

**NOTICE 3410 OF 2002**

**NATIONAL DEPARTMENT OF TRANSPORT  
ENVIRONMENTAL IMPLEMENTATION PLAN  
(FIRST EDITION)**

**EXECUTIVE SUMMARY**

This document is the First Edition Environmental Implementation Plan compiled for the National Department of Transport as per the requirements of Section 11(1) of the National Environmental Management Act, No. 107 of 1998. The First Edition EIP conforms to the guidelines suggested by the Department of Environment Affairs and Tourism and contains:

- A description of the NDOT mandate (including the functions of the NDOT, its agencies and parastatal companies impacting on the environment)
- Institutional arrangements (external and internal relationships involving the NDOT, mechanisms and procedures for co-operative governance, and the requirements of environmental legislation)
- A description of the policies, plans and programmes of the NDOT, its agencies and parastatal companies which may impact on the environment
- An evaluation of these policies in terms of their environmental impact
- Recommendations for environmental management
- An addendum containing key indicators for the implementation of the recommendations of the EIP.

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## LIST OF ABBREVIATIONS

ACSA	Airports Company of South Africa
ATNS	Air Traffic and Navigation Services
BOT	Build Operate Transfer
CAA	Civil Aviation Authority
CBRTA	Cross-Border Road Transport Agency
CDCAA	Chief Directorate Civil Aviation Authority
CDM	Clean Development Mechanism
CEC	Committee for Environmental Co-ordination
COTO	Committee of Transport Officials
DACST	Department of Arts, Culture, Science and Technology
DEAT	Department of Environment Affairs and Tourism
DHE	Department of Health
DLA	Department of Land Affairs
DME	Department of Minerals and Energy
DOA	Department of Agriculture
DOF	Department of Finance
DOH	Department of Housing
DOL	Department of Labor
DPE	Department of Public Enterprises
DPLG	Department of Provincial and Local Government
DTI	Department of Trade and Industry
DWAF	Department of Water Affairs and Forestry
EIA	Environmental Impact Assessment
EIP	Environmental Implementation Plan
FIR	Flight Information Region
HOV	High Occupancy Vehicle
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
IMO	International Maritime Organisation
ITP	Integrated Transport Plan
JSE	Johannesburg Stock Exchange
LED	Local Economic Development
LTCC	Land Transport Co-ordinating Committee
MIDP	Motor Industry Development Plan
MINCOM	Ministerial Committee
MOU	Memorandum of Understanding
MSA	Moving South Africa
MTB	Metropolitan Transport Boards
MVA	Motor Vehicle Accident
NEMA	National Environmental Management Act
NFA	National Framework Agreement
NDOT	National Department of Transport
NLTTA	National Land Transport Transition Act
PPP	Public Private Partnership
RAF	Road Accident Fund
RCC	Roads Co-ordinating Committee
SAMSA	South African Maritime Safety Authority
SANRA	South African National Roads Agency Ltd
SARB	South African Roads Board
SARCC	South African Rail Commuter Corporation
SEP	Strategic Equity Partner
SMME	Small Medium and Micro Enterprise
SOE	State Owned Enterprise
TA	Transport Authority
TDM	Travel Demand Management

## **1. MANDATE AND FUNCTIONS**

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### **1.1. RATIONALE FOR THE ENVIRONMENTAL IMPLEMENTATION PLAN**

In terms of Section 11(1) of the National Environmental Management Act, No. 107 of 1998, the NDOT is obliged to compile an EIP and submit this document to the CEC of the DEAT.

The underlying purpose of the EIP is to implement the principle of co-operative governance. A fundamental component of this exercise is to identify those activities of the Department and its agencies, and other organs of state falling under its jurisdiction, which may have an impact on the environment. Current structures in the Department will be examined to determine whether these are sufficient for dealing with these issues. Where required, additional structures and institutional arrangements necessary to deal with these activities are recommended. A number of indicators are provided to assist in determining whether these objectives are being met.

### **1.2. DESCRIPTION OF THE NDOT MANDATE**

#### **1.2.1 Role of the NDOT**

Since 1998 the NDOT's role and structure have undergone fundamental changes to enable the Department to implement the goals of the 1996 White Paper on National Transport Policy and the 1998 Moving South Africa Strategy. The role of the NDOT has changed from one of administration and bureaucratic regulation to one of policy-making, strategic leadership, substantive regulation and facilitation of action. This has entailed the creation of a new set of institutions and relationships in the transport sector.

The NDOT is now a relatively small organisation whose function encompasses the areas of policy formulation and analysis, strategy determination and high-level regulation. In its new role, the Department sits at the heart of a cluster of government agencies and parastatal companies operating in a commercial environment, which delivers the actual services - infrastructure development and safety enforcement. The role of the NDOT has therefore altered from that of a government department which attempted to formulate and implement policy to one of a streamlined department which oversees and co-ordinates a number of focused agencies and parastatal companies that are commercially oriented and carry out specific functions.

The role of the NDOT is therefore perfectly suited to formulating an EIP and implementing the principle of co-operative governance.

### 1.2.2 Vision for the NDOT

The vision for South African transport is a system that will:

"provide safe, reliable, effective, efficient and fully integrated transport operations and infrastructure which will best meet the needs of freight and passenger customers at improving levels of service and cost in a fashion which supports government strategies for economic and social development whilst being environmentally and economically sustainable" (NDOT, White Paper on National Transport Policy, 1996).

### 1.2.3 Mission statement of the NDOT

The Department will work in a transparent, accountable and responsible manner, with the provinces and the other countries in the southern African region, to provide an affordable, safe and sustainable national and international transport system by:

- Planning new transport infrastructure and means of developing the country to improve mobility and the quality of life for all
- Regulating the transport system to ensure its efficiency and effectiveness, to prevent strife and to create an environment of healthy competition
- Supporting the transport system through appropriate and justified subsidisation where necessary
- Managing the transport system to ensure its upkeep and so that forward planning for rehabilitation improvements and enhancements can be done timeously.

## 1.3. FUNCTIONS OF THE NDOT IMPACTING ON THE ENVIRONMENT

Unlike numerous other national government departments, the NDOT is responsible solely for policy co-ordination and monitoring and is not directly involved in implementation as it was in the past, e.g. the management of national road infrastructure. These activities are now carried out by the agencies and parastatal companies falling under the NDOT's responsibility. The NDOT's new role, however, ensures that it is perfectly positioned to oversee the environmental impacts of these activities, monitor them and advise on suitable structures to deal with them – essentially the co-operative governance role set out in the NEMA.

The policies, plans and programmes of the NDOT, the agencies and parastatal companies will be examined in detail and evaluated to determine whether they meet the requirements of the NEMA and other environmental legislation.

#### **1.4. AGENCIES AND PARASTATAL COMPANIES RESPONSIBLE TO THE NDOT AND INCLUDED IN THE EIP**

A number of agencies were created out of functions, which were previously undertaken by the NDOT. The agencies are responsible to the Minister of Transport and are included in the EIP:

- South African National Roads Agency Limited
- Road Accident Fund
- South African Maritime Safety Authority
- Cross-Border Road Transport Authority
- South African Civil Aviation Authority

The EIP also includes an examination of the following parastatal companies, which are answerable to the Minister of Transport as majority shareholder, namely:

- Airports Company of South Africa
- Air Traffic & Navigation Services Company
- South African Rail Commuter Corporation

##### **1.4.1 South African National Roads Agency Limited**

This section contains information on the mission, functions and financing sources of the SANRAL.

###### **1.4.1.1 SANRAL rationale**

The SANRA came into being after a detailed study by the NDOT which concluded that a roads agency was required to administer the South African (national) road network, comprising approximately 7 200 km of roads. This agency would replace the Chief Directorate: Roads of the NDOT but would be more commercially oriented than a conventional government department. The SANRA was then constituted in terms of the South African National Roads Agency Limited and National Roads Act, No. 7 of 1998. The SANRA was established in terms of the Act as an independent statutory company with the Minister of Transport as the sole shareholder.

###### **1.4.1.2 SANRAL mission**

The mission of the agency is to commercially driven organization committed to achieving its vision for the economic benefit of the South African community through:

- A highly motivated and professional team;
- State-of-the-art technology
- Proficient service providers; and
- Promoting the user pay principle.

#### 1.4.1.3 SANRAL functions

The SANRAL's principle tasks with respect to the national road networks are the following:

- To strategically plan, design, construct, operate, rehabilitate and maintain South African's national roads;
- To deliver and maintain a world class road network for South Africa;
- To generate revenues from the development and management of its assets;
- To undertake research and development to enhance the quality of South Africa's roads;
- To advise the Minister of Transport on matters relating to South Africa's roads; and
- Upon request from the Minister of Transport and in agreement with a foreign country, to finance, plan, construct, acquire, provide, operate and maintain roads in that country.

In pursuit of the various tasks assigned to it by the South African National Roads Agency Act of 1998, the SANRAL performs the following core functions:

#### **Road Management and Strategic Road Network Planning**

The SANRA develops and manages the National Road network. This involves in-depth research and analysis of key data across a global front to arrive at optimal engineering and financial solutions to South Africa's existing and future road network needs. To this end, increasing emphasis is being placed on important social and economic issues. This, in turn, has led to a rise in prominence of concepts such as inter-modal transport development and management, which are aimed at stimulating economic growth and development.

