban transport

Metropolitan transport advisory boards govern urban areas, which have been declared metropolitan transport areas. Both short- and 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.

In implementing the Rural Transport Strategy, the Department of Transport established the Integrated Rural Transport Development Programme in six rural districts. About R8,9 million has been transferred to the relevant municipalities.

The objective is to promote rural transport infrastructure and services.

This will include NMT infrastructure, provision of rural transport passenger facilities and rural freight transport logistics.

Motor vehicles

The number of registered vehicles increased from 9 162 840 at the end of February 2008 to 9 506 138 in August 2009.

Taxi Recapitalisation Programme (TRP)

Government's TRP is underpinned by a strong desire to have an integrated public-transport 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 around the taxi industry.

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.

By October 2009, more than 27 800 old taxi vehicles had been scrapped, with more than R1,4 billion paid out to operators. A total of R7,7 billion has been allocated for the TRP.

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.

The BRT system is a key component of the Department of Transport's integrated transport network plan, which government is implementing in the 2010 FIFA World Cup™ host cities.

The system will feature dedicated and segregated bus-only lanes, as well as bus stations that are safe, comfortable, weather-protected and friendly to disabled passengers. It will run for 18 hours a day from 5:00 to 23:00 and the plan is to eventually extend this to 24 hours a day.

The enclosed stations will have high security features, including security surveillance on buses and stations. Commuters from low-income areas will have equal access to economically active regions as BRT bus routes will service townships. Some benefits are:
- contactless electronic ticketing will be used at station access gates
- a single automated electronic ticketing system will be used for all modes of public transport
- BRT buses and Gautrain routes and timetables will be coordinated to enable commuters to enjoy door-to-door transport convenience
- new planning strategies will limit car access to high-density areas
- when exchanging private cars for buses, greenhouse-gas emissions are drastically reduced.

Through the National Joint Working Group on Public Transport, the department will continue its intensive engagement with the taxi industry on many issues, including the BRT, TRP as well as the regulation and legislation of the industry.

Road-traffic safety

There are about 700 000 road crashes in South Africa every year, resulting in about 15 000 deaths and 50 000 serious injuries, at a cost of almost R43 billion.

The RTMC Act, 1999 (Act 20 of 1999), provides for the establishment of the RTMC to:
- enhance the overall quality of road-traffic management and service provision
- strengthen cooperation and coordination between the national, provincial and local spheres of government in the management of road traffic
- maximise the effectiveness of provincial and local government efforts, particularly in road-traffic law enforcement
- create business opportunities, particularly for the historically disadvantaged sectors, to supplement public-sector capacity
- guide and sustain the expansion of private-sector investment in road-traffic management.

The RTMC oversees the training of traffic law-enforcement personnel, road-traffic information, crash investigation and recording, communication and education and infrastructure safety audits.

The role of the RTMC is to guide and sustain the expansion of private-sector investment in road-traffic management. The South African Government has recently become a contracting party to the United Nation's 1998 Global Agreement on Harmonised Vehicle Technical Rules.

Government has implemented the road-safety 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. The corporation is committed to implementing the Administrative Adjudication of Road Traffic Offences (AARTO) throughout the country in 2010. AARTO seeks to create an efficient road traffic-management environment in the country, and enhance a culture of compliance through the points demerit system.

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 to the same period the previous year
- improve road-user compliance with traffic laws
- forge an improved working relationship between traffic authorities in the various spheres of government.

The number of fatalities over Easter 2009 decreased by 76 (23,82%) from 297 in 2008 to 173 in 2009.

Cross-border transport
Multilateral

The SADC Protocol on Transport, Communications and Meteorology provides a comprehensive framework for regional integration across the entire spectrum of the transport, communications and meteorology sectors. The general objective is to promote the provision of efficient, cost-effective and fully integrated infrastructure and operations in these fields. The protocol also specifically addresses road transport, and aims to facilitate the unimpeded flow of goods and passengers between and across the territories of SADC member states.

