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Chapter 23

Transport

South Africa's extensive transport system plays an important role in the national economy as well as in the economies of several other African states. A number of countries in southern Africa use South Africa's transport infrastructure to move their imports and exports.

The main functions of the Department of Transport include policy formulation; strategic planning, which facilitates growth and development; and regulation, which promotes fair competition, upholds safety standards, and protects the environment. The national Department of Transport is strategically positioned to provide safe, reliable, effective, efficient and fully integrated transport operations and infrastructure, which best meet the needs of freight and passenger customers and improve levels of service and cost. This supports government strategies for economic and social development while being environmentally and economically sustainable.

Policy

The Department of Transport is reviewing the national transport policy to ensure that it meets the needs of all South Africans.

In October 2001, the Minister of Tansport, Mr Dullah Omar, launched the new 10M4 coaches. The new design provides for improved safety features, enhanced facilities and more cost-effective maintenance. The first phase of the project involves the refurbishment of 176 coaches (88 in both Cape Town and Gauteng). The programme will see the present class 5M2A coaches upgraded to class 10M4 coaches, ensuring an additional 30 years of coach life.

The National Land Transport Transition Act, 2000 (Act 22 of 2000), provides for a completely new system of 'permissions' to replace permits for taxi and bus transport, and will lay the foundation for a fully integrated, long-term user-orientated land transport system.

The Act rests on the following: creating appropriate institutional bodies, planning, regulated competition and the restructuring of modes, sustainable funding, and effective transport law enforcement.

The Act also provides for the devolution of transport planning, services and infrastructure development to transport authorities. Pilot projects will be initiated in the Durban and Pretoria regions with a view to integrating different institutional and funding arrangements. The process of devolution will evolve over time as more transport authorities are established. The result will be the identification of an appropriate transport mode for each transport corridor. This will contribute towards eliminating parallel-subsidised services and reducing operating subsidies.

A report entitled *Moving South Africa Strategy* was released in May 1999. It contains a unique strategic framework for the improvement of passenger and freight transport over a 20-year period, based for the first time on consumer needs. The project focuses mainly on the improvement of infrastructure and the encouragement of private investment, particularly in the minibus-taxi, bus and rail sectors. Investments in the public transport system will be redirected to historically disadvantaged people such as the disabled and senior citizens.

The Strategy also aims to concentrate residential and industrial developments around transport corridors. This will increase the number of people using public transport and bring down costs, allowing government and operators to focus investment in the corridors.

Contributing to the Rural Development Strategy, the Department will secure close co-operation between the provincial members on the executive committee (MECs) for transport and public works. It wants to ensure the rehabilitation or construction of basic access roads in areas identified for development, and supported in terms of the provision of housing, water, electricity, health, education, social welfare, communication, and safety and security services. The Department will also implement pilot projects in the extended use of non-motorised forms of transport such as bicycles and donkey-drawn carts.

The *Shova Lula* (Ride Easy) National Bicycle Transport Partnership Project will roll out 15 000 bicycle transport packages to at least one site in each province, and up to 17 sites nationally. The sites will be chosen with due regard to the national nodal points development programme. *Shova Lula* also aims to create local employment by supplying training to create expertise in bicycle repairs. *Shova Lula* will support KwaZulu-Natal's Scholar Bicycle Project and the construction of the Ivory Park cycleway in co-operation with the Midrand Council in Gauteng

The Project is targeted at the young – particularly students and workers who walk long distances to schools and places of work every day.

The initial impetus for the Project came from the non-profit sector, which demonstrated that it is possible to overcome current impediments to low-cost cycling. A South African non-governmental organisation (NGO), AFRIBIKE, together with partners in the United States (US), United Kingdom and the Netherlands, have been able to procure low-cost new and used bicycles, and have developed a delivery chain that includes a container-based shop, a cycle-repair training course, light engineering modifications to produce load-carrying work-cycles, a scholar programme, and a women's training programme.

Over the past year, innovative partnerships between AFRIBIKE and local provincial governments have piloted practical bicycle transport projects, focusing especially on scholars and women. This work has caught the eye of the World Bank, through its Rural Travel and Transport Programme in sub-Saharan Africa, and South African specialists have assisted in scoping missions and bicycle transport pilots in Senegal, Ghana and Guinea.

The Road to Safety 2001–2005

The final version of the new safety strategy, The Road to Safety 2001–2005, was published in mid-2001. Highlights of the strategy are:

- thorough institutional reform of driver licensing, driving schools and vehicle testing
- the expansion and upgrading of licence and vehicle-testing inspectorates
- the country-wide piloting of a fraud-resistant computerised/touch-screen/audio-visual learner's licence test system in all official languages
- a stricter, compulsory two-yearly practical test – with a new requirement for specific road awareness and defensive driving skills – for all holders of the Professional Driver's Permit (PrDP), plus a comprehensive annual medical examination, which tests for all capacity-inhibiting conditions
- tough, uniform penalties for serious road traffic violations such as drinking and driving, speeding, ignoring barrier lines and jumping traffic lights, including not only heavy fines and custodial sentences but further investigation into automatic licence suspensions
- compulsory retraining in road awareness and defensive driving techniques, and community service sentences for certain categories of offence
- registration of all bus and minibus-taxi operators, and the development and implementation of a Code of Practice/Fleet Safety

Management Plan that can be monitored on-site at any time for compliance, with the option of deregistration of non-compliant operators
- compulsory fitment of key safety technologies such as top-speed limiters and tyre safety management systems
- introduction of a national Passenger's Charter for public transport users, to be displayed in all public transport vehicles and to be implemented via compulsory company complaint lines, and a National Traffic Call Centre (NTCC) linked to traffic control rooms and the South African Police Service (SAPS)
- a national programme for the multidisciplinary upgrading of hazardous locations on national, provincial and local roads, linked to a comprehensive programme of general road safety and pedestrian education in the community and through the formal school curriculum, from pre-primary to Grade 12.

The new directions emerging from the Road to Safety strategy represent a further refinement and streamlining of the priorities outlined in the Strategy 2000 discussion document, which addressed three major challenges inherited from the recent past.

In the area of heavy freight and public passenger transport, the Department will upgrade the quality and status of the PrDP by adding a compulsory practical test to the existing two-yearly theoretical test and making the practical test significantly tougher than the current requirements for a Code 14 licence under the K-53 system. It will also be made compulsory for first-time applicants for the PrDP to complete an accredited advanced/defensive driving course prior to application for the permit, and for existing PrDP holders to go through such a test as a refresher exercise every four years.

In addition to this, a more stringent annual medical test to cover matters such as screening for drugs and the presence of identified medical conditions that can compromise a professional driver's ability to drive with a high degree of safety will be developed and implemented.

The other main areas that the strategy addresses are the following:
- restructuring of the Inspectorate for Driver Licence-testing Centres and Vehicle-testing Stations to ensure adequate staffing resources, technical and forensic skills and the required legal powers to act decisively against malpractice
- a programme for the rapid upgrading of non-compliant Driver Licence-testing Centres and Vehicle-testing Stations has already begun, and this will be accompanied by a war on fraud and corruption.

At the front end of the licensing process major developments are in the pipeline:
- driving schools will have to meet strict formal criteria for accreditation, and both driving schools and instructors will have to meet clearly specified standards for their reregistration every two years, under a stringent national inspection regime.
- the Department will be piloting a computerised learner's licence-testing system. This will largely automate the administration of the learner's test, minimising scope for fraudulent human intervention in the process, while at the same time making the test more user-friendly for disadvantaged applicants through the use of touch-screen and audio-visual technology.
- the K-53 driving test will be revised to ensure that it is as accessible as possible to all applicants and that it is testing the right road-user and driver skills in the correct way.
- the Department will remove unfit and unsafe vehicles from the roads through a combination of enforcement, regulation and the compulsory introduction of proven vehicle-safety technologies.

Agencies

The Department of Transport has established four bodies to move certain elements of government's operational activities to commercial agencies. They are the South African National Roads Agency (SANRAL), the South African Maritime Safety Authority (SAMSA), the Cross-border Road Transport Agency (CBRTA) and the South African Civil Aviation Authority (CAA).

The agencies perform functions and services previously provided by the national Department of Transport in a fully commercial environment. They have been assigned clearly-defined responsibilities and functions, and each agency has entered into a formal performance agreement and memorandum of understanding with the Government as shareholder.