#### **Engineering**

This covers the maintenance and, where necessary, upgrading of the existing national road network, as well as the provision of new roads, bridges and interchanges. This work draws on a wide variety of skills and services (including extensive environmental impact assessments) to determine the environmental compatibility of new construction projects.

#### 1.4.1.4 SANRAL financing sources

The following financing sources are relevant to SANRA for the funding of its infrastructure:

**Toll income** – the user-pay principle is now well established on major limited-access national roads.

**Borrowing powers** – Section 33(2)(a) of the South African National Roads Agency Limited and National Roads Act, 1998 (Act No. 7 of 1998) entitles the Agency at any time, with the approval of the Minister of Transport and in consultation with the Minister

of Finance, to raise funds by means of loans from any source including the money and capital markets;

**Private Sector Borrowings** – In view of the borrowing powers of the Agency, financing is procured from the private sector and/or through Concession Contracts and the toll income provides the income stream to service these loans.

**Treasury Allocations** – The Agency receives an annual budget from the National Treasury to finance non-toll roads. The current 7 200 km of national roads under the Agency's jurisdiction comprises of both toll and non-toll roads. While toll roads are funded through the user-pay principle, non-toll roads are funded through the National Treasury.

The SANRAL is the successor of all assets and liabilities of the old South African Roads Board. The assets include the national road network as well as substantial land holdings, which need to be effectively managed. The liabilities include a loan portfolio deriving from earlier toll road projects. In addition to this important function, the Agency also manages funds provided by the government for the non-toll road portion of the National Road network.

Expenditure on national roads falls into the following broad categories:

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

The SANRAL has moved towards public-private sector partnerships in terms of which attractive financial structures are used to encourage the building of new roads and the rehabilitation of existing networks. Details are contained in the respective BOT projects under discussion.

#### **Grants from Fiscus**

This source is an allocation from government to fund the construction and maintenance of non-toll roads.

#### **Toll Income**

The 'user pays' principle is now well established on major limited-access national roads. The toll concept has facilitated private sector funding on totally commercial grounds, not only for the initial construction of the roads but for their ongoing maintenance - which usually exceeds the initial construction cost over the life-span of the road.

Since 1995 there have been two types of toll road in South Africa:

- State toll roads – funded through loans with a government guarantee
- Private-sector-financed and maintained toll roads – operated by private sector companies through a Concession Agreement with the SANRA in respect of each toll road.

#### 1.4.2 Road Accident Fund

The RAF, like its predecessors, is the instrument by which government compensates victims of motor vehicle accidents on terms and conditions provided for in various Acts governing such compensation, commencing with the introduction of compulsory MVA insurance in 1942.

The RAF in the present context is founded on the RAF Commission Act, 1998 (Act No. 71 of 1998). The purpose of this Act is to appoint a Commission with a mandate to enquire into, and make recommendations on, a system of compensation payments or benefits, or a combination of both, in the event of the injury or death of persons in road accidents.

#### RAF Funding Sources

The RAF is financed mainly by an appropriation from the general fuel tax, calculated at respective rates per litre of petrol and diesel sold. The income is used primarily to pay claims, settlement costs and administrative costs.

#### 1.4.3 South African Maritime Safety Authority

The objectives of the SAMSA are to:

- To ensure the safety of life and property at sea
- To prevent and combat pollution of the marine environment by ships: and
- To promote South Africa's maritime interests.

##### 1.4.3.2 SAMSA functions

SAMSA has a number of key functions with respect to maritime safety:

- Advising the Minister of Transport about maritime matters affecting South Africa.
- Liaising with foreign governments and representing South Africa on the international Maritime bodies and at international maritime for a;
- Administering and maintaining the maritime legislation assigned to its Administration;
- Carrying out accident investigations;
- Carrying out flag State and port State control of ships and seafarers, including ship, cargo and seafarer certification inspections,
- Administering the seafarer training and certification system;
- Administering the Ships Register;

- Managing the maritime search and rescue capacity; and
- In co-operation with DEAT, managing the pollution prevention and response capacity

#### 1.4.3.3 SAMSAs funding sources

There are a number of funding sources for SAMSAs:

- Levies on vessels calling at South African ports
- Direct user charges
- Government service fees
- Other indirect sources.

#### 1.4.4 Cross-Border Road Transport Agency

##### 1.4.4.1 CBRTA mission

The CBRTA mission is composed of two principal elements:

- Regulate and control access to the cross-border road transport market by the road transport industry
- Facilitate the establishment of co-operative and consultative relationships and structures between public and private sector institutions with an interest in cross-border road transport.

##### 1.4.4.2 CBRTA functions

The functions of CBRTA are the following:

- Advise the Minister of Transport on cross-border road transport issues and assist in the process of negotiating cross-border road transport agreements where necessary
- Regulate the road transport industry's access to the cross-border road transport market
- Facilitate ongoing co-operative and consultative relationships and structures between the public and private sector in support of cross-border road transport operations
- Undertake road transport law enforcement.

##### 1.4.4.3 CBRTA funding sources

The main source of funding for the CBRTA is the fees charged for cross-border permits by transport operators (passengers and freight).

## 1.4.5 South African Civil Aviation Authority

### 1.4.5.1 Establishment and structure

The CAA was established in terms of the South African Civil Aviation Authority Act, No. 40 of 1998. The Act provides for the establishment of a stand-alone authority charged with the promotion, regulation and enforcement of civil aviation safety and security. The safety and security-related functions of the Chief Directorate: Civil Aviation Authority (CDCAA) of the NDOT were transferred to the Civil Aviation Authority on 1 October 1998, along with the most of the staff performing those functions.

The creation of the CAA reflects the government's new priorities of policy development, economic restructuring, addressing social inequalities and reducing the burden on the general taxpayer by introducing a 'user pays' system. Since 1994, the number of registered aircraft in South Africa has risen to 7 000 in January 1999. During the period 1994 to 1997, government budget allocation for the funding of the CDCAA fell from R26 m to R22 m. This increased workload and reduced resource base resulted in an overworked and underpaid staff unable to satisfactorily fulfill the CDCAA's functions.

The establishment of the CAA is consistent with international trends in regulating civil aviation safety and mirrors steps already taken with the establishment of the South African Maritime Safety Authority, the South African National Roads Agency and the Cross-Border Transport Authority in April 1998.

The CDCAA structure had been that of a traditional hierarchical organisation. The new CAA has been designed in line with modern management thinking to provide a much flatter organisation based on the project management approach.

The Authority is governed by a Board of Directors appointed by the Minister of Transport. The Board is representative of industry, management and business expertise. The Chief Executive Officer is also a Board member. The Board is required to report to the Minister regularly and its performance in fulfilling its obligations and carrying out its functions will be carefully monitored.

### 1.4.5.2 CAA core activities

The primary purpose and objective of the CAA is to promote, regulate and support continuously improving levels of safety and security throughout the civil aviation industry. The core activities of the CAA therefore relate to aviation safety supervision of operations, aircraft, personnel, airports and airspace.

#### 1.4.5.3 CAA funding - full cost recovery

The CDCAA was fully funded by government as part of the Department of Transport, with only nominal fees being charged for services rendered. In line with the Department's requirement, the CAA is moving towards a position of total non-profit self-funding by means of full-cost-recovery charging. In order to ease the burden that this change places on the industry, the CAA will continue to receive a reducing subsidy (state transfer) from the NDOT until 2002. This subsidy has been used for the implementation/start-up costs of the CAA and will continue to be used to supplement the user charges until these reflect full cost recovery. In order to achieve this, user charges will be increased annually by 18% for the first three years, and then by the forecast inflationary rate. User charges will represent 60% of the CAA's total revenue.

Some services are not readily attributable to a specific customer - for example, international liaison and support functions. These activities will be funded through an aviation fuel levy, which will provide the remaining 40% of the CAA's required revenue in the future.

The full cost of accident and incident investigation as well as other services provided to the government will continue to be funded by the NDOT.

### 1.4.6 Airports Company of South Africa

#### 1.4.6.1 ACSA mission

The ACSA's mission is to manage and develop world-class airports successfully for the benefit of all stakeholders.

#### 1.4.6.2 ACSA vision

Their vision is to craft partnerships in airports services excellence.

#### 1.4.6.3 ACSA historical review

The ACSA was established in August 1993, under the Airports Company Act, to own and operate South Africa's nine principal airports. Then followed a major phase of restructuring, comprising new management, a flat functional structure and a new business strategy aimed at identifying and optimising new and existing revenue streams.

#### 1.4.6.4 ACSA commercial development

The ACSA's future commercial development is bound up with government's two-phase privatisation strategy: first, the acquisition of a Strategic Equity Partner and, second, the listing of its remaining shares on the Johannesburg Stock Exchange.

The National Framework Agreement process leading up to the SEP was successful. In terms of the SEP, the bidding process involved evaluating bids from a number of leading international airport authorities. *Aeroporti di Roma* acquired a 20% stake in the ACSA, with an option of acquiring a further 10%. Listing of the company on the JSE will be approved by government once the objectives for black economic empowerment have been met.

#### 1.4.6.5 ACSA key functions

The main functions of ACSA are to:

- be the preferred airport management company in the globalised local environment, via management contracts and equity stakes
- play an influential role in the development of airports of international standard in the SADC region
- enhance existing infrastructure and provide additional infrastructure at world-class standard for future capacity demand
- promote employment equity and economic empowerment
- develop productive, interactive, value-adding relationships with all stakeholders in the process of delivering sustainable growth in the air transport sector.