It aims to promote the adoption of a harmonised policy, which lays down general operational conditions for carriers. Cross-border transport within the Southern African Customs Union (Sacu) is undertaken in terms of the Sacu Memorandum of Understanding (MoU), which facilitates transport between member countries through the use of the single-permit system. The MoU provides the framework for cooperation between the signatory countries, which has resulted in the establishment of technical working groups for traffic standards, road-user charges and passenger transport.

The activities of the passenger-transport working groups have led to the establishment of joint route-management committees for certain cross-border passenger routes within the Sacu. These committees comprise representatives from the public and private sectors of the countries concerned, and are aimed at jointly managing the routes in consultation with all stakeholders.

Bilateral

Bilateral agreements facilitate and encourage cross-border road transport in support of regional trade. The Maputo Development Corridor between South Africa and Mozambique is a good example.

The two governments also signed agreements dealing with road freight and passenger transport between the two countries, to facilitate the movement of goods and people by road, and to eliminate bureaucratic proceedings at border posts.

The project also includes the upgrading and modernisation of the railway line between the two countries and of Maputo Harbour, at a cost of about R150 million.

On 29 September 2003, South Africa, Namibia and Botswana signed an MoU on the development and management of the Trans-Kalahari Corridor (TKC). The TKC was formally established in 1998 following the completion of the Trans-Kgalagadi highway in Botswana. One of the benefits of the TKC is that it links the hinterlands of Botswana, Namibia and South Africa (especially Gauteng) by road with the Port of Walvis Bay. This port is the western seaboard port in southern Africa and is closest to shipping routes to and from markets in the Americas and Europe.

The development of the TKC has the potential of significantly reducing transaction costs for SADC exporters and importers. This is expected to enable economic operators to become increasingly competitive internationally by enhancing their ability to exploit the benefits of preferential trade agreements with the United States of America (USA) and the European Union.

Rail transport

With over 2,4 million passenger journeys being made every day, South Africa has the fastest growing railway in Africa. Government invested R25 billion over the Medium Term Expenditure Framework to upgrade passenger rail-transport services in the country. Of this, R14 billion was spent to upgrade rail passenger infrastructure and rolling stock.

Since 2006/07, the South African Rail Commuter Corporation (SARCC), now Prasa, has accelerated the rolling stock investment programmes. This has led to over 1 500 coaches being refurbished at a total of R5 billion. An additional 700 coaches will follow this programme at an estimated cost of R2 billion.

The Department of Transport developed regional rail plans in consultation with provinces and metropolitan authorities.

In August 2009, the Road-Traffic Management Corporation hosted the first International Road-Traffic Safety Management Conference in partnership with the Institute of Traffic and Municipality Police Officers of Southern Africa and the Western Cape.

The objective of the conference was to address critical road-traffic safety issues and to find solutions, share expertise, identify best-practice models and experiences, and improve the image as well as professionalism of the road-traffic fraternity. This platform was used to communicate and clarify the administrative adjudication of road-traffic offence-related matters.

Other major areas of road-traffic management that were discussed during the conference included:
- traffic law enforcement
- road-safety education and communication
- accident investigation and reconstruction
- training of traffic personnel
- traffic-quality management and evaluation.

The conference also formed part of the initiatives that road-traffic authorities undertook to realise a millennium development goal of halving road fatalities by the year 2014 as set by the African Union.

These clarified the role that commuter rail should play in the context of an integrated approach to public transport.

The Department of Transport has embarked on a comprehensive recapitalisation programme to improve rail safety and revive rail transport as a viable public-transport alternative.

Passenger rail safety

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

The following different options have been proposed:
- full recovery, where the whole rail network would be restored
- a limited system, where all but efficient lines/routes would be closed
- priority rail corridors, where the socio-economic 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 promote the use of rail.