National Roads Agency (SANRAL)

SANRAL, a company registered in terms of the Companies Act, 1973 (Act 61 of 1973), aims to provide and manage an adequate and sustainable primary road network in South Africa, at optimum cost and efficiency, in order to stimulate economic growth and improve quality of life. Its purpose is to maintain and develop the national road network and to manage assets with an estimated value of more than R135 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 from the Minister and in agreement with a foreign country, provide, operate and maintain roads in that country.

The budget of SANRAL derives from various sources, including levies on petrol and distillate fuels, loans granted to or raised by the Agency, income from tolls charged, income earned in terms of joint ventures, fines and penalties.

South African Maritime Safety Agency (SAMSA)

The Authority is a statutory body that reports to the Minister of Transport through a board of directors. Its responsibilities include the promotion of safety of life and property at sea, the prevention of sea pollution by pollutants emanating from ships, and the co-ordination of overall technical operations. It also develops policy in respect of 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
- 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
- develop a national port authority
- manage a coastal patrol service
- manage vessel traffic including navigation aids
- provide lighthouse services.

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

Cross-border Road Transport Agency (CBRTA)

The Agency regulates and controls access to the cross-border road transport market by the road transport industry. It also aims to facilitate the establishment of co-operative and consultative relationships and structures between public and private-sector institutions with an interest in cross-border transport.

The CBRTA is furthermore involved in the collection, processing and dissemination of relevant information, the provision of training and capacity-building, and the promotion of entrepreneurship, with the focus on small, medium and micro-enterprises (SMMEs) 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 if requested to do so

- regulating the road transport industry's access to the cross-border road transport market
- facilitating ongoing co-operative and consultative relationships and structures between the public and private sectors in support of cross-border road transport operations
- undertaking road transport law-enforcement.

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

South African Civil Aviation Authority (CAA)

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

The establishment of the CAA is consistent with international trends in regulating civil aviation, and mirrors steps taken with the establishment of SAMSA, SANRAL and the CBRTA.

In setting up the CAA, government has identified the need to meet its international obligations in relation to its international treaty obligations through the International Civil Aviation Authority (ICAO) standards and recommended practices to ensure internationally accepted levels of aviation safety in South Africa.

The Authority is governed by a Board of Directors appointed by the Minister of Transport, and is representative of the aviation industry, management and business expertise.

The management of the CAA has been structured along three core responsibility levels: The Strategic Management level which constitutes the Executive Management; Project Management level, which together with the Executive Management constitutes Senior Management; and the Operational level, which is organised according to technical departments.

The key role for the Executive is the strategic leadership of the organisation and the coordination of policy formulation. The Executive's function is to develop and maintain positive links with the industry and to coordinate the CAA's international relations with organisations such as the Southern African Development Community (SADC), ICAO, African Civil Aviation Commission (AFCAC) and other civil aviation authorities.

The Project Management level coordinates the technical activities of the key areas of oversight.

Areas of oversight

- Airport oversight involves the certification of airports and heliports, and monitoring civil and electrical engineering matters in relation to infrastructure on and around airports such as lighting and navigational aids and their repair and maintenance. Development in the vicinity of airports is monitored, including the construction of 'obstacles' – objects tall enough to pose a hazard to flying operations such as cellular phone masts, cranes and buildings. Another important area of airport oversight includes monitoring processes and procedures for rescue and fire-fighting services, screening of passengers and baggage, access control in terms of fencing and lighting, and the handling, packaging and documentation of hazardous substances. Administration of the aeronautical Very High Frequency spectrum on behalf of the Independent Communications Authority of South Africa (ICASA) is also part of the oversight of airports.
- Aircraft oversight deals with all certification activities in relation to aircraft products and parts. This includes the issuing and renewing of airworthiness certificates, approvals and renewals for aircraft maintenance, design and manufacturing, processing and testing organisations. In addition, aircraft oversight covers the approval of modifications, noise certification, and maintenance and repair to aircraft.

- The area of personnel involves oversight in relation to examining, licensing and training of aviation personnel as well as their medical certification.
- Oversight of operations is carried out in terms of monitoring information contained in the operations manuals of every operator to ensure compliance with relevant legislation. Oversight is performed through regular and *ad hoc* inspections, including route surveillance checks on operators to ensure compliance with required standards. Flight simulator checks and certification, and cabin safety and flight engineer surveillance are performed at least once a year. In addition, security programmes and processes of operators in relation to their handling of passengers, baggage and dangerous goods are monitored.
- Airspace oversight ensures the effective management and provision of air traffic services through the allocation of airspace by the statutory consultative body, the National Airspace Committee. This ensures that air traffic service-providers maintain required standards and equipment. This area of oversight is also responsible for the development of procedures for air navigation services and operations, designing, testing and certifying instrument flight procedures, and the preparation of aeronautical charts. There is regular contact with organisations such as ICAO and AFCAC.
- Accident and incident investigation is a key activity of the CAA. Investigations are conducted to determine the cause and to recommend measures to prevent recurrence. In addition, the monitoring of trends regarding aircraft accidents and incidents, the identification of potential problem areas and possible safety deficiencies, and proposing safety recommendations to the regulatory body are other key functions.
- The Flight Inspection Department's function is to calibrate the radio navigational aids used by aircraft to ensure accuracy and reliability. The navigational aids are inspected at regular intervals in accordance with international requirements. The Department inspects all radio navigational aids in South Africa as well as some in neighbouring states.
- The Aeronautical Information Services Department provides aeronautical information to the industry and also meets the information needs of the organisation.

Privatisation and restructuring

The restructuring of Transnet has already started to yield results, with the Department of Public Enterprises declaring in March 2000 a net profit of R779 million for the first time in many years, despite inheriting a liability of approximately R23 billion in 1994.

Portnet will be corporatised into a separate port authority and port operations component. This separation and the respective roles and functions will be clearly defined in the Ports Policy to be released by the Department of Transport. A new and more competitive tariff regime will be unveiled to ensure that rates are on par with competitors. The concessioning of some of the ports operations to the private sector will begin in the first quarter of 2002.

Internal transformation at Spoornet is well under way. A team of rail specialists was brought in to assist the management team in identifying the most efficient mode of internal operations. Government accepts State participation in the general freight business and the mainline passenger services.

Considerable progress has been made in improving the financial situation at South African Airways (SAA). Fleet modernisation remains a critical challenge to the airline. The SAirGroup has opted to retain its 20% shareholding in SAA. In his budget vote in June 2001, the Minister of Public Enterprises said his department was planning to prepare SAA for an Initial Public Offering in 2002.

Transnet Limited

The public company Transnet Limited was founded on 1 April 1990. Transnet handles 179 Mt of rail freight per year, 2,1 Mt road freight, and 192 Mt through the harbours, while 16 000 Ml are pumped through its petrol pipelines annually.

The company flies 5,7 million domestic, regional and international passengers per year. In total, Transnet is worth R56 billion in fixed assets and has a workforce of some 90 500 employees.

Transnet consists of five transport businesses – Spoornet (rail transport), Portnet (harbours), freightdynamics (strategic road freight), Petronet (liquid petroleum transport), and Metrorail (commuter rail services) – and a number of related and support businesses. In February 1998, Transnet launched independent boards for its seven divisions as part of its transformation process. Petronet, SAA, Autonet, Portnet, Metrorail, Fast Forward and Spoornet had to drive the business operations of each division.

Road transport

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 is the responsibility of the SANRAL. The Agency will initially only manage the construction and maintenance of South Africa's 8 000-km national road network, but it is expected that this will be extended to 20 000 km of primary roads in future.

The national road system links all the major centres in the country to one another as well as to neighbouring countries. These roads include some 1 440 km of dual-carriage freeway, 292 km of single-carriage freeway and 4 401 km of single-carriage main road with unlimited access.

The Department of Transport has embarked on 20 major road projects (including toll-roads), worth more than R5 billion over two years – many of which have brought substantial benefits to local communities.

Over the past few years, significant investments have gone into the Maputo Development Corridor, the N3 road project, the N4 Platinum Highway and the Lubombo road.

All the investment for these concession projects – a massive R8,8 billion – has been sourced from the private sector, working on the Build, Operate and Transfer (BOT) principle and the introduction of tolling. This has also contributed indirectly to national development by freeing-up these resources for allocation elsewhere.