#### 1.4.6.6 ACSA core business structure

The components of the ACSA structure are:

- Airport services - Responsible for the upgrading of all airports and ensuring the highest security, safety and service standards
- Property - Manages the ACSA's property portfolio with the objective of optimising both aviation and non-aviation property revenues; a growth of 298% in property revenues has been achieved since 1995
- Retail - Responsible for optimising retail revenues by unlocking the vast potential for retail growth; a growth of 237% in retail revenues has been achieved since 1995.

#### 1.4.6.7 ACSA shareholding structure

The ACSA shareholding is made up as follows:

- State - 51%
- Empowerment investors - 10%
- Employees - 9%
- NEF - 10%
- Aeroporti di Roma - 20%

Prospective shareholders will be able to acquire 25% of shares in the future.

#### 1.4.7 Air Traffic and Navigation Services Company

##### 1.4.7.1 ATNS mission

Their mission is to provide safe, orderly, expeditious and efficient air traffic, navigation and associated services, meeting the required world-class standards, by:

- adding value to client services and meeting customer expectations
- developing and training employees
- providing real returns for shareholders
- complying with all legal and statutory requirements

##### 1.4.7.2 ATNS vision

The vision of ATNS is to be the preferred supplier of air traffic, navigation and associated services to the African continent and surrounding regions.

##### 1.4.7.3 ATNS historical overview

An important milestone in the development of air traffic services in South Africa was the creation of Air Traffic and Navigation Services Company Ltd as a state-owned, limited liability company in August 1993 (Act No. 45 of 1993). This legislation established ATNS as a provider of air traffic control and related services on a commercial, 'user pays' basis. To lessen the impact of the introduction of end-user charges to aircraft operations, state subsidies of R50 m and R35, 4 m were granted to ATNS in the first two financial years respectively. Since then ATNS has, however, operated entirely on revenue generated from its customer base.

In 1996 the capital infrastructure planning was finalised and a capital expenditure plan of R350 m over five years was started in earnest, with a wide range of air traffic and navigation projects aimed at ensuring the delivery of world-class air traffic services to ATNS clients and the aviation industry in general. Since 1997 the company has established itself as a key role-player in the SADC region in current air traffic services issues as well as co-operating in the future planning of air traffic services in the region.

##### 1.4.7.4 ATNS key functions

ATNS is responsible for safe, orderly and expeditious air traffic, navigation and associated services in its designated area of control. Operationally, the mission of the company is discharged in South Africa's continental and adjacent oceanic airspace. The latter comprises the area due west of 10°W longitude and due east of 75°E longitude to the South Pole (excluding the Mauritius Flight Information Region (FIR)).

ATNS also provides extensive air traffic information services and various related aeronautical support services in all major airspace and at 22 airports throughout South Africa.

The ATNS Aviation training academy is a well-established facility currently used by a large number of African countries for air traffic services training, as well as technical training for equipment support. ATNS Head Office and Academy have recently received ISO 9001 accreditation.

#### 1.4.7.5 ATNS strategy

With growing air traffic volumes within South Africa, as well as into and out of South Africa, ATNS will have a key role to play in future air traffic services co-operation in the SADC region. The recent V-SAT satellite communications project installed in the region to improve communications between air traffic centres received the Air Traffic Management Project Award for innovation and was the first co-operative venture of this nature. Current implementation of the capital programme will ensure an improved and streamlined air traffic service in South Africa.

### 1.4.8 South African Rail Commuter Corporation Limited

#### 1.4.8.1 SARCC vision

To establish rail as the preferred mode of public transport and to be the recognized champion in ensuring the provision of quality commuter rail services for all Transport Authorities in South Africa

#### 1.4.8.2 SARCC mission

To manage the assets and funding of the rail commuter business on behalf of government, and to ensure the efficient and effective local delivery of rail commuter services, within National Land Transport Policy directives and appropriate regulatory regimes.

#### 1.4.8.3 SARCC overview

The SA Rail Commuter Corporation is an agency of the NDOT, responsible for the provision and management of rail commuter services, and all rail commuter related assets in South Africa. A Board of Control, appointed by the Minister of Transport, and a full time management team, manages the Corporation. The management team consists of four Executive Managers, the Managing Director of the Corporation's wholly owned property subsidiary and a full time CEO. The current incumbent is acting in the position of CEO.

#### 1.4.8.4 SARCC key functions

The SARCC is responsible for the provision of rail commuter services at the request of NDOT and at regional/local government; financial management of the rail commuter business in South Africa, management of an operational contract with the public operator for the provision of the rail commuter services, management of the of the asset base (infrastructure and rolling stock) of the rail commuter business in conjunction with

the operator, the management and financial exploitation of the property portfolio consisting of 319 railway stations, associated land and residual properties.

The SARCC was established together with Transnet Limited in 1990 in the Legal Succession to the South African Transport Services Act (Act 9 of 1989), as part of the deregulation of the freight transport industry in South Africa. The responsibility for the subsidized rail commuter services was transferred to the SARCC in order to create financial transparency for the highly subsidized rail commuter services, and to eliminate the cross subsidisation between rail commuter services and rail freight services. The objective of eliminating cross subsidisation practices within the rail industry included improving the ability of Spoornet (the rail freight carrier) to compete on equal price and cost footing with the road transport freight sector.

## 2. INSTITUTIONAL ARRANGEMENTS

### 2.1. EXTERNAL AND INTERNAL RELATIONSHIPS

#### 2.1.1 External relationships

The external relationships relevant to the NDOT are set out in Figure 2.1. The rationale for each of the external relationships, current activities and whether there is an environmental component to the relationship is set out in Table 2.1:

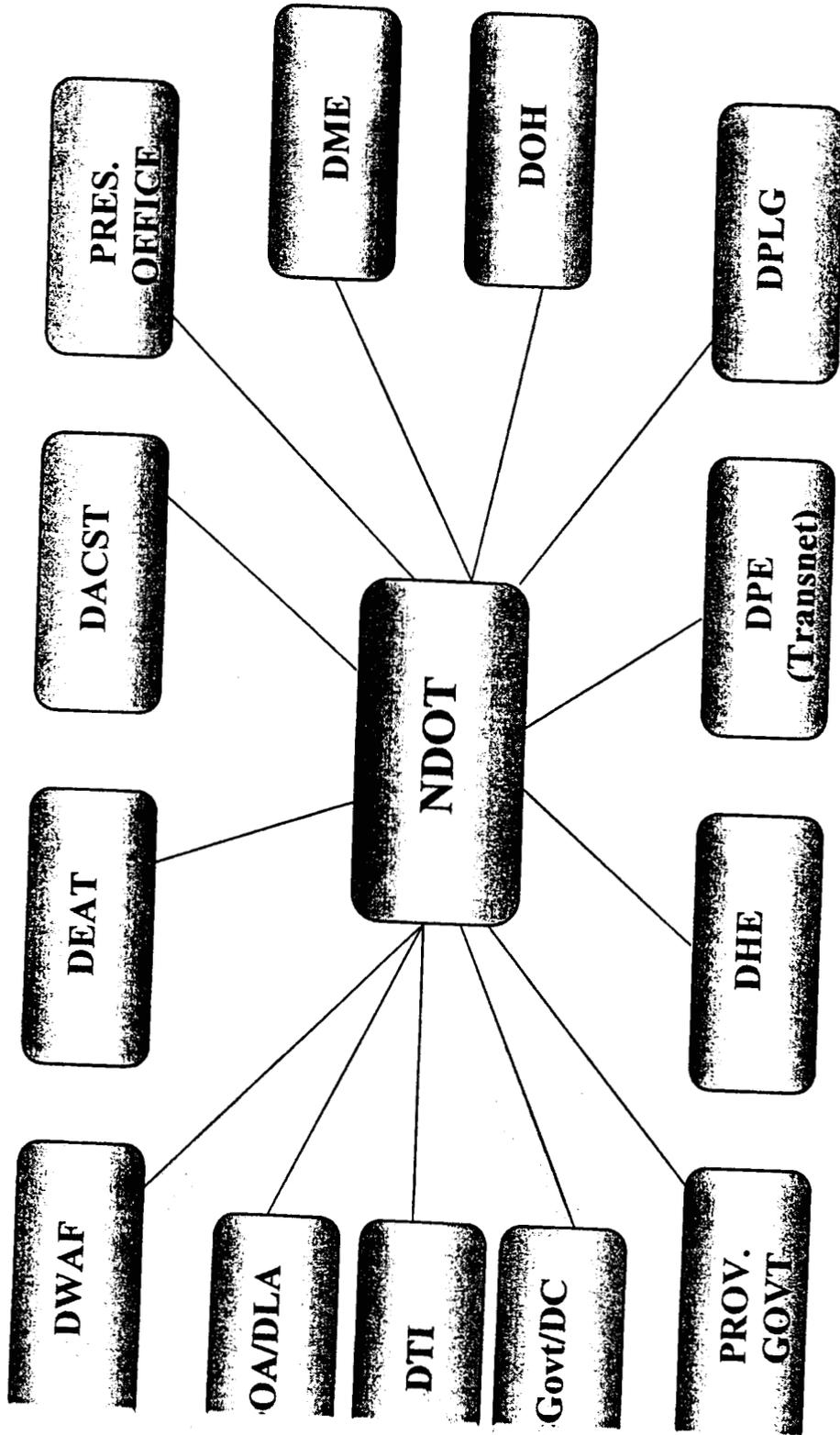
**Table 2.1: NDOT external relationships**