In pursuance of this mandate, the RSR has, in collaboration with the railway industry and the 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

Gautrain facts

- During peak periods, there will be a train at each station every 10 minutes.
- Benefits of the Gautrain project far outweigh costs – the projected increase in business sales in new markets for products, goods and services to deliver the Gautrain are R6 billion.
- A key objective of the Gautrain is to link the Pretoria Ring Rail Project, which will link Mamelodi, Atteridgeville, Soshanguve and Mabopane.
- 260 000 concrete sleepers will be manufactured for use on the track.
- Six million m³ of soil will be removed.
- 10 stations will be built – three underground, three elevated on viaducts and four at street level.
- 750 000 m³ of concrete will be used.
- Each stop will vary between 30 and 45 seconds.
- More than 210 Black Economic Empowerment companies had benefitted from the Gautrain Project by July 2008.
- The Gautrain is fitted with a fully integrated audio and visual passenger information system.
- As the car bodies are manufactured mainly from aluminium, they have a relatively low mass and are therefore more energy-efficient than South Africa's present rolling stock.

Source: *www.gautrain.co.za*

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).

The Sara Board has adopted the safety-management system as a framework to guide safety-management practices by operators in the region. The RSR is working closely with the Bombela Concession Company regarding the proposed standards for the Gautrain Rapid Rail Link Project.

The regulator also oversees safety by conducting audits and inspections; undertaking occurrence investigations; analysing occurrence statistics, operator-safety plans and accident reports; and issuing notices to operators to cease an activity or to improve an unsafe activity. Failure to respond to a notice could result in the opera-

tor, including the top management and even the board, being prosecuted.

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

Through its cooperative agreement with the South African Police Service (SAPS), the Department of Transport is building security-related infrastructure required for the roll-out of a dedicated rail police unit. In 2009, the roll-out was on course with more than 1 700 rail police active in patrols in the rail environment.

In 2009, the construction of rail police stations in Cape Town, Retreat, Belville and Phillipi in the Western Cape was completed.

In July 2009, construction was advanced in Durban, Reunion, Cavendish and KwaMashu in KwaZulu-Natal; and in Pretoria, Denneboom, Mabopane, Germiston, new Canada and Johannesburg in Gauteng. The Cape Town network has seen a 32% reduction in crime-related incidents and fare evasion has reduced from 9% to 4%.

The introduction of railway police, with the deployment of 2 500 officers in the rail industry, had reduced crime in trains by more than 38%.

Gautrain

Construction on the Gautrain began in September 2006, and part of this project requires the construction of the OR Tambo external shell for the station. The central terminal building will be connected to the Gautrain Rapid Rail Link, of which construction of the external shell of the OR Tambo station concourse is complete.

The Gautrain 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. 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.

The three anchor stations will be located at: OR Tambo International Airport, Pretoria and Johannesburg. The seven other stations will be

In February 2009, about 150 special guests and members of the media became the first non-Gautrain officials to board the high-speed Gautrain, in a special event marking the homecoming of the train's first completed rail car. The state-of-the-art train with its trademark blue, white and gold design gave guests a first-hand experience of the comfort of world-class public transport.

located at Rosebank, Sandton, Marlboro, Midrand, Centurion, Hatfield and Rhodesfield (Kempton Park).

This modern train will offer international standards of public transport with high levels of safety, reliability, predictability and comfort. Travelling at a maximum speed of 160 to 180 km per hour, it will reach Pretoria from Johannesburg in less than 40 minutes. The minimum frequency between Johannesburg and Pretoria will initially 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.

The Gautrain Project is expected to reduce the severe traffic congestion along the Johannesburg-Pretoria traffic corridor, which sees 300 000 vehicles per day, growing at an estimated 7% per year. The estimation indicates that the Gautrain Rapid Rail Link will reduce this amount by 20%.

Passenger Rail Agency of South Africa

Prasa was launched in March 2009. It replaced the SARCC. The establishment of Prasa brought the possibility to provide integrated transport solutions through its control of commuter rail, intercity, long-distance rail and road-based long-distance buses.

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.

Prasa is tasked with transforming the country's public transport system. The agency, which was established by the consolidation of state-owned passenger rail entities, a road-based bus passenger carrier and an asset-management entity, invested R25 billion to improve the local public transport system.

About R14 billion of the money was spent on capital programmes while more than R9 billion went to operational costs.

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 employs 13 000 people and had refurbished over 1 489 coaches at a cost of R4 billion, as part of its accelerated rolling stock programme.