By June 2001, these concession projects had led to the following:

- kilometres of road had been upgraded, rehabilitated and maintained by these funds.
- 860 direct jobs had been created, with salaries amounting to R321 million.
- approximately 17 000 people had been trained in skills varying from basic life and business skills to relatively complex construction skills – to a total value of R12,6 million.
- some 530 SMMEs had been developed. Contracts to a total value of R207,7 million had been awarded for design and construction work, while R113,4 million had been awarded for operation and maintenance contracts.

On non-concession projects, not only on national but also on provincial roads where assistance had been requested by MECs, major employment and training successes had been registered:

- 400 jobs had been created at a salary value of R86,2 million
- SMME contracts had been awarded to the value of R101,5 million in design and construction, and to the value of R19,6 million in operations and maintenance
- contracts to a value of R135,8 million had been awarded for rehabilitation, improvement and new facilities.

The N8, the new national road between Kimberley and Bloemfontein, was officially opened in June 2001. The N8 has social and economic implications for the Northern Cape and Free State. The 28-km road was previously a gravel one. It has been resurfaced and made into a two-lane single carriageway at a cost of R37 million.

Provincial roads

The planning, construction and maintenance of roads and bridges, other than those falling under SANRAL or local governments, is the responsibility of the provincial governments. The national Department of Transport is always ready to assist provincial and local governments to improve and develop the state of their roads. Gauteng is in a very advanced stage of forming its own road agency.

The KwaZulu-Natal Department of Transport has implemented the ongoing household-based *Zibambele* project. It is a rural poverty-relief scheme that has allocated some R200 million for access road maintenance to some of the most destitute households in the deep rural areas of the province, mainly headed by women.

Spatial Development Initiatives (SDIs)

The SDI programme uses public resources – particularly project planning, scoping and logistical coordination skills – to leverage private-sector involvement. SDIs are recognised as an effective means of stimulating economic growth by exploiting the existing economic potential within an area. The Department's involvement in this project is focused on hard infrastructure provision, black economic empowerment, skills transfer, and the creation of sustainable jobs.

The SDIs are Lubombo, West Coast, Fish River, Maputo Development Corridor, Wild Coast, Platinum, Phalaborwa and Richards Bay.

At the launch of the first and fourth phases of the Lumbombo SDI in November 2000, Deputy President Jacob Zuma said that through the Lubombo SDI process, a number of integrated interventions were promoted to improve the investment climate in the region and bring development. The Lubombo SDI is based on clear and coordinated national and provincial strategies that aim to develop the area as a major international tourist destination. As part of this approach, the Lubombo SDI identified key factors constraining tourism development in the Lubombo region.

Together with relevant provincial and national agencies, the Lubombo SDI is implementing a systematic programme that is removing the major factors blocking the emergence of the region as a world-class tourism destination.

One of the determinants of tourism growth is the availability of transport and other key infrastructure. This is illustrated by the fact that more than 85% of northern KwaZulu-Natal's existing tourism beds are within 10 km of a tarred road, mainly the N2.

The total value of the Lubombo road is R234 million, which marks the most significant investment in this region by the Government in the last 20 years.

The first 44 km of the road from Hluhluwe to Lower Mkuze, valued at R60 million, is complete. The second 41-km section from Lower Mkuze past Mbazwana town to Mseleni Hospital is well under construction.

The final 42-km phase that was launched in November 2000 is valued at R45 million.

Municipal roads

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

Toll-roads

Toll-roads cover some 1 000 km and are serviced by 21 toll-plazas.

The viability of every toll-road is determined over a 30-year period in order to assess the private-sector funding which can be sustained and served. The performance of all toll-roads is within the forecast, and in many cases roads perform better than forecast. It is envisaged that all major new toll-road projects will be financed through BOT. This allows greater private-sector involvement in the financing, building, operation and maintenance of toll projects. When the concession period expires, the facility is transferred back to the State at no cost.

Construction of the N4 Maputo Corridor Toll-road has begun, and will include 70 km of new road, 112 km of rehabilitation and 240 km of road-widening. The new road, to be completed in two years, will be one of the few privately financed cross-border toll-roads in the world. Ownership of the N4 Maputo

Corridor Toll-road, for which Trans African Concessions is the concessionaire for 30 years, will revert to the South African and Mozambican governments after the concession agreement expires.

The Platinum Toll-road will eventually link Maputo Harbour in Mozambique with Walvis Bay in Namibia. South Africa's contribution will involve the construction of the road from Pretoria in Gauteng to Rustenburg in North-West and Lobatse in Botswana.

Road expenditure

The Minister of Transport, Mr Dullah Omar, announced in October 1999 that it would cost about R23 billion to upgrade and build new roads in rural areas.

Expenditure on national roads falls into the following categories:

- routine, periodic and special maintenance, and provision of support to increase road safety
- improvement of the network, rehabilitation and reconstruction, upgrading and provision of new facilities.

After the floods in part of Mpumalanga and Northern Province, the Minister of Transport and other private companies made available funds to improve the state of provincial roads. There have been a number of other initiatives in various provinces to improve the state of roads. The Minister committed himself to continuing to find extra resources to maintain and develop infrastructure.

Road traffic signs

A revised road traffic sign system, which closely conforms to international standards, has been phased in since November 1993.

The revised system involves changes to the colours of some of the regulatory and all of the warning signs, changes in design parameters, the modernisation of text and symbols, and the addition of new signs, signals and markings. Many of the new signs make use of symbols rather than text to eliminate language problems and to reduce observation time.

South Africa is preparing a road-signs manual for the SADC in terms of the 1998 Protocol on Transport, Communications and Meteorology. South Africa has since started phasing in new SADC-aligned signs on its roads and other cross-border roads. The previous system was concurrently legal with the new system until 31 December 2000, on which date all the old signs had to be phased out and replaced with new signs.

The following globally-accepted basic principles with regard to information on signs were adopted:

- no more than eight bits of information will be displayed on any sign
- in order to overcome language problems and to prevent driver information overload, use will, as far as possible, be made of symbols instead of worded messages
- route numbers will be the primary information displayed on direction signs, supplemented by primary names
- only primary names (in whatever language, provided they are accepted by domestic place-name committees) will be used as destination information on direction signs
- in the few cases where additional worded messages may be needed, English (as an international language) will be used

In order to simplify the navigation task for tourists, foreigners and drivers in unfamiliar areas, as well as to promote global uniformity, it was agreed that drivers should make use of route maps (readable in any language) and route numbers to guide them towards their destinations (all major routes and main streets in urban areas are numbered and shown on readily available maps).

The new road traffic sign system was promoted in the form of the Be Sign Wise Competition, as part of the Arrive Alive road safety campaign during January and February 2001, with particular emphasis on signs and markings.

Promotional material included wall charts, posters, pamphlets, and concise road sign booklets. Educational courses on road signs were presented at schools and communities.

Public transport

In terms of the Constitution of South Africa, 1996 (Act 108 of 1996), legislative and executive powers in respect of public transport are a provincial competency. National government is, however, responsible for policy formulation, monitoring and strategic implementation. The national Department of Transport continues to effectively administer subsidies of buses and other subsidised forms of public transport.

National Transport Register

The establishment of the *National Transport Register* is the requirement of the National Land Transport Transition Act, 2000. The purpose of the Register is to integrate the land transport systems, i.e. the Subsidy Management System (SUMS), the Land Transport Permit System (LTPS) and the Registration Administration System (RAS). The primary goal of LTPS is to facilitate the issue of public road carrier permits in order to regulate entry into the road carrier markets. The objective is to facilitate the processing of permit applications and to enable the Local Road Transportation Boards (Provincial Permit Board) to provide an efficient service to the industry. In achieving this goal, the System supports the Boards with

- registering applications
- generating and verifying advertisements
- capturing objections and appeals
- generating agendas
- verifying vehicle information
- generating permits and permit transfers.

The primary goal of RAS is to facilitate the registration of minibus-taxi associations at the Provincial Registrar in order to formalise the industry. They support the Registrar with

- registering members and associations
- registering vehicle particulars of members
- registering corridor particulars of associations
- management reporting.

The primary goal of SUMS is to manage claims received from provincial departments for bus contracts, and to manage payment.

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 in accordance with a growth management plan, and travel modes should not compete with each other. In urban areas, passenger road transport services are provided by local governments and private bus companies, which operate scheduled bus services between peripheral areas and city centres, and by minibus-taxis.

The Department will support provincial departments of transport and public works in the construction of intermodal facilities and in their efforts to achieve integration between bus and taxi operations.

The taxi industry has shown phenomenal growth during the last few years, leading to a decrease in the market share of the bus and train as modes of transport. Currently, government subsidies for public transport amount to more than R2,5 billion a year.