Entity with which NDOT has external relationship	Rationale for relationship	Environmental aspect to relationship and necessity for this
DEAT	Representation on CEC in terms of NEMA EIA regulations Clean Development Mechanism – Committee for Sustainable Development Environmental Conservation Act, No. 78 of 1989 Policy initiatives – Moving South Africa, e.g. taxi recap programme	Yes - Implementation of environmental legislation
Office of the President	Presidential interdepartmental initiatives: Disabilities programme Integrated Sustainable Rural Development Strategy	No direct environmental relationship – linkage on environment needs to be established
DACST	Foresight study Joint issues – with NDOT in overlapping areas	No direct environmental relationship – linkage on environment not critical
DME	White Paper on Energy Policy (see extracts) – drafting of Proposed Energy Bill under way	Environmental component at policy level only – environmental

Entity with which NDOT has external relationship	Rationale for relationship	Environmental aspect to relationship and necessity for this
	Transport energy issues (Directorate) Taxi recap programme	linkage needed
DOH	Integration of land use and transportation planning Corridor development	No direct environmental relationship – linkage on environment required
DPLG	Local government sustainability LED programme Integrated Sustainable Rural Development Strategy IDP Process	No direct environmental relationship – linkage on environment required
DPE	Co-ordination of transport policy with Transnet strategy [Financing of SOEs, e.g. Spoornet, SAA business strategies] SOE restructuring process	No direct environmental relationship - linkage on environment required
DHE	Policy co-ordination: Health impacts of transport air pollution Continuous interaction on issues of mutual interest	Yes – environmental aspects as they emerge from transport policies
DTI	Motor industry strategy and MIDP Taxi recap programme	No direct environmental relationship
DOA/DLA	Rural transport – emerging farmers, encouragement of SMMEs	No direct environmental relationship
DWAF	Continuous contact between officials of both departments	No direct environmental relationship
Provincial	MINCOM - chaired by Min. Transport	

Entity with which NDOT has external relationship	Rationale for relationship	Environmental aspect to relationship and necessity for this
Government	COTO - chaired by senior officials of NDOT LTCC – chaired by senior officials of NDOT RCC	Yes – environmental aspects dealt with at policy level
Local Government (incl. District Councils) (Lgovt/DC)	IDPs MTBs – public transport contracts and local area transport plans Transport Authorities in terms of NLTTA Act 22 of 2000	Yes – implementation of NLTTA has environmental requirements

External relationships of the NDOT



The White Paper on Energy Policy has several objectives which involve the Transport Sector: These are as follows.

#### 2.1.1.1 White Paper on Energy Policy

During the era of sanctions, the prime task of government was to ensure sufficient fuel supplies to the country. Accordingly, a highly organised system of fuel acquisition and distribution was set up to achieve this objective. The primary focus of the system was on the "supply" of fuel, to the detriment of "demand" policies and issues. Although it is impossible to ignore supply issues completely, the emphasis has lately shifted more towards demand issues.

The White Paper on Energy Policy includes some important points on transport energy aspects:

- **Pricing of liquid fuels** - a suitable tax differential between diesel and petrol is to be determined through research and negotiation between government departments and stakeholder interest groups.
- **Efficiency of transport energy use** - The DME is to advise other government departments, e.g. the NDOT and the DOF on the energy efficiency implications of alternative modes and public transport subsidy policies, and will provide assistance in the formulation of fiscal and transport policies to promote energy conservation and efficiency. Information on fuel use characteristics of new vehicles (a cross-cutting issue) will be provided by the DME.
- **Environmental impacts of transport energy use** - The impacts of congestion and emissions are to be taken into account (another cross-cutting issue).
- **Alternative fuels** - Research is to be undertaken into alternative fuels for various modes, e.g. electricity, gas or diesel.
- **Intergovernmental co-ordination** - An interdepartmental Transport Energy Co-ordinating Committee is to be established to co-ordinate and integrate policy formulation between the DME and other relevant departments.
- **Transport energy and land-use policy** - The Transport Energy Co-ordinating Committee is to give attention to the formulation of guidelines to assist metropolitan and other planning authorities to consider the transport energy use impacts of land use, transport and traffic management plans.

The proposed Energy Bill in the process of being drafted will address the need for:

- An integrated energy-planning approach
- A mandatory data-collection process
- Effective intergovernmental co-ordination
- The co-ordination of regulators in each sub-sector
- Definition of the role of the DME in environmental issues.

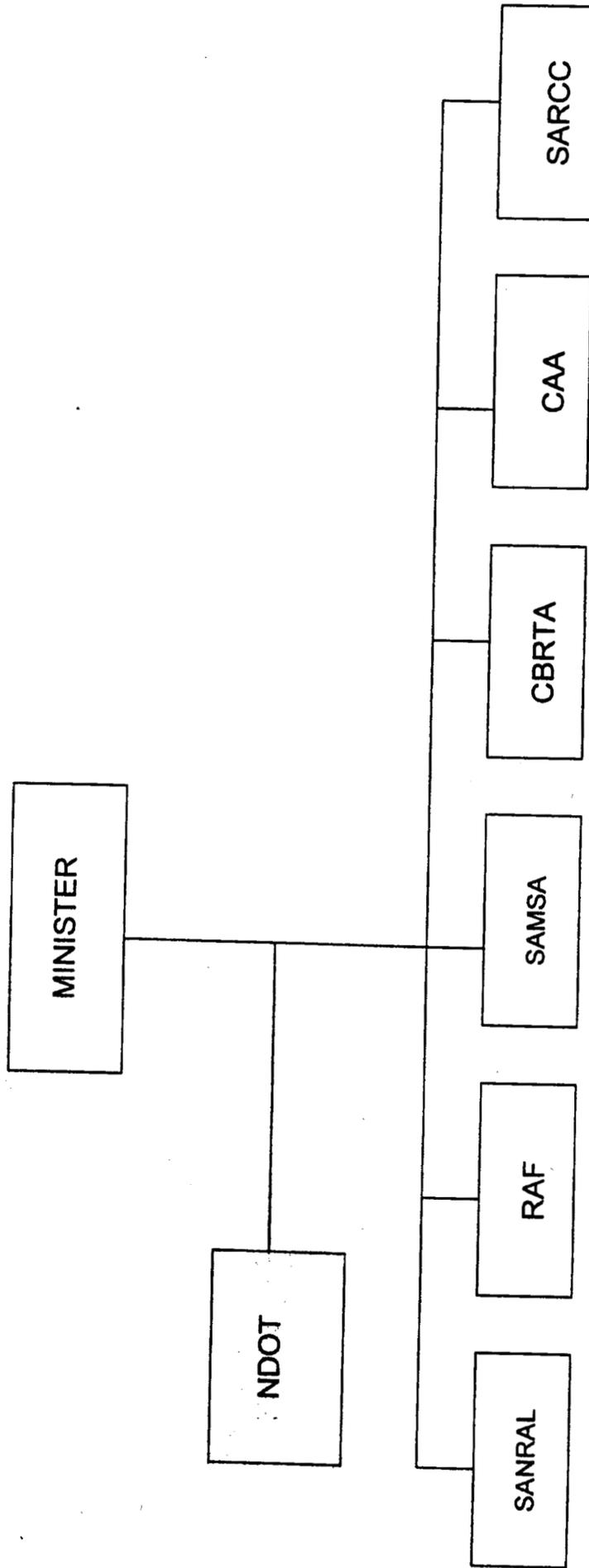
#### 2.1.2 Internal relationships

The internal relationships relevant to the NDOT are set out in Figure 2.2. The organisations involved and the nature of their relationships with the NDOT are shown in Table 2.2.