Freight transport

The fourth *State of Logistics Survey (2007)* shows that about 87% of all land freight tonnage is carried by road, with the remainder carried by rail. Generally, road transport costs anything between 30% and 50% more than rail transport in additional costs, which cargo owners and end customers have to bear.

The National Freight Logistics Strategy is being implemented and seeks, among other things, to integrate 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 co-operation 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 (previously called Spoornet), 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.

Civil aviation

Civil aviation will play a pivotal role during the 2010 World Cup and the civil aviation fraternity has placed a huge emphasis on its preparations for the tournament.

With statistics showing that South Africa is home to more than 70% of aviation activities in the SADC region, it is not surprising that most regard the country as the aviation powerhouse in Africa.

South Africa's aviation industry has experienced significant growth over the past 10 years. In recent years, the SACAA has witnessed a substantial growth in the number of foreign aviation entities plying their businesses in South Africa.

In 1993, fewer than 12 international airlines flew into South Africa. By 2009, more than 70 international airlines flew into the country regularly. In addition, there has been an increase in the number of aircraft and personnel registrations and industry representative organisations. Moreover, passenger numbers have been growing by more than 10% annually. Despite all the growth, the SACAA has managed to maintain the rate of accident and serious incidents at a constant and acceptable level for a number of years.

An important area for the Department of Transport has been to drive the capacity of the aviation sector and it has embarked on a programme to prepare for 2010 and beyond. Revenue is expected to grow from R3 billion in 2007/08 to over R4,3 billion by 2010/11. This growth averages an increase of 12,1% per year.

Acsa, in turn, continues with its concerted infrastructure expenditure through developments at OR Tambo International Airport, Cape Town and Durban and other airports at a cost of over R20 billion to provide for the expansion of airport infrastructure.

Airlift Strategy

The five-year Airlift Strategy was approved by Cabinet 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 Accelerated and Shared Growth Initiative for South Africa 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 millennium development goals 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 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 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.

By June 2009, the Department of Transport had achieved a 40% increase in air-traffic frequencies being granted within the various bilateral air-services agreements, which were concluded with other countries.

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.

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 Atlantic, 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 seat on board includes a personal, on-demand entertainment system with a full range of upgraded content. Travellers in premium class enjoy 180-degree fully 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 2008/09, SAA made a net profit of R398 million. This is compared to a net loss after restructuring costs of R1 085 billion in 2007/08.

Ports

Commercial ports play a crucial role in South Africa's transport, logistics and socio-economic 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 Ngqura.

The TNPA provides suitable infrastructure as a conduit for the country's imports and 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 customer-relationship 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 vessel-tracing 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

The Port of Richards Bay is South Africa's leading port in terms of cargo volumes, handling in excess of 80 metric ton (mt) of cargo annually. In 2008, the port handled 7 589 891 mt of cargo, of which 7 226 772 mt was bulk cargo and 363 119 mt break bulk. During the 2008/09 financial year, Richards Bay's coal terminal handled 61,79 mt of export coal. Over the same period, the port handled a total of 1 750 ships with a gross tonnage of 59 mt.

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 high-speed, 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 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.

Plans are underway to further expand the Port of Durban, with the addition of a new R70-million rail facility attached to the container terminal, the widening of the harbour mouth, and other major projects.

The rail terminal was commissioned by the port's operator, Transnet Port Terminals, at the end of June 2009 and is part of a multibillion-rand capital investment programme. By the end of 2009, construction was underway on a R164-million expansion of the historic 15-berth Maydon Wharf, which handles bulk goods such as sugar, grain, fruit and fertiliser. The improvements include storage for 80 000 tons of maize.

Other improvements include the R140-million truck staging area at the six-berth Durban Container Terminal, which alleviates the problem of queuing, and the R2-billion first stage of the conversion of Bayhead Pier One into a container terminal.

Phase Two of the Pier One project is at the feasibility stage and involves the conversion of the former naval base, Salisbury Island resulting in an additional capacity. Pier One is expected to be fully operational by July 2010.

The Durban Harbour-Widening Project is at an advanced stage. From its 122-m width, the entrance channel will span 220 m at its narrowest point. The current depth of 12,8 m will sink to between 18 m and 19 m, allowing modern container super-ships to enter the harbour.