Operators may tender for contracts to operate their services according to specifications. The Government will monitor the quantity, quality and price of the service offered by each bus company. In terms of the scheme set out in the *White Paper on National Transport Policy*, transport costs will be kept below 10% of disposable income.

Motor cars

On 28 February 1998, there were some 6,55 million registered motor vehicles in South Africa, more than 3,8 million of which were motor cars. The number of private motor vehicles continues to grow.

Minibus-taxis

There are close to 127 000 minibus-taxis in South Africa which provide 65% of the 2,5 billion annual passenger trips in urban areas and a high percentage of rural and intercity transport.

The South African Taxi Council (SATACO) is the umbrella body for all provincial taxi organisations, and strives to regulate, formalise and stabilise the industry. The Council acts as a mediator in disputes between taxi organisations, and plays a role in eliminating the causes of taxi violence.

In May 1999, the Government signed a memorandum of understanding with SATACO, paving the way for the replacement of the industry's ageing fleet and its absorption into South Africa's formal economy. The memorandum commits SATACO to, among other things, act against violent elements in the industry, participate in the regulation of the industry by ensuring its members have legal operations, and implement a programme of acceptable labour practices. The Government, in turn, is bound by the memorandum to find an acceptable solution to the industry's recapitalisation crisis, to legalise illegal operations within agreed parameters, and to provide taxi operators with extensive training.

The national Department of Transport launched the *Be Legal* Campaign at the Jack Mincer Taxi Rank in Johannesburg on 15 March 2001. The Campaign is a national short-term emergency campaign driven and coordinated in conjunction with provinces and in partnership with local government.

The Campaign provided an opportunity for the 36 000 illegal minibus-taxi operators to apply for operating licences in terms of the National Land Transport Transition Act, 2000, and to subject the whole industry to regulation and effective law enforcement. The objectives of the Campaign were to

- legalise qualifying minibus-taxi operators
- create a positive climate for the formalisation and democratisation of the taxi industry
- create positive conditions for the smooth implementation of the Taxi Recapitalisation Programme
- create positive conditions for the economic empowerment of the taxi industry and the rationalisation of public transport operations.

The Campaign ran for a period of seven months. Four months were utilised for the receiving of applications, and three months thereafter for processing and finalising the Campaign. By June 2001, the legalisation, democratisation and formalisation processes for the taxi industry were close to completion. Each of the nine provinces has a democratically elected taxi council in place. All the existing umbrella groupings and elected councils have been drawn together in a National Conference Preparatory Committee tasked with charting the process towards a single unified taxi body for the whole of South Africa.

The first National Minibus Taxi Conference was held in September 2001in Durban. Some 1 000 delegates attended. Issues such as the Taxi Recapitalisation Programme, road safety and government subsidy were discussed.

Taxi Recapitalisation Programme

The Government is in the process of developing a R4-billion strategy to deal with the economic challenges facing the aged 127 000-strong taxi fleet. Most of these vehicles are more than nine years old. The aim of the Taxi Recapitalisation Programme is to replace, over a five-year period, the current ageing taxi fleet with new, locally-assembled 18- and 35-seater vehicles specifically designed to meet the high quality and safety standards required for public passenger transport.

Key to the project will be a strong empowerment element involving the establishment of taxi co-operatives to liaise with financiers, distribute the new vehicles, and provide the facilities for a compulsory maintenance programme. The co-operatives will be established after extensive consultation with local taxi organisations.

The aim is to ensure that the new vehicles are manufactured locally and to tap into South Africa's highly-diversified componentsmanufacturing sector. The vehicles will use diesel, which is cheaper than petrol and which will be distributed by co-operatives. Diesel will also cut back on noxious exhaust emissions. The taxis will contain unique features such as a stalling device to prevent overloading and so-called smart-card payment systems.

The scheme, developed by a task team representing the departments of Transport, Trade and Industry, and Minerals and Energy, and the National Treasury, in partnership with the taxi industry, will be facilitated via a permit swap system (old for new) and a scrapping allowance which will be available to legal owners of existing vehicles to offset the price of the new vehicles. The scheme has built-in regulatory levers in the form of compulsory registration of new vehicles on a national permits database and forced maintenance contracts linked to the residual (scrapping) value of the vehicle at the end of its effective life.

By June 2001, the six short-listed bidders were at work refining the raw prototype vehicles they displayed earlier in the year. A separate tender was published for the vehicles' electronic management system (EMS). All short-listed bidders will be given an opportunity to submit their best and final offer, incorporating the revised EMS technology specifications.

In addition, all vehicles will be subjected to a South African Bureau of Standards (SABS) homologation process and severe road-testing by Gerotek as part of the evaluation process.

Bus transport

A network of public and privately owned passenger bus services links the major centres of South Africa and also serves commuters in the deep rural areas. A spate of serious bus accidents in the latter half of 1999 led the Cabinet to approve far-reaching measures intended to improve public transport safety. These included the immediate intensification of law enforcement, lowering of the maximum speed limit for buses and minibus-taxis to 100 km/h, and a programme of vehicle fitness-testing for buses.

An informal consultation process is under way with freight and public transport employers' associations and trade unions. This will be followed by formal negotiations to build consensus around self-regulatory measures and legislative or regulatory changes deemed necessary for tighter fleet safety management.

International models being explored emphasise the need for a formal safety fitness rating methodology. A vehicle operator receives a safety rating when an accredited or authorised safety specialist conducts an on-site review of the operator's compliance with applicable safety and hazardous material regulations. In terms of the formal compliance review, the operator will then be awarded one of the three safety ratings: satisfactory, conditional or unsatisfactory.

To meet safety fitness standards, the carrier will have to demonstrate that it has adequate safety management controls in place to reduce the risks associated with

- inadequate levels of financial responsibility
- inadequate inspection, repair, and maintenance of vehicles
- PrDP standard violations
- the use of unqualified and fatigued drivers
- improper use of motor vehicles
- unsafe vehicles operating on highways
- failure to maintain collision registers and copies of collision reports
- motor vehicle crashes
- driving and parking rule violations
- violation of hazardous materials regulations.

The operator of a vehicle that has received an unsatisfactory safety rating will have a specified period of time from the effective date of rating notice to improve the safety rating to 'conditional' or 'satisfactory'.

If these improvements do not occur, the carrier will be prohibited from operating commercial motor vehicles or transporting passengers for reward.

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 at facilitating the unimpeded flow of goods and passengers between and across the territories of SADC member states. It wants 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. The Memorandum facilitates transport between member countries through, among other things, the use of the single permit system.

The Memorandum provides the framework for co-operation between the signatory countries, which has resulted in the establishment of various technical working groups for such things as traffic standards, road-user charges and passenger transport.

The activities of the passenger transport working group led to the establishment of Joint Route Management Committees (JRMCs) for certain cross-border passenger routes within SACU. The JRMCs 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

The main thrust of bilateral agreements is to facilitate and encourage cross-border road transport in support of regional trade.

This is promoted through, among other things, the entrenchment of the principle of extraterritorial jurisdiction, the entrenchment of a strategic public-private sector relationship, and the establishment of consultative mechanisms that are sufficiently flexible to promote the joint management of implementation.

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, which will facilitate the movement of goods and people by road and eliminate bureaucratic proceedings at border posts.

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

Domestic

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 also encourages small-business development in the industry.

Goods transport

Since the mid-eighties, the southern African road transport industry has grown considerably, with the number of road operators increasing from fewer than 400 in 1988 to nearly 4 000. Approximately 80% of all freight carried in South Africa is conveyed by road, while nearly 7% of the gross national product is spent on freight transport.

Road traffic safety

South Africa's road vehicle collision and fatality rates compare poorly with those of most other countries. Every year about 10 000 people are killed and 150 000 injured in approximately 500 000 accidents. The cost of road traffic accidents is estimated at more than R11,9 billion a year.

The Constitution authorises provinces to exercise legislative and executive powers pertaining to road traffic safety, while the promotion thereof is primarily the responsibility of the Department of Transport. The Road

Traffic Safety Board (RTSB) endorses and acts as guardian of the Road Traffic Management Strategy (RTMS), assists in the identification, formulation and prioritisation of projects, monitors progress, and gives direction in the implementation of the RTMS. The RTSB is made up of members of all three spheres of government as well as traffic stakeholders in the private sector. The Ministers of Education, Health, Justice and Constitutional Development, Provincial and Local Government, Safety and Security, and Transport serve on the Board.