**Table 2.2: Internal relationships relevant to the NDOT**

<b>Entity with which the NDOT has an internal relationship</b>	<b>Role of the entity and nature of the relationship</b>
SANRA	Management of the National Road network Management of public-private concession projects
RAF	Administration of accident claims
SAMSA	Management of merchant shipping and related maritime operations
CBRTA	Management of cross-border land transport (passenger and freight)
CAA	Civil aviation safety and security oversight and promotion, accident investigation.
SARCC	Management of rail commuter services (infrastructure and operations)

Figure 2.2: Internal relationships of the NDOT



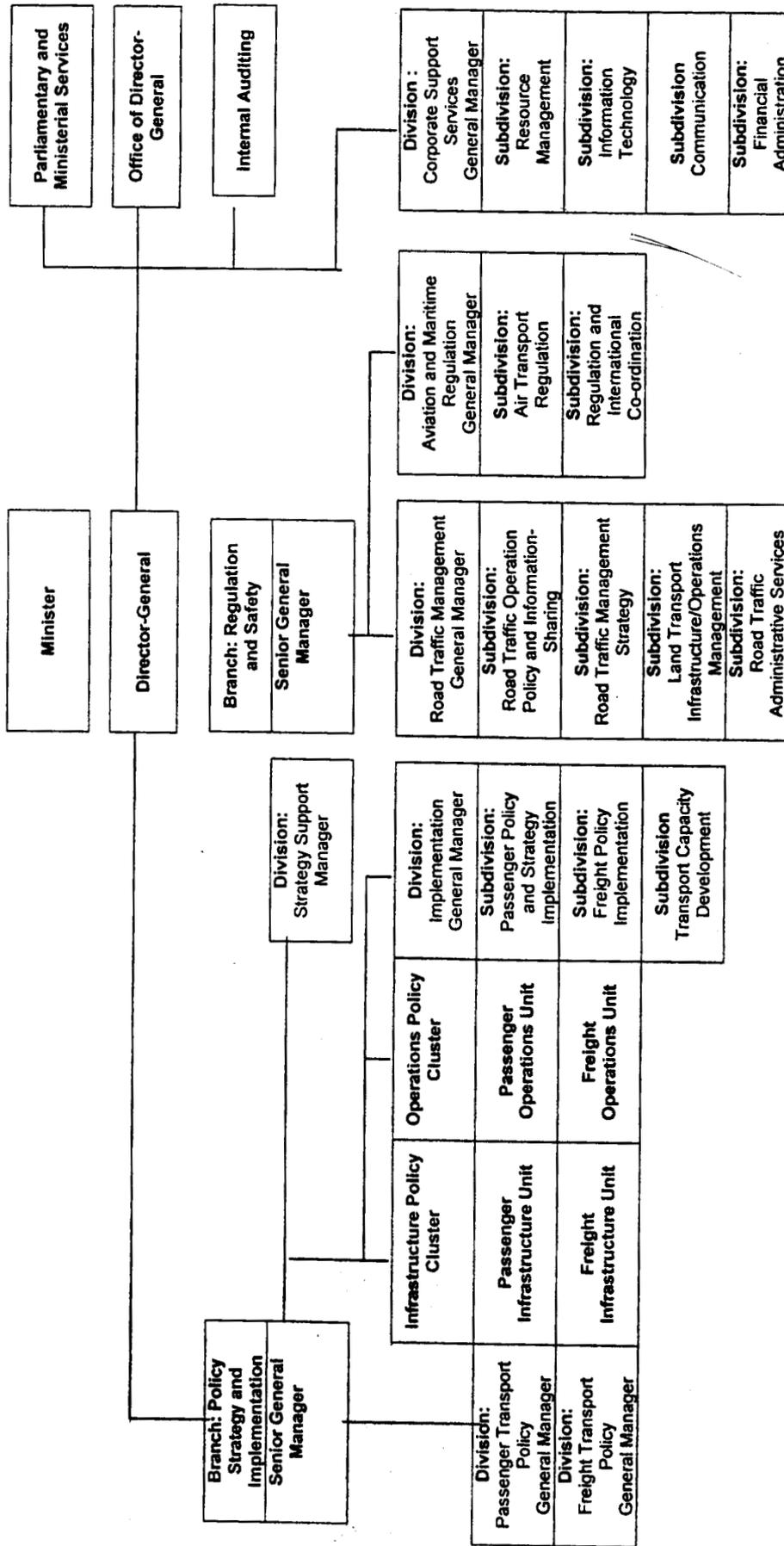
## **2.2. MECHANISMS AND PROCEDURES FOR CO-OPERATIVE GOVERNANCE**

At present, the mechanisms and procedures for co-operative governance in the area of environmental management in the transport sector are limited. Responsibility for representing the NDOT at interdepartmental level rests with the Passenger Transport Policy Sub-branch within the Branch: Policy, Strategy and Implementation, amongst other functions. This section contains an overview of the NDOT's structure and reviews the extent to which this structure meets the objective of co-operative governance in environmental management.

### **2.2.1 Structure of the NDOT**

This section examines the structure of the NDOT itself, as distinct from its external relationships with other national government departments and other tiers of government, as well as its internal relationships with the agencies. The structure of the NDOT is set out in Figure 2.3. The rationale for the structure of the department is explained in the next subsection.

Figure 2.3: Structure of the National Department of Transport



#### 2.2.1.1 Rationale for the NDOT's structure

The establishment of Agencies, the continuing implementation of policies outlined in the White Paper on National Transport Policy and the strategic directions emerging from the "Moving South Africa" project have all played a key role in defining the new structure and staffing profile of the National Department of Transport.

#### 2.2.1.2 Structure formalisation

To enable the Department to create an environment in which project teams, employee empowerment and the devolution of greater responsibility to lower levels of staffing could be achieved, it was necessary to look at alternative structures better suited to the needs of the new Department. This was achieved through the alignment of functional and matrix-type structures.

The new structure of the Department consists of two main branches:

- Branch: Policy, Strategy and Implementation
- Branch: Regulation and Safety.

The two branches are supported by a Division: Corporate Support Services.

#### 2.2.1.3 Branch: Policy, Strategy and Implementation

This Branch has four Divisions:

- Division: Passenger Transport Policy
- Division: Freight Transport Policy
- Division: Implementation
- Division: Strategic Support

which focus on:

- passenger and freight transport policy monitoring
- identifying customer needs
- updating strategy
- ensuring that these policies and strategies are promoted and implemented.

The Strategic Support Division renders a strategic support and co-ordination service. Two Policy Clusters, for passenger and freight transport, make provision for co-ordinating the development, planning and monitoring of projects. The Branch is headed by a Senior General Manager.

#### 2.2.1.4 Branch: Regulation and Safety

This Branch has two Divisions: Road Traffic Management, and Aviation and Maritime Regulation. The Branch is headed by a Senior General Manager.

**Division: Road Traffic Management**

This Division has four Subdivisions:

- Road Traffic Operations Policy and Information Management
- Road Traffic Management Strategy
- Land Transport Infrastructure/Operations Management
- Road Traffic Administrative Service.

Its responsibilities are to:

- develop and maintain road traffic policy
- set uniform standards for training, law enforcement, communication and education in respect of road traffic quality and safety.

The Division is also responsible for overseeing the performance of the SANRA and the CBRTA, and for investigating major road and rail accidents. The Division is headed by a General Manager supported by three Managers and one Deputy Manager.

**Division: Aviation and Maritime Regulation**

This Division has two Subdivisions:

- Subdivision: Air Transport Regulation
- Subdivision: Regulation and International Co-operation.

The Subdivisions are responsible for:

- maintaining bilateral transport agreements
- managing obligations under multilateral agreements
- ensuring that the two agencies, SAMSA and the CAA, comply with their agreements.

The Search and Rescue function remains the responsibility of the Department and the Subdivision is tasked with creating an enabling environment for this function in southern Africa. The Division is headed by a General Manager and supported by two Managers.

**Division: Corporate Support Services**

The Division: Corporate Support Services has four Subdivisions and provides a responsive staff support function to the rest of the Department. The Division is headed by a General Manager and supported by four Managers. It falls under the authority of the Director-General.

Two additional Subdivisions have been created: the Office of the Director-General, and Internal Auditing, both directly accountable to the Director-General. The Office of the Director-General manages special projects, provides a legal service and co-ordinates international affairs for the Department as well as for the four Agencies. The Division:

Communication and Ministerial Support Services reports to the Director-General and provides media liaison, parliamentary and administrative support to both the Minister and the Director-General. In terms of the above structure of the NDOT, the environmental function resides in the Branch: Policy, Strategy and Implementation, Division: Passenger Transport Policy. The function is not explicitly defined and the role is assumed amongst other responsibilities.

**2.2.2 Structure of the Agencies in terms of environmental function**

This section sets out the structures of the aforementioned Agencies for which the NDOT is responsible in terms of whether or not they have an environmental function. The situation of the Agencies is set out in Table 2.3.

Table2.3: Structure of the Agencies in terms of environmental function

Agency	Environmental function, duties and position
SANRAL	<ul style="list-style-type: none"> <li>• Yes.</li> <li>• Environmental Manager (EM) in the Engineering cluster (the other clusters are Corporate and Finance).</li> <li>• Duties: to ensure that Environmental Impact Assessments (EIAs) are undertaken on all national road projects pertaining to upgrading and construction and to comply with the EIA regulations in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989) that lists the building and/or upgrading of roads as requiring EIAs. All environmental documents are assessed by the EM before submission to the environmental authorities</li> </ul>
SAMSA	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Executive Manager Operations and Executive Manager Standards</li> <li>• Duties: Administer relevant statutory legislation in respect to ship inspection and certification, equipment inspection and approval, port State control of foreign ships and intervention in case of pollution incidents or threats (SAMSA Act).</li> </ul>
CBRTA	No
CAA	No
SARCC	No
ACSA	<ul style="list-style-type: none"> <li>• The Safety Division oversees safety and environmental matters; ensures compliance with the Environmental Conservation Act, No. 73 of 1989; and maintains ongoing collaboration with stakeholders with respect to the environmental impacts of airport operation, e.g. bird populations.</li> <li>• The Master Plans and Infrastructure Management Section oversees the effects of airport construction and operations on the environment.</li> <li>• EIAs are obligatory in terms of the Environmental Conservation Act 73 of 1989.</li> </ul>
ATNS	<ul style="list-style-type: none"> <li>• Yes</li> <li>• The Air Traffic Management Planning Division participates in the development of the Aircraft and Engine Emissions Policy and</li> </ul>

### 2.3. ENVIRONMENTAL LEGISLATION

This section examines environmental legislation relevant to the NDOT and its Agencies and parastatal companies.