Transnet's investment in the Durban Port covers a number of other key areas – upgrading the staff car park, resurfacing the quayside and relocating staff facilities and workshops, increasing container stacking capacity from 13 691 to 17 262 ground slots, and upgrading the seats of the container terminal's 120 straddle carriers.

A R648-million expansion of the car terminal was also on the cards in 2009. Durban's car terminal handles two thirds of South Africa's motor-vehicle imports and exports. The allocation of 13 200 bays is to be increased to 14 000, of which 4 500 will be under cover.

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. In 2008/09, the port handled a total of

In May 2009, Transnet announced that it had concluded the disposal of South African Express (SAX) and Shosholoza Meyl, completing its transformation as a freight transport and logistics business. SAX was sold to the Department of Public Enterprises for R140 million. Shosholoza Meyl was sold to the Passenger Rail Agency of South Africa. The deal, which also includes the coach maintenance business of Transnet Rail Engineering, became effective on 31 March 2009. The SAX transaction was effective from April 2007.

297 988 mt in cargo, of which 265 613 mt was bulk cargo and 32 375 mt breakbulk cargo.

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 port-infrastructure improvement.

Pipelines

Transnet Pipelines owns, maintains and operates a network of 3 000 km of high-pressure 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 was expected to start in 2009. The 450-km-long pipeline will transport up to 3,5 Ml a year and is expected to prevent potential fuel shortages in South Africa.

The multiproduct pipeline will take just six months to build, as project operator Petroline intends to have it operating in 2010. Petroline is a locally registered company that also owns the sections of the line that runs through South African soil.

When completed, the pipeline will facilitate 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 will be diverted to Nelspruit while the remainder will be transported to Kendal.

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 passenger-carrying 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 IT 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 watch-keeping 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.

As part of Transport Month, the Minister of Transport, Mr Sibusiso Ndebele, launched the Centre for Sea Watch and Response (CSWR) at the South African Maritime Authority offices in Cape Town in October 2009.

The CSWR has the capacity to identify and track vessels up to 1 000 miles from the coastline as well as South African-flagged vessels anywhere in the world. This data, automatically transmitted every six hours, can be displayed on an electronic chart, which is accessible via a secured website. Once a vessel is identified, full details of the vessel can be accessed via a ship's database.

The CSWR has access to an automatic identification system of ships on the coast in the areas around the major ports of South Africa, which means the vessel's every move can be tracked.

The centre's mission is to comply with national maritime regulations and agreements as well as international conventions such as the International Maritime Organisation's Safety of Life At Sea and Search and Rescue requirements with respect to maritime security and the protection of the marine environment.

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 (SAR) 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 square kilometres 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.

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 SAR 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 SAR operations. This is the only way to provide a worldwide SAR system.

In 2007, South Africa orchestrated the signing of the multilateral agreement on the coordination of maritime SAR services by five countries. The Cape Town office of MRCC was also commissioned as the regional MRCC immediately after the signing of the multilateral agreement.

The 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 SAR capacity at the Antarctic region.

The Department of Transport, the South African National Defence Force, Telkom, Portnet, Samsa, SACAA, ATNS, SAPS, the Independent Communications Authority of South Africa, SAA and the Department of Cooperative Governance and Traditional Affairs 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 African Maritime Transport Charter was adopted at the Second African Union Conference of Ministers Responsible for Maritime Transport, under the theme *Creation of a Safe, Secure and Clean Maritime Transport Industry*, held in Durban, South Africa, from 15 to 16 October 2009.

The Aeronautical Rescue Coordination Centre is an operational facility of Sasar that promotes the efficient organisation of SAR services and coordinates aeronautical SAR 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 is enabling South Africa to exercise its responsibilities to the international community by employing state-of-the-art SAR infrastructure and services. Various laden, very large crude-oil carriers have been assisted to safety, their cargo safely transferred by means of ship-to-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.

South Africa also acts in terms of the Indian Ocean MoU on Port State Control and has a similar agreement with the states of west Africa in the form of the Abuja MoU.

Acknowledgements

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