Three Acts provide for the national co-ordination of regulation and law enforcement, the registration and licensing of motor vehicles, and the training and appointment of traffic officers. These are the Road Traffic Management Corporation (RTMC) Act, 1999 (Act 20 of 1999), the National Road Traffic Amendment Act, 1999 (Act 21 of 1999), and the Administrative Adjudication of Road Traffic Offences Amendment Act, 1999 (Act 22 of 1999).

The Administrative Adjudication of Road Traffic Offences Amendment Act, 1999 provides for a more efficient system of collecting traffic fines and for the introduction of a points demerit system, linked to the new credit card-format (CCF) driver's licence. In terms of the Act, a motorist's driver's licence will be suspended when he or she has 12 penalty points against his or her name. For every point over and above 12, the motorist's licence will be suspended for three months. Points can easily be accumulated, for example four points each for exceeding the speed limit by 50%, driving an unregistered vehicle, refusing to undergo a blood or breathalyser test, or driving a vehicle without registration plates. The use of hand-held cellular phones in vehicles was banned in August 2000; non-compliance could cost a motorist two points.

When a licence is suspended for a third time, it will be cancelled and the motorist will again have to undergo a driver's test. In more serious cases, a court may forbid a motorist ever to drive on a public road again. However, the system in no way detracts from the accused's constitutional right to a fair trial. The points demerit system is to be implemented in phases.

In February 2001, the Minister of Transport announced that the Administrative Adjudication of Road Traffic Offences Act, 1999 will be implemented immediately. This will be achieved via the incremental roll-out, starting in Gauteng, of the Road Traffic Infringement Agency (RTIA). As soon as all neccesary technical requirements have been employed, the Agency will start functioning.

The establishment of the RTMC is specifically intended to redefine and strengthen the structures and mechanisms for co-operation between the national, provincial and local spheres of government in support of their responsibilities for road traffic strategic planning, regulation, facilitation and enforcement, and to ensure uniformity in law enforcement and road traffic management country-wide. The main focus of the new system will be on road traffic law enforcement and the improvement of income streams. The objectives will be to curb fraud and corruption, increase private-sector involvement in road traffic management, and improve the quality of service to the public.

The RTMC will create a single umbrella structure, which will address functions such as vehicle and driver testing and licensing, standards monitoring, centralised statistical research, and professional career development of traffic officers. It will also set up a Traffic Academy.

Overloading

Early in 1996, a survey was undertaken to determine the extent of overloading on the road network. It was found that between 20% and 30% of all heavy vehicles were overloaded, causing damage in the order of R500 million per annum to roads.

In response, the Ministerial Committee created a National Overload Control Fund of R210 million, contributed to by the national and provincial departments of transport. This was to be spent over five years on the development and construction of a network of traffic control centres (weigh-stations), to monitor overloading offences.

However, not all provinces sustained their contributions, projects were scaled down, information gathering was poor, few Traffic Control Centres operated on a 24-hour basis, and many operators found ingenious physical escape routes and other methods of evasion.

All this has resulted in an estimated increase in damage to the road network now thought to be in the order of between R800 and R900 million per annum. It is further estimated that the percentage of overloaded trucks on the road network has increased to between 30% and 40%.

A new approach is thus being developed, whereby SANRAL is financing a comprehensive and effective corridor-focused overload control management system. This was initially devised in conjunction with KwaZulu-Natal, but is now being extended to other provinces.

It is based on a systematic operational strategy, which focuses on a combination of optimal use of critically located, fully-staffed and maintained weigh-stations, using escape cut-off tactics and increasing the use of tactically placed weigh-in-motion indicative devices. There is additional assistance from the private sector in the extended provision and operation of such devices.

The next step to be taken will be the completion of a technical study by the SABS into the admissibility of read-outs from such devices as evidence in court, and a consequent further redeployment of resources in the direction of this more flexible and cost-effective approach.

The SABS is working with the departments of Transport and Justice and Constitutional Development to implement the new system.

Arrive Alive

The Arrive Alive campaign is a year-round 24-hour per day campaign.

The success of the December 2000/01 and Easter 2001 traffic safety campaigns was also complemented by visible law enforcement by law enforcement officers.

Road safety education and ongoing awareness campaigns to sensitise the public also played a critical role in the decrease of the death toll. 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 relationship between traffic authorities in the various spheres of government.

The road death toll for December 2000 was 7,5% lower than in the same period in 1999. The road death toll for the 2000/01 holiday season was 1 124.

A national pedestrian safety month was launched in February 2001 by the Minister of Transport. The initiative was aimed at reducing the number of pedestrians killed on South African roads.

The Alive Pedestrian Month and its culminating Pedestrian Week, which lasted from 25–31 March 2001, dictated that provinces organised events at hazardous locations to raise public awareness around pedestrian issues.

The initiative was a joint effort between the national Department of Transport, the Council for Scientific and Industrial Research (CSIR) and the provinces. It was workshopped during January 2001 when representatives of all nine provinces identified 10 locations in their respective regions which are particularly hazardous to pedestrians, and undertook to initiate remedial engineering measures in those locations.

The engineering projects will be supported by appropriate education efforts aimed at adults and children, and by public awareness and enforcement campaigns to ensure compliance to the new or changed facilities. The CSIR is responsible for the evaluation of these 90 projects and for preparing a report on the effectiveness of the campaign.

Pedestrian problems are not restricted to South Africa. As indicated in Global Road

Safety Partnerships literature, they are prevalent in all developing and transitional societies because of a variety of factors. In some countries, pedestrian fatalities amount to up to 70% of road deaths. Although South Africa's rate is much less at between 30 and 40%, it is still unacceptably high. Factors which have exaggerated the problem in South Africa include lack of infrastructure such as adequate pavements or road-crossing facilities, lack of education in road usage, a traffic mix with vehicles and pedestrians sharing the road, poor town and transport planning of facilities such as schools and community halls, and an absence of enforcement.

The Department is in the process of introducing the NTCC with the assistance of the private sector. The NTCC will ensure commuter vigilance, reporting and preventative action. The Centre will receive and record calls on unsafe, poor, reckless and negligent driving behaviour and non-compliance with the rules of the road.

Important strides have been made in integrating road safety awareness education into the mainstream school curriculum, as a set of basic life skills that can be continuously expanded and deepened over time.

The implementation of road safety education has been planned and prepared in detail by task teams from the departments of transport and education.

Pre-school level through to Grade 9 will be exposed to systematic, practical road safety education within the framework of the 'life-skills' component of their curriculum.

All the required learning materials for grades 10, 11 and 12 will be ready by 2002, but these modules will only be introduced within the implementation time-frame set by the Department of Education; 2003 for Grade 10, 2004 for Grade 11 and 2005 for Grade 12.

Road traffic control

The Department of Transport is responsible for coordinating and harmonising traffic control (law enforcement) in South Africa. This is done in liaison with the provinces, which have legislative and executive powers in this regard. The aim is to enhance traffic quality, promote voluntary compliance by road users with rules and regulations, reduce the incidence of traffic offences, prevent accidents, ensure effective adjudication, and implement improved management.

An important facet of the Department's work is the development of a standardised management system for traffic control at micro level, to assist traffic authorities in managing their internal and external environments optimally and to achieve the highest levels of traffic quality, subject to the limited availability of resources. The traffic management model has been implemented at approximately 100 provincial and local traffic authorities. Other functions undertaken by the Department include the following:

- developing a standardised training system for traffic personnel
- developing a proactive traffic control system, with special emphasis on community involvement in the improvement of traffic quality
- facilitating the national overloading control programme for the protection of roads on rural, metropolitan and urban routes, and several other coordinated programmes regarding critical road traffic offences or modes, e.g. alcohol, speeding, following distance, tyre condition and pedestrians.

The National Traffic Information System (NaTIS) is an online system, allowing traffic authorities to key in and verify the particulars of a transaction while the applicant is still in the office.

The conversion to the CCF licences will improve the operation of the System, which is expected to save the country millions of Rands by making traffic administration more efficient and reducing traffic accidents, forged licences and vehicle theft. The NaTIS provides for

- vehicle registration and licensing
- driver and professional driver registration
- registration of authorised officers, and vehicle and driver-testing facilities
- recording of traffic offences
- recording of collisions.

Accident insurance

Under the present system, motor accident victims are able to claim up to R1 million for damages and loss of income.