#### 2.3.1 Environmental Conservation Act, No. 73 of 1989

Sections 21, 22, 26 and Schedule 1 of the Act are relevant. These sections identify activities and projects in terms of which an Environmental Impact Assessment (EIA) is obligatory, namely road projects, airports and helipads, and maritime port/harbour infrastructure.

The Act has formed the basis of a comprehensive set of EIA regulations which are used as guidelines indicating for what types of activity EIAs are obligatory and how they ought to be completed. The regulations contain a schedule of project types for which an EIA is mandatory.

#### 2.3.2 South African National Roads Agency Limited and National Roads Act, No. 7 of 1998

Section 26 of the Act deals with the requirements regarding the rehabilitation of vegetation affected by road projects and road reserves. It sets out in detail the requirements for compensating the environment, including the planting of trees or the rehabilitation of a wetland displaced by a road project.

#### 2.3.3 National Environmental Management Act, No. 107 of 1998

The requirements for the completion of EIPs by line government departments such as the NDOT are contained in the National Environmental Management Act of 1998 (NEMA). The sections of the Act most directly relevant to the project are:

##### 2.3.3.1 Chapter 2: Part 1: CEC

The CEC was established in terms of Section 7 (1) of the Act. The objectives of the CEC are to promote the:

- integration and co-ordination of environmental functions by the relevant organs of state (e.g. government departments, parastatals and state companies); and in particular the
- achievement of the purpose and objectives of environmental implementation plans and environmental management plans as set out in Section 12 of the Act.

The CEC has the following *core functions*:

- Evaluation of the EIPs submitted to it in accordance with Section 15 of the Act
- Investigation and evaluation of the implications of the formal institutional arrangements between organs of state, including the delegation of functions prescribed in terms of legislation (be they the NEMA of 1998 or any other Act dealing with the protection of the environment), as well as the practical working arrangements in terms of MOUs concluded between the aforementioned organs of state
- Identification of the need for a co-ordinating mechanism in each province responsible for the collation of applications for approval of activities involving more than one organ of state. This ought to be done with the full knowledge and concurrence of the provincial MEC concerned
- Recommendations regarding the application of environmental management as defined in Chapter 5 of the Act, including co-operation in environmental assessment procedures and prevention of duplication of activities in this area
- Recommendations aimed at ensuring compliance with the National Environmental Management Principles contained in Section 2 of the Act and national norms and standards contained in Section 146 (2)(b)(i) of the Constitution of South Africa
- Recommendations ensuring uniformity of the environmental functions of all national departments and associated bodies
- Ensuring compliance with the principle of serving the needs of the populace (Section 2(2)) and advising government in this area.

The CEC membership comprises the Directors-General of the following government departments:

- DEAT
- DWAF
- DME
- DLA
- DPLG
- DOH
- DOA
- DHE
- DOL
- DACST.

The CEC also includes a number of other appointees from other levels of government and from other departments, as follows:

- Provincial heads of department appointed by the Minister with the concurrence of the MEC
- Representatives of the national organisation recognised in terms of the Organised Local Government Act, No. 52 of 1997
- Any other Director-General appointed by the Minister (Environmental Affairs) with the concurrence of the Minister under whose portfolio the department falls.

The CEC may co-opt and appoint additional persons to assist in functions and attend meetings as it deems necessary.

#### 2.3.3.2 Chapter 3: Procedures for Co-operative Governance: Environmental Implementation Plans and Management Plans

This chapter of the NEMA sets out the requirements of the Act in terms of the EIPs and their contents.

#### Legal requirements and obligations regarding the compilation of an EIP

The NEMA of 1998 states explicitly that each government department listed in Schedule 1 of the Act must compile an EIP within one year of the promulgation of the Act and at least every four years thereafter. The NDOT is included in Schedule 1 of the Act and therefore must compile an EIP, taking into account completed EIPs. A list of government departments whose functions may affect the environment as per Schedule 1 is provided in Appendix A of this report. In the compilation of an EIP, the Director-General of Environmental Affairs and Tourism is obliged to assist in the preparation of an EIP if so requested by a national department.

**Rationale for EIPs as set out in the NEMA, No. 107 of 1998**

The stated purpose of the EIPs is to:

- Co-ordinate the environmental plans and initiatives of those national departments whose functions may affect the environment (e.g. those in Schedule 1), in order to minimise duplication and maximise consistency between these activities
- Implement the principle of "co-operative governance" as contained in Chapter 3 of the Constitution
- Ensure protection of the environment
- Prevent unreasonable actions by national departments or provinces which may affect the environment
- Enable the Minister and the DEAT to monitor the attainment of the objective of a sustainable environment.

**Prescribed content of an EIP**

- Description of plans, policies and programmes which may affect the environment
- Description of how the aforementioned policies, plans and programmes will comply with the principles set out in Section 2
- Description of the manner in which the national department will ensure that the plans and programmes will be implemented and what the effects on the environment may be
- Recommendations for the promotion of objectives and plans for the implementation of the procedures and regulations referred to in Chapter 5.

**Submission, scrutiny and adoption of EIPs**

An EIP must be submitted to the CEC by a date set by the Minister.

The CEC has one of two options:

- Adopt the EIP
- Report to the Minister and other ministers represented on the CEC that the EIP fails to comply with:
  - the principles of Section 2, and
  - the purpose and objectives of EIPs.

If the CEC recommends the adoption of the EIP, the department must publish the EIP in the Government Gazette within 90 days of the approval and the EIP becomes effective from the date of the publication.

Every department must report to the Director-General and the CEC on the implementation of its EIP annually, within four months of the end of its financial year. The Minister may also recommend to a department that has not completed an EIP that it adopts certain specified provisions of an adopted EIP from another department.

### **3. POLICIES, PLANS AND PROGRAMMES**

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This section reviews the current policies, plans and programmes of the NDOT, its Agencies and parastatal companies in order for the EIP to conform to Section 13(1)(a) of the NEMA. Section 13(1)(a) provides that the EIP must contain "... a description of the policies, plans and programmes that may significantly affect the environment". These respective initiatives are then evaluated in terms of their impact on the environment in line with the provisions of Section 13(1) of the NEMA.

#### **3.1. DESCRIPTION OF POLICIES, PLANS AND PROGRAMMES**

##### **3.1.1 White Paper on National Transport Policy**

The 1996 White Paper on National Transport Policy is the principal policy document of the NDOT and provides the framework of the department's initiatives.

###### **3.1.1.1 Policy goals**

The key national transport policy goals contained in the White Paper are to:

- support the goals of the RDP for meeting basic needs, growing the economy, developing human resources and democratising decision-making
- enable customers requiring transport for people or goods to access the transport system in ways which best satisfy their criteria
- improve the safety, security, reliability, quality and speed of transporting goods and people
- improve South Africa's competitiveness and that of its transport infrastructure and operations through greater effectiveness and efficiency to better meet the needs of different customer groups, both locally and globally
- invest in infrastructure or transport systems in ways that satisfy social, economic, or strategic investment criteria
- achieve the above objectives in a manner that is economically and environmentally sustainable, and minimises negative side effects.

###### **3.1.1.2 Land passenger transport**

For land passenger transport, the above policy goals imply the promotion of:

- more efficient urban land-use structures, correcting spatial imbalances and reducing travel distances and times for commuting to a limit of 40 km or one hour in each direction
- the use of public transport over private car travel, with the goal of achieving a ratio of 80:20 between public transport and private car usage
- the use of more energy-efficient and less polluting modes of transport.

###### **3.1.1.3 Land freight transport**

For land freight transport, these policy goals should translate into measures that:

- level the playing fields to allow fair competition between the various land transport modes
- encourage integration, intermodalism and partnerships between the modes, provided this does not result in monopolies.

### 3.1.2 **Moving South Africa Action Agenda**

The MSA project sought to establish a national strategy for transport to the year 2020. The main policy thrusts coming from MSA in terms of passenger and freight transport are set out below.

#### 3.1.2.1 **Passenger transport**

The key components of MSA relating to passenger transport are:

- "Densify in corridors and nodes to achieve economies of scope, effectively turning around the current trend towards dispersal
- Optimise modal economies and service mix through infrastructure investment to support the corridors, and by selecting the optimal mode based on the cost/service trade-off. This also involves facilitating differentiated service and choice wherever possible, but with subsidisation only for the optimal mode, if at all. Tough road space management is necessary to prioritise public transport, and subsidies should be targeted at facilitating affordable access to the optimal mode
- Improve firm level performance through competitive tendering to the private sector with incentives for productivity innovations, effectively regulating all modes, especially taxis, and improving sustainability through capital investment".

#### 3.1.2.2 **Freight transport**

The MSA freight transport strategy comprises:

- "Build density in the transport system through focusing freight flows in select corridors by supporting and reinforcing current trends to build the backbone of the system
- Build economies of scale within the different modes by focusing the role of the modes, maximising scale economies within each mode and offering differentiated services where economically sustainable
- Improve firm level competitiveness by removing obstacles, improving integration, ensuring sufficient reinvestment to maintain infrastructure, restoring price and value

signals between customers and providers, and building an industry platform which drives differentiation and innovation".

### 3.1.2.3 Urban passenger transport

A number of key strategic issues were identified by MSA as far as urban passenger transport is concerned.