In March 2001, the Road Accident Fund (RAF) Amendment Bill was approved for submission to Parliament. The Bill confers additional powers and/or functions to the Fund in line with road safety projects initiated by government.

The Fund receives a dedicated RAF levy, which is imposed on petrol and diesel. The levy has been differentiated between petrol and diesel at 14,5 cents a litre and 10,3 cents a litre in 2000/01, respectively, and this yielded an estimated R2 158,9 million in revenue. New tax proposals include an adjustment to the petrol levy by 2 cents a litre to 16,5 cents a litre from April 2001, and the equalisation of the diesel levy to 16,5 cents a litre by July 2001. These adjustments will result in an additional R437 million, and an estimated total revenue of R2 510 million in 2001/02. The administration of the Fund and benefits payable are being reviewed, and an RAF Commission has been established to investigate ways in which the Fund can be restructured.

Rail transport

The implementation of the National Land Transportation Act, 2000 resulted in a focus by newly elected metropolitan or unicity authorities on their obligations and rights relative to commuter rail. Most of the bigger cities have already started processes to ensure the establishment of appropriate structures such as Metropolitan Transport Authorities to ultimately control commuter rail concessions within their sphere of authority.

Significant progress has been made with the establishment of the Railway Safety Regulator (RSR). The RSR will monitor and supervise the establishment of a Safety Management System for South African railway operators. Currently, the main operators are Spoornet and Metrorail. Both have worked very closely with the national Department of Transport team that has been tasked with finalising the legislation for submission to Parliament during the 2001 session. By June 2001, draft legislation was completed.

In the meantime, Metrorail and the South African Rail Commuter Corporation (SARCC) have started an ambitious programme to reduce fare evasion in the commuter rail system. The Automatic Fare Collection and Control system will be designed to enable Metrorail to recover as much of the fares as possible. At the same time, it will create new opportunities for modal integration and through ticketing initiatives. Both commuters and the Government will benefit.

Spoornet

Spoornet is the largest division of Transnet, a commercialised company with the State as shareholder. Transnet was created in 1990 as a result of government policy to commercialise its transport business interests and deregulate the transport industry in South Africa. Spoornet's core business lies in Freight Logistics Solutions (FLS) designed for customers in numerous industry-based business segments, mining, heavy manufacturing and light manufacturing sectors.

Spoornet is the largest railroad and heavy haulier in southern Africa with an annual turnover of R9 billion, generated by the transportation of 180 Mt of freight. The company has 60% market share of the 170 billion ton kilometre cargo available in South Africa. To serve these markets, it utilises 30 600 km of track, 3 549 locomotives and 123 750 wagons.

Spoornet maintains an extensive rail network across South Africa and connects with rail networks in the sub-Saharan region. Its infrastructure represents 80% of Africa's rail infrastructure.

Freight Logistics Solutions (FLS)

In line with current market demands, Spoornet's new vision is to be the leader in FLS. To achieve this vision, the company has devolved from its current rail competencies to warehousing, transport (including long haul, trans-shipment and feeder services), inventory management, freight forwarding, clearing and other logistics services. Logistics is the management of the entire supply chain, where a supply chain can be described as the flow of goods from supplier through manufacturing and distribution chains to the end user.

Logistics incorporates all the freight transportation modes such as road, rail, airfreight, ocean and barge. It includes warehousing, inventory management, fleet operations, freight forwarding, and customs brokerage services. The software and information technology used to support the flow of goods to market is also part of the logistics mix.

Spoornet consists of five business units, each with its own core business focus.

General Freight Business (GFB)

GFB is the largest Spoornet business unit in terms of revenue, customer accounts and the number of people employed. It handles in excess of 52% of its freight tonnage per annum.

GFB conveys about 96 Mt of commodity freight a year, serving customers in specialised diverse industrial commodity markets, namely mining, and light and heavy manufacturing. Structures provide for a sales force dedicated to customers in specific business sectors under a relationship/one-on-one philosophy.

COALlink

COALlink focuses on the provision of world class transportation of South Africa's export coal, from the Mpumalanga coalfields to the Richards Bay Coal Terminal at the port in Richards Bay.

South Africa is second only to Australia in terms of tons of coal exported. South Africa is the world leader in terms of steam coal exports. Coal exports constitute an integral part of the South African export industry, with a value approaching 2% of South Africa's gross domestic product. Coal exports rank as the fourth-largest earner of foreign exchange, and the industry employs thousands of people.

COALlink was formed in 1997, through the ringfencing of the rail operation over the coal export line, and augmenting the structure with a business component and other support functions. This initiative ensured that South Africa remains at the forefront of the world steam-coal export market. Mercer Management Consultants benchmarked the coal line operation in 1994 against similar operations world-wide. The study rated the bulk export logistics supply chain as 8% more efficient than world best-practice.

A major milestone in the history of the coal export industry in this country was reached in December 2000 when the billionth ton of coal was transported over the coal line and exported through the terminal. The coal line celebrated 25 years of existence in April 2001.

Orex

Orex, a specialist business unit of Spoornet, deals in the haulage of iron ore over the 861-km track from Sishen to Saldanha Bay. The line is dedicated to the movement of iron ore from the mines in the far Northern Cape to the steel industries in the Western Cape, and for the export of the ore through the Port of Saldanha Bay. The success of this bulk logistics operation depends on close co-operation with the port and its facilities.

The average iron ore transported per year increased from 17,5 Mt for the period 1990/92 to 1994/95, to 21,6 Mt for 1999/00. A benchmark study rated this seamless operation as 38% more efficient than world best-practice.

Information

In September 2001, Gauteng's Premier, Mbazima Shilowa, announced plans for a Gauteng rail network that would create more than 40 000 jobs.The network will link Johannesburg, Pretoria and the new central business district of Sandton with the Johannesburg International Airport. The new world-class fast trains are expected to drastically reduce traffic congestion on Gauteng roads. Construction is set to begin in the second half of 2003.

Orex does not only transport iron ore, but has also become an international player in providing a diverse range of heavy-haul logistics solutions for growing local and international markets. The line celebrated its 25th anniversary in May 2001.

Main Line Passenger Services (MLPS)

MLPS provides an affordable intercity passenger service between major destinations in South and southern Africa. Approximately four million passengers utilise their services per annum.

MLPS operates daily long-distance passenger services between Johannesburg, Durban, East London, Port Elizabeth, Bloemfontein, Kimberley and Cape Town. Services also connect main centres in South Africa with destinations in southern Africa, namely Bulawayo in Zimbabwe, Maputo in Mozambique, and Mbabane, Swaziland.

MLPS ensures access for any person or enterprise that wishes to charter a train. Significant time and effort is spent on the design of the train service to fit their needs and requirements. The type of coaches that can be hired varies from traditional sleeper coaches to lounge cars, dining cars and open plan coaches that can be used for parties or lecture rooms.

For the more selective travellers MLPS offers a new class of travel, called Premier Classe. It consists of two sleeping coaches and one dining *cum* lounge car that is for the exclusive use of these guests. The sleeping coaches and air-conditioned lounge/dining car can accommodate up to 20 people.

LuxRail

LuxRail's primary focus is on the prestigious operation of the Blue Train, and caters to a growing international tourist market. For over half a century, South Africa's Blue Train has enjoyed an international reputation as one of the world's paramount travelling experiences. It was voted the world's leading luxury train by some 250 000 travel agents in 181 countries at the 2001 World Travel Awards. The Blue Train wine list has consistently, for the past few years, received the Annual Diner's Club Award of Approval.

A lounge car at the rear of the Train compliments the unique Blue Train experience by allowing guests to use it as an observation car. The observation car is designed to be transposed from a lounge to a 22-seater conference facility with computer, overhead projection, video and slide facilities.

The Blue Train travels from Pretoria to Cape Town, the Victoria Falls and Hoedspruit, and on the famous Garden Route, between Port Elizabeth and Cape Town.

LuxRail also manages contracts with other luxury train operators utilising Spoornet's infrastructure, such as Rovos Rail and Spier on the wine route in the Western Cape.

Social investment activities

Spoornet contributes to the social fabric of South Africans, and notable social investment activities include the following: the Legal i Train, AIDS awareness, Mr ChooChoo Safety Education Campaign, the Spoornet Rugby Excellence Programme, and Saturday schools for Spoornet employees' children to improve their performance in mathematics and science and to offer supplementary courses such as study skills, career guidance and computer literacy. These classes are designed to support the national school curriculum.

South African Rail Commuter Corporation (SARCC)

The SARCC is a State corporation, established in 1990 to provide commuter rail services for the people of South Africa. It falls directly under the Department of Transport, but has its own autonomous board of control. It owns the rail assets and acts as an agency of the Department. Its main sources of revenue are the subsidies to cover operational losses and capital expenditure. The Corporation received transfers from the Department of R1 727,4 million in 2000/01.

The Corporation's role as concessionor is to establish and monitor service standards, safety and security levels, and operating efficiencies. The *White Paper on National*

Transport Policy will lead to far-reaching changes in the way commuter rail services are structured in future. According to the White Paper, public and private operators will in future be able to bid competitively for the right to operate a rail line, a service or a network concession.

This has meant a change in the mission of the SARCC to one that ensures the 'provision of effective, efficient and sustainable rail commuter services under concessioning agreements'.

The Department has developed a strategic framework for the concessioning of rail services. Parliament has passed the SARCC Limited Financial Arrangements Act, 2000 (Act 64 of 2000), to effect the transfer of the SARCC's debt of about R2,2 billion to government. From 2001/02, the Corporation's total expenditure will be funded from the budget of the Department of Transport. In the past, capital expenditure was funded through borrowing – hence the accumulation of debt.

Metrorail

Metrorail, a business unit of Transnet, is tasked with the operation of SARCC assets to provide an efficient commuter service. Metrorail only services urban areas. It operates in the Witwatersrand area, Pretoria, the Western Cape, Durban, Port Elizabeth and East London.

Metrorail operations have made steady progress in implementing far-reaching efficiency-improvement projects. This has enabled Metrorail to save the fiscus just over R90 million in the 1999/00 and 2000/01 financial years. At the same time, it has produced healthy returns to its shareholder.

Through customer-focused projects, it is managing to attract more customers back to rail. A highly successful pilot project, the Metroplus Express between Pretoria and Johannesburg, has received complimentary press coverage. The number of customers of this service has grown from 75 on the first day to 400 per day. There is now a request for this service to be extended to other areas.

Together with the SARCC, major safety projects have been identified, and significant portions of the R355 million capital funds will be spent on refurbishing or renewing safety-critical signalling installations. The investment in the refurbishment of rolling stock is continuing, and the increased infrastructural investment as announced by the Ministers of Finance and Transport should also see improvements in other parts of the railway infrastructure.

The Department, together with the SARCC and Metrorail, is looking at streamlining institutional arrangements, improving management, reducing inefficiencies, and dealing decisively with fare evasion and safety and security both on trains and at commuter stations. Some R300 million has been earmarked for renewal and upgrading of rolling stock and signalling systems.

The Department has developed a strategic framework for the concessioning of rail services; the current Metrorail service contract is already based on concessioning principles.

The Minister of Transport has announced that concessioning will not occur during 2003 as originally planned. This is to give the country an opportunity to review the principles around concessioning and develop a programme to address the challenges around infrastructure investment in the railway industry. It also has implications for the pilot concessioning project that was due to start in 2002. In the meantime, Metrorail and the SARCC have continued to conduct their relationship in terms of the Business Agreement

Information

The Minister of Transport instructed Intersite Management Services in March 2001 to conduct an audit of all the 350 train stations across the country. Intersite, which is responsible for developing the stations, will look at improving their infrastructure and communication systems. The aim of this move is to avoid a situation where Metrorail operates and at the same time investigates themselves in cases where accidents or inconveniences have happened.

that is firmly based on world-wide concessioning principles.

Intersite

Faced with managing a property portfolio of more than 373 stations worth some R2 billion, the SARCC formed a property management company in 1992, called Intersite Property Management Services, to perform this task on its behalf. Intersite aims to develop railway stations into transport nodes that link taxi, bus and rail services in an integrated public transport system. Money earned from the commercial aspects of Intersite's developments is ploughed back to reduce the subsidy provided by government.

Operations

Metrorail is responsible for some 19% of all public transport in South Africa, which amounts to transporting approximately two million people to and from work daily. It serves 473 stations with 2 400 train services. Operating assets to the value of R69 million are managed on behalf of the State. Metrorail has set aside R2,8 billion to upgrade its coaches over the next 15 years. These include mobile ticket-selling points, customer care programmes for all frontline staff, station upgrades and a zone fare structure.

Civil aviation

South Africa's aviation policy is being reviewed to move away from protection, introducing greater openness and competition. South Africa is party to the Yamoussoukro Declaration, which provides for the opening up of the African skies over the next few years.

Airports

The Cabinet approved the *Green Paper on National Policy on Airports and Airspace Management* in February 1998. The document lays down principles for the development of airports, and calls for the sustainability of public-owned airports to be assessed and for action to be taken where necessary. The Green Paper establishes criteria, ranging from economic activity to the implementation of air traffic control, that should be used to determine which airports could be named as possible international airports. Civil aviation is controlled by the CAA. International airports are those airports where the necessary facilities and services exist to accommodate international flights. Cabinet has approved 10 international airports in South Africa. These are: Johannesburg, Cape Town, Durban, Bloemfontein, Port Elizabeth, Pilanesberg, Lanseria, Gateway (Pietersburg), Nelspruit and Upington.

In 2000, 8 810 873 passengers moved through these airports.

The Airports Company of South Africa (ACSA) owns and has responsibility for the planning, construction and operation of the nine previously State-operated airports. The assets and operations of these airports were transferred to the Airports Company in 1993. The airports are Johannesburg, Cape Town and Durban international airports, and the airports at Kimberley, Port Elizabeth, Bloemfontein, George, East London and Upington. These airports serve about 15 million passengers every year.

The Air Traffic Navigation Service (ATNS) Company is responsible for the efficient running of South Africa's air traffic control systems and the maintenance of navigation equipment, which includes the deployment of air traffic controllers and aviation technical staff.

A joint operations centre at Johannesburg International Airport is the nerve centre of all

Information

The CAA declared June 2001 *Aviation Safety Awareness Month*. The purpose of the campaign was to create greater awareness within the aviation industry and amongst the flying public. A comprehensive programme of events was carried out, including aviation safety workshops in Johannesburg, Cape Town, Durban and Port Elizabeth. A publicity drive to raise awareness of in-flight fire hazards has been launched at all major airports. This was supported by ACSA, the ATNS, all the domestic airlines, and wide sections of the tourism industry, including hotels and travel agents.

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 information technology centre.

The Airports Company is undertaking major capital developments totalling R1,7 billion at the Johannesburg, Cape Town and Durban international airports. Half this sum is allocated for Johannesburg International Airport, the busiest in Africa. The Airport at Johannesburg is expected to deal with 18 million passengers a year by 2005.

Construction of a new domestic terminal at a cost of R350 million is expected to be completed by 2003.

Cape Town International Airport is to spend about R2,8 billion on developments over the next five years. A new baggage-scanning system capable of detecting hazardous chemical compounds has been installed. It is part of a R27-million baggage security upgrade at the country's international airports.

Scheduled airlines

Domestic services

Twenty scheduled domestic airlines are currently licensed to provide air services within South Africa. These airlines provide internal flights, which link up with the internal and international networks of SAA, British Airways (BA)/Comair, Interair, SA Express and SA Airlink.

International services

BA/Comair, SA Express, SA Airlink and Interair operate scheduled air services within 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, Cargolux, Cathay Pacific, Congo Airlines, Das Air, Delta Airlines, El Al, Egyptair, Emirates, Ethiopian Airlines, Ghana Airways, Iberia, KLM, Kenya Airways, LAM, LTU, 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.

Ports

By far the largest, best-equipped and most efficient network of ports on the African continent, South Africa's seven commercial ports have a significant role to play. They are not only conduits for the imports and exports of South Africa and neighbouring countries, but also serve as hubs for traffic emanating from and destined for the East and West African coasts. Portnet, a division of Transnet Limited, is the largest port authority in greater southern Africa, controlling seven of the 16 biggest ports in this region.

These are Richards Bay, Durban, East London, Port Elizabeth, Mossel Bay, Cape Town and Saldanha. Portnet's regulatory function will be separated from its operational function in order to radically enhance efficiency in freight handling and logistics, and reduce costs while at the same time providing for independent regulation. Portnet will retain its landowner function, but will have to compete with international tenders for the concession of port operations.

The new National Ports Authority was created, which will ensure independence and impartiality in carrying out the regulatory function. The Authority's Corporate Identity was launched on 23 August 2001.