#### Lack of affordable basic access

MSA found that 2,8 million people (12% of the total urban population) fall into the category of "stranded", i.e. with no access whatsoever (physical or financial) to public transport of any kind. This segment is projected to grow by 28% to 3,6 million by 2020. Even with the payment of R2, 8 million in public transport subsidies (1997), only 40% of the "stranded" apparently have access to bus transport, 20% per cent have access to train, and the major portion (78%) say they have access to the unsubsidised taxi mode.

#### Ineffective public transport

The public transport system, when offered as an alternative to private car transport, has significant shortcomings in terms of access time, travel time, safety and comfort. It is largely a commuter system with traditionally low levels of service and an operator-based subsidy system, with all incentives geared to keeping the operator's costs to an absolute minimum. This has been translated into poor levels of capital investment in vehicle fleets. The average age of minibus taxis is approximately nine years, whereas that for buses is 11 years, with obvious implications for emissions levels. Fare recovery is extremely poor, with revenue covering a mere 30% of costs for rail and 50% for bus transport. The sustainability of the public transport system will therefore become a major concern in future.

#### Increasing dependence on private cars

Increasing private car usage is widely expected in South Africa over the next 20 years, with the "stubborn" category of the population (currently 3 million) projected to grow by 88% (see above). Likewise, the "selective" element is set to grow by 39%. Partly due to the lack of an attractive public transport system as an alternative to travel by private car, and partly as a result of incentives such as company cars and car allowances which make the use of a private car a relatively cheap and attractive option, it is estimated that the private car fleet in South Africa will grow by 64% between 1996 and 2020. The issue is therefore not only to get the "stubborn" out of their cars, but also to keep a substantial portion of the "selectives" on public transport.

#### Sub-optimal spatial planning

The apartheid system's legacy of dormitory townships on the urban periphery is being exacerbated by current land-use planning in South Africa which locates new low-cost housing on the cheapest land and away from the urban centres. In addition, the current development practice of locating commercial development outside the CBD and in the

suburbs creates urban sprawl and renders the servicing of these areas by public transport non-viable. The average urban commuter trip distance in South Africa is 17 km for private cars and 20 km for public transport, compared with 10 km in European and Latin American cities.

#### 3.1.2.4 MSA urban passenger transport: Key initiatives

In addressing the above challenges, the MSA Action Agenda advocates a number of actions:

##### **Stopping the dispersion of activities**

Densification of settlements and commercial activities needs to be undertaken. Commitment to such densification already exists in government policy, e.g. in the Urban Development Strategy, the White Paper on Transport Policy, IDPs and the Development Facilitation Act. This would involve the densification of transport corridors in order to concentrate activities and users.

##### **Investment in public transport as an antidote to congestion**

The MSA Action Agenda argues against the notion of building more roads to relieve congestion, as this usually encourages further growth in vehicle usage. Instead, it argues for some form of TDM, be it in the form of control mechanisms (e.g. parking and access controls), pricing, or incentives (e.g. HOV lanes to promote ride-sharing). This should occur in conjunction with investment in the public transport system to create a feasible alternative.

##### **Externalities**

As a result of the problems inherent in urban passenger transport, i.e. the increase in private car dependence and the expense required to create a viable public transport system as an alternative, the MSA Action Agenda was explicit in identifying the need to examine transport externalities in South Africa.

The externalities arising from accidents were estimated by MSA to amount to R12 billion per annum. Of this amount, only 56% is covered by insurance, as drivers are often not insured. MSA perceived the externalities arising from congestion and emissions to be an even more severe long-term threat and accordingly recommended in the Action Agenda that transport externalities be internalised. To achieve this objective, three actions must be taken:

- *The role of the fuel tax must be determined* - Should it be a general tax or should it be a road user charge? In the case of the latter, an additional charge should be levied to internalise externalities, and road needs will be met from this funding source. If it is a general tax, mechanisms to allocate funds from Treasury to the transport sector ought to be more apparent.

- *Externality costs are to be assessed and allocated.* - An estimate of the externality costs associated with transport in South Africa needs to be made.
- *Allocation of externality costs* - Once determined, the responsibility for externality costs needs to be allocated and factored into the price of, for example, fuel.

### 3.1.3 NDOT Business Plan 2000/2001

The key elements of the NDOT Business Plan are set out in this section:

#### 3.1.3.1 Passenger transport policy

A number of key strategic thrusts form the core of the NDOT's passenger transport policy programme.

***Ensuring the safety of members of the public utilising public transport*** – This includes the development of an independent Rail Safety Regulator and the reduction of crime on public transport.

***Developing proactive responses to the economic environment facing transport world-wide*** – This varies from the privatisation and deregulation of transport to understanding the implications of globalisation for the South African transport sector.

***Assistance to marginalized sections of society to enable them to contribute to society and economy*** – This includes the development of a "disabled and special needs" strategy for public transport and a comprehensive rural transport strategy

***Enhancement of MSA strategy through key policy initiatives*** – This covers the development of a land transport funding strategy (identification of funding sources and funding allocation) and the development of policy support for provinces and local government.

#### 3.1.3.2 Disabled/special needs passengers

This relates to enhancing the accessibility of public transport to and the mobility of disabled and special needs user groups and includes the assessment of infrastructural and operational aspects.

#### 3.1.3.3 Transport sector environmental policy

The NDOT is committed to an integrated environmental management approach in the provision of transport. The Department is also committed to developing a transport environmental policy in the future. In addition, it is required in terms of the National Environmental Management Act, No. 107 of 1998, to develop an Environmental Implementation Plan. In terms of the National Land Transport Transition Act, the NDOT must produce a national land transport framework, which includes a general strategy for land transport and the environment and has as a major principle that Land Transport Plans must take account of the environment (Section 4).

**3.1.3.4 Rural transport strategy**

A comprehensive rural transport strategy is to be completed based on work already under way. The general objective of the work is to put forward ways in which transport can enable access to markets, employment, economic activity, health care, welfare services and so on.

**3.1.3.5 SMME development strategy**

This strategy is aimed at ensuring the development of sustainable SMMEs in the transport sector, involving a number of projects, e.g. the establishment of taxi co-operatives, tenders for bus contracts and freight transport.

**3.1.3.6 Initiation of an aviation strategy**

This is aimed at a reassessment of economic regulation in the aviation sector, including the following areas: globalisation, market access, regulation of monopolies, management of anti-competitive behaviour, investment in the airline industry and safety issues.

**3.1.3.7 Support strategy for planning, regulation and targeted investments**

The aim is to establish a well-managed planning process, which prioritises spending, targets investments and effectively regulates the operation of transport.

**3.1.3.8 Development of a Rail Safety Regulator**

The devolution of commuter rail and the deregulation of Transnet requires that safety be overseen by an independent national body, e.g. possibly an agency of the NDOT, in the future.

**3.1.3.9 Public transport customer empowerment**

MSA envisages informed customers, organised customer groups and customer-focused institutional channels.

**3.1.3.10 Customer-based research and information**

A *South African Land Passenger Transport Review* is to be published containing the findings of research on public transport records, a national travel survey, vehicle ownership and user trends, and the effectiveness of transport legislation.

**3.1.3.11 Freight transport policy**

A strategic framework is to be developed for port and rail infrastructure. This will include the finalisation of a ports policy and an Interim Ports Bill.

#### 3.1.3.12 Provincial and transport authority support

The NLTTA, Act No. 22 of 2000, has created a platform for the establishment of Transport Authorities. In terms of the Act, land transport planning will be the prime responsibility of the TAs and must be integrated with the land development process. Transport plans will be a key component of the IDPs. In terms of the Act, land transport planning includes public and private transport, as well as all modes relevant in the areas concerned.

The NLTTA also sets out requirements in respect of the preparation of a National Land Transport Strategic Framework, provincial land transport frameworks, public transport records, permission strategies, rationalisation plans, public transport plans and integrated transport plans. Key participants in the implementation of the NLTTA by Provincial Departments of Transport and TAs will be the MINCOM and the LTCC. The NLTTA provides that TAs must include environmental issues in their planning. The onus in this respect will be on the TAs and local government to incorporate environmental concerns in their activities and ensure that their plans are aimed at assisting usage of the mode of transport, which has least impact on the environment. As part of NDOT's external environment, the NDOT can support TAs and local government generally in fulfilling their obligations in implementing the environmental components of the NLTTA, but it cannot compel them to do so.

#### 3.1.3.13 Policy and institutional support and planning in Metro areas

In order to support the implementation of the MSA strategy and the NLTTA, assistance will be given to Metro areas with establishing and administering TAs.

#### 3.1.3.14 Rail transport

Commuter rail will be restructured by means of appropriate institutional strategies agreed upon by all levels of government. A key component of this plan will be the rail concessioning programme. A complementary programme will cover the replacement and refurbishment of infrastructure and rolling stock.

#### 3.1.3.15 Minibus-taxi transport

The taxi recapitalisation programme will be continued, in conjunction with the DTI, DME and DEAT.

#### 3.1.3.16 Bus transport

The contract system will be altered from an Interim Contracts System to a Net Contract System. This will be done together with the restructuring of parastatal and municipal bus operations. A fundamental part of the plan will be to establish capacity within Provincial Departments of Transport to administer the system.