First-class facilities and services at reasonable tariffs are comprehensive, and include navigational aids along the coast. There are 45 lighthouses, 29 of which are automatic.

Portnet offers all port services, except for stevedoring and cartage of break bulk cargo at

Durban. The services provided include pilotage, tugs, berthing, shore labour for shipping and discharging, tally clerks and checkers. All large tugs are fitted with salvage and fire-fighting equipment. Portnet also operates port grain elevators at Durban and East London.

The ports of Durban, Port Elizabeth and Cape Town provide large container terminals for deep-sea and coastal container traffic. East London has a small terminal to handle conventional and coaster feeder vessels carrying containers.

Durban is Africa's busiest port and the largest conduit for containerised cargo in southern Africa. It is responsible for more than 70% of South Africa's containerised traffic, with a daily handling capacity of 3 500 containers. The bay covers an area of 893 ha, and the port entrance channel is 12,8 m deep at low-water ordinary springtide. Quayage available for commercial shipping is 15 196 m. Durban can accommodate deep ro-ro vessels and has five deep-sea and two container berths, as well as repair facilities. Privately-owned bulk storage and handling facilities for various products are provided in the port.

Information

The 3rd meeting of the Southern Africa Transport and Communication Commission's (SATCC) Maritime and Inland Waterways Committee Meeting was held in Durban in March 2001. The Minister of Transport said that some 90% of South African imports and exports reached or left the country's shores by sea, hence the need to maintain the highest possible standards of ports efficiency, maritime training of seafarers (including shore-based personnel), maritime legislation, safety standards at sea and ashore, environmental control, and the provision of an effective search-and-rescue service to the vessels that sail along the country's coastline.

Over the past year, some 700 ships calling at South Africa's ports were targeted for Port State Control inspections at the country's seven major ports. Vessels not in compliance with international safety standards and norms were detained and fined when necessary.

The Indian Memorandum of Understanding for Port State Control, which is chaired by South Africa, is playing a vital role in the eradication of sub-standard ships from Indian Ocean waters. The efficiency of this system will be greatly improved once a database and information office of ship information is established by early 2003.

The Ben Schoeman Dock in Cape Town has a water area of 112,7 ha with five berths for container handling as well as a pier for coastal ro-ro traffic. The Dock has comprehensive ship-repair facilities. The bulk of South Africa's fruit exports is handled here.

Port Elizabeth has an enclosed water area of about 115 ha, and more than 3 400 m of quayage alongside for commercial shipping with depths of up to 12,2 m at chart datum. In addition, anchorage is available for vessels of any draught in a partly sheltered roadstead.

East London, the only river port in South Africa, has nearly 2 600 m of commercial quayage with low-water depths alongside varying from 8,5 m to 10,7 m. Tankers with an overall length of 204,2 m and a maximum loaded draught of 9,9 m can be accommodated at the tanker berth, which is 259 m long.

Saldanha, 110 km north-west of Cape Town, is in water mass the largest harbour facility on the South African coast. It was developed primarily for the export of high-grade iron ore from Sishen in the Northern Cape. A railway line of 861 km was built from Sishen to the ore terminal. Saldanha Bay is the largest port on the west coast of Africa.

The port area, nearly 5 200 ha, is about four times larger than the combined areas of the ports of Durban, Cape Town, Port Elizabeth and East London. It is one of the best natural ports in the world, and the only breakwater which had to be constructed was a 1 700 m spending beach type. Anchorage is provided in the lee of the breakwater, where the minimum water depth is 14,6 m at chart datum. Other facilities include a general-purpose quay with a depth alongside of 12 m at chart datum, a tug port and many navigational aids.

Richards Bay Port was developed primarily to handle bulk cargoes such as bituminous coal and anthracite. This deepwater port, 193 km north of Durban, is the biggest port in South Africa and the world's largest bulk-coal terminal. It handles 53% of the country's total tonnage of cargo.

Pipelines

Petronet owns, maintains and operates a network of 3 000 km of high-pressure petroleum and gas pipelines. During the 1999/00 financial year, Petronet transported 16 billion litres of fuel from coastal and inland refineries to the main business centres in Gauteng and surrounding areas, and some 200 million m^3 of gas from Secunda to KwaZulu-Natal. Petronet's customers are the major oil companies in South Africa.

Maritime affairs

Maritime administration, legislation and shipping

South Africa's maritime administration and legislation is the responsibility of the Department of Transport, and is controlled on its behalf by SAMSA 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 sea pollution by oil and other substances emanating from ships.

The Department of Environmental Affairs and Tourism is responsible for the combating of pollution, and has specific means at its disposal such as the *Kuswag* vessels with which to perform this function.

SAMSA is responsible for the introduction and maintenance of 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 communication and radio navigation aids
- pollution prevention.

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

Other functions include the registration of ships, the establishment of a coastal patrol service, and the management of marine casualties and wrecks.

SAMSA is steadily improving its capacity to monitor safety standards on foreign vessels. Over the past year, 700 ships calling at South Africa's seven major ports were inspected. Vessels not in compliance with international safety standards were detained until the deficiencies were 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.

Training

The South African Merchant Navy Academy, 'General Botha', established at Granger Bay, is integrated into the Cape Technikon, with a similar training facility at the Natal Technikon. Deck and engineering students and officers complete their academic training at the Cape and Natal technikons, 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 the accreditation of all maritime courses.

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

Search-and-rescue services

The Department of Transport is responsible for the provision of a search-and-rescue function in South Africa. The South African Search and Rescue Organisation (SASAR) has been established to provide South Africa with a renowned search-and-rescue capability. SASAR is a voluntary organisation, and functions under the auspices of the Department of Transport.

SASAR comprises the Executive Committee, chaired by the Head of the South African Search and Rescue Services, the Maritime Subcommittee and the Aeronautical Subcommittee.

Its main function is to search for, assist and, if necessary, rescue survivors of aircraft accidents or forced landings, vessels in distress and accidents at sea. It is also charged with coordinating the resources made available to the Department of Transport by various government departments, voluntary organisations, private aircraft and shipping companies for search-and-rescue purposes. The Executive Committee of SASAR, in conjunction with the relevant officials of the Department, is responsible for formulating policy and procedures.

The Department of Transport, South African National Defence Force, Telkom, Portnet, SAMSA, CAA, ATNS Company, SAPS, ICASA, SAA and the Department of Provincial and Local Government are members of SASAR and contribute their services and/or facilities. Voluntary organisations such as the 4X4 Rescue Club, Mountain Club of South Africa, Hamnet and the National Sea Rescue Institute are also members of SASAR.

The Department of Transport is charged with the negotiation and conclusion of bilateral search-and-rescue agreements with countries bordering on the vast area of responsibility, which is laid down by both the ICAO and the IMO and is approximately 28,5 million km^2.

In 2000, search-and-rescue negotiations were concluded with five states, and a new Search and Rescue Agreement was signed with Namibia. In 2001, it was envisaged that negotiations would be carried out with Swaziland, Botswana, Zimbabwe, Angola, Mauritius, Madagascar, US, Uruguay and Brazil.

South Africa initiated discussions on regional co-operation and coordination in search-and-rescue by tabling a proposed regional search-and-rescue agreement for consideration by SADC member states.

A Working Group has been established under the auspices of the SATCC's Technical Unit to consider a regional agreement on the coordination of search-and-rescue services.

South Africa has contributed significantly to search-and-rescue in the southern oceans with the establishment of the Cospas-Sarsat System. It comprises three segments, namely:

- radio beacons, carried by ships and aircraft as recommended by the IMO and ICAO
- a space segment
- a ground segment.

Satellite services are provided free of charge in terms of the International Cospas-Sarsat Agreement, but individual countries must provide and pay for the ground segment that comprises

- Local User Terminals (LUTs), that process relayed distress signals to provide a beacon location and then transmit alert messages to the Mission Control Centre (MCC)
- the MCC which then validates and exchanges alert data and technical information and redistributes it to search-and-rescue authorities.

South Africa has been accepted as a member of the International Cospas-Sarsat Programme as Ground Segment Provider with effect from 1 November 2000.

This will enable its LUT/MCC to be integrated into the global Cospas-Sarsat System. The following countries will be served by the LUT/MCC: Angola, Botswana, Burundi, the Democratic Republic of Congo, Lesotho, Malawi, Mozambique, Namibia, Rwanda, Swaziland, Uganda, Zambia and Zimbabwe.

Acknowledgements

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Department of Transport
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Portnet
South African Rail Commuter Corporation
Transnet Ltd

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