### 3.1.3.17 Non-motorised transport

A national bicycle programme, *Shova Kalula*, has been initiated. The aim of the programme is the provision of cycle transport to scholars and workers who are currently forced to walk to and from their places of learning/work. The programme includes the provision of both cycles and infrastructure, repair facilities and expertise and safety education. The programme is intended to bring affordable transport to those in need of mobility, as well as being environmentally-friendly. It also conforms to the principles of Agenda 21 in respect of sustainable development. Other non-motorised projects are being formulated by the NDOT for implementation in future.

### **3.1.4 NDOT policies on travel demand management, land use, public transport and private car transport**

As part of this policy milieu, the NDOT has initiated research into the broad impacts of transport on the economy, i.e. an estimation of the level of transport externalities in South Africa. The Department has also formulated a coherent policy stance in terms of how it aims to address these impacts. The key elements of the NDOT policy are:

- promotion of public transport at the expense of private car transport
- integration of land-use and transportation planning
- application of appropriate TDM measures to facilitate the move from the use of private cars to public transport in all major cities in South Africa.

These programmes also conform to the principles of sustainable development as outlined in Agenda 21 and will assist South Africa in meeting those objectives.

The Department has completed research in a number of areas involving transport and the environment. These project areas are:

- Impact of public transport on the environment
- Procedure for integrating environmental concerns into the planning and implementation of urban road projects
- A Transportation Environmental Management Manual (land-based transportation). Manual not officially accepted by NDOT
- Preparation for the introduction of TDM measures in South Africa
- Externalities of transport in South Africa.

### **3.1.5 SANRA policies, plans and programmes**

#### **Unsolicited Bids**

The Agency has developed an innovative policy to deal with initiatives identified by the private sector. The policy is titled "Policy of the South African National Roads Agency in respect of Unsolicited proposals, May 1999".

The policy was developed in view of the SANRAL's strong commitment to develop and maintain infrastructure and services in partnership with private sector, thereby drawing on benefits of private sector funding, innovation, efficiency and skills. The policy aims to encourage the private sector to propose self-funding of road infrastructure projects to the Agency for consideration. Under the policy, several projects have been proposed which the Agency is prepared to adopt and implement. The following proponents have been

awarded "scheme developer status" in terms of the unsolicited bids policy and are in various stages of development:

- o N1 between R300 and Hex River and the N2 from R300 to Bot River, 142 km;
- o N21 (R300) Peninsula Expressway in Cape Town (Cape Town Ring Road), 68 km;
- o The N1 corridor scheme between Pretoria and Johannesburg;
- o The John Ross Highway between Empangeni and Richards Bay, 15 km; and
- o The N2 Wild Coast Toll Road between East London and Durban, 540 km.

### 3.1.6 Road Accident Fund

The RAF administers claims on the Fund with respect to motor vehicle accidents. As such, the activities of the RAF will not have a direct environmental impact.

### 3.1.7 SAMSA

The key components of the SAMSA Business Plan are:

- Ship safety – Achieving a professional ship-surveying service, reducing shipboard accidents in South Africa, improving navigation aids in South Africa and ensuring the safety of life and property at sea.
- Marine environmental protection – Preventing pollution from ships through joint oil/chemical response organisation.
- International and regional co-operation – Improving SADC and regional co-operation in maritime matters.
- Regulatory matters – Ensuring effective legislation and user-friendly ships register.
- Management of SAMSA – Providing efficient and effective monitoring of SAMSA's business.

### 3.1.8 CBRTA

The key elements of CBRTA's strategic priorities are:

- Regulation permits – The life of taxi permits is to be extended to six months.
- Route viability – A study is to be undertaken to determine the viability of routes.
- Information system – The system is to be supplemented by data from Provincial Permit Boards.
- Decentralisation of services – The permit-issuing capacity will be extended to all Provincial Permit Boards.
- Safety – Taxi operators will be encouraged to upgrade to midibuses.
- Overloading – Overloading regulations will be rigorously enforced on cross-border operators.

- Freight transport issues – The transport of hazardous goods will be strictly regulated.

### 3.1.9 CAA

The key strategic issues for the CAA are:

- Fulfillment of national and international civil aviation safety and security responsibilities and obligations
- Achievement of self-sustaining financial viability
- Appointment, retention and maintenance of competent and committed staff
- Satisfaction of customers' needs for a reliable, courteous, speedy service from a proactive safety agency focused on prevention.

### 3.1.10 ACSA

The key components of ACSA's strategic plans are:

- Human resource development
- Upgrading of all ACSA airports (almost complete)
- Exploiting the opportunities offered by e-commerce
- Enhancing the contribution of the Property Division through the development and leasing of commercial property owned by ACSA.

### 3.1.11 ATNS Company

The strategic imperatives of the ATNS Company are:

- Adding value to client services and meeting customer expectations
- Developing and training employees
- Providing real returns for shareholders and complying with all legal and statutory Requirements.

### 3.1.12 SARCC

The fundamental components of the SARCC Business Plan are:

- Rolling stock and infrastructure refurbishment – A major programme of modernisation is to be undertaken in this area.
- Property management – Interstice aims to realise the full value of the SARCC's property portfolio so as to optimise income for the organisation.

### **3.2. EVALUATION OF POLICIES, PLANS AND PROGRAMMES IN TERMS OF THEIR ENVIRONMENTAL IMPACT**

This section examines the policies, plans and programmes of the NDOT, its Agencies and parastatal companies in terms of their possible environmental impacts.

#### **3.2.1 National Department of Transport**

##### **3.2.1.1 Densification into corridors**

The densification of activities into corridors and the integration of land use and transport operations will improve the viability of public transport operations in South Africa and serve to address the dispersion of activities which is the legacy of the apartheid system. However, the densification of people's residential areas and employment activities will expose more individuals to vehicle exhaust emissions in a concentrated area. This will be exacerbated by the fact that public transport in South Africa relies either on leaded petrol (accounting for 90% of the petrol used in South Africa and used by most minibus-taxis) or diesel (used by most buses), the latter being known internationally for extensive particulate emissions contributing to local air pollution.

##### **3.2.1.2 Promotion of public transport and contracting**

The promotion of public transport is a stated objective of the MSA strategy. However, as mentioned previously, public transport in South Africa has significant detrimental environmental implications in terms of the fuels used in the engines and the resultant emissions. Moreover, the selection of the most appropriate mode to be used along specific corridors will not entail consideration of environmental criteria. Also, contracts for public transport do not initially specify criteria for environmental soundness.

##### **3.2.1.3 Taxi recapitalisation programme**

A fundamental component of the taxi recapitalisation programme is the replacement of the bulk of the current taxi fleet of 120 000 vehicles which use petrol (largely leaded) with 85 000 vehicles using diesel (noted for particulate emissions). This poses important environmental questions because not only is one form of pollution being exchanged for another, but the people exposed to these emissions will be the people least able to deal with their health effects themselves, i.e. low-income groups.

##### **3.2.1.4 Capacity of Transport Authorities in respect of the NLTTA**

In terms of the NLTTA, Transport Authorities will be obliged to compile Land Transport Plans for their particular local areas. If these TAs are to incorporate environmental impacts adequately into their plans, this will place a significant burden on local authorities throughout the country when it becomes common knowledge that this level of government is most seriously affected by a lack of capacity.

##### **3.2.1.5 NDOT environmental capacity**

It is obvious that the NDOT is lacking in environmental capacity, with environmental issues being the responsibility of the Branch: Passenger Transport Policy, which deals with many other important issues. However, this does limit the ability of the Department to ensure that the environmental impacts of transport activities are adequately addressed from a national or policy perspective.

### **3.2.2 South African National Roads Agency**

The SANRA programme of BOT concession projects will have an environmental impact due to the fact that they entail significant upgrading of major roads. Also, in terms of the Environmental Conservation Act, No. 78 of 1989, road projects are listed as requiring EIA studies. However, the SANRA already has an Environmental Officer who ensures that EIAs are completed for each of the SANRA projects (construction & rehabilitation) where required in terms of the legislation. These studies are submitted to DEAT as required. In the case of maintenance activities, the SANRA applies for exemption through DEAT as these activities are of a routine nature and their environmental impact is generally extremely slight. The SANRA therefore already complies in all aspects with the requirements of the legislation in this regard.

### **3.2.3 Road Accident Fund**

The RAF is responsible for the administration of third party claims for motor vehicle accidents. Although motor vehicle accidents are an externality imposed on the country, the Fund's activities do not require an environmental appraisal as such.

### **3.2.4 Cross-Border Road Transport Agency**

The CBRTA is responsible for the issuing of permits to cross-border transport operators for both passenger and freight transport. Currently, the granting of permits does not involve environmental considerations arising from the operation of the vehicles or the loads carried. Nor does the agency have any capacity to examine the environmental impacts of vehicles involved in cross-border operations. This is especially serious in the case of the conveyance of hazardous goods. Particularly important is the element of disclosure with regard to the nature of the loads being carried.

### **3.2.5 South African Maritime Safety Authority**

SAMSA is responsible for ensuring safety of life and property at sea, to prevent and combat pollution of the maritime environment by ships and, to promote South Africa's maritime interests. SAMSA has a dedicated pollution specialist responsible for broader pollution policy, including developing the national oil/chemical spill contingency plan. Also SAMSA has a co-operative relationship with DEAT, who within the context of pollution response is responsible for combating pollution in the maritime, whereas SAMSA's responsibility is to prevent pollution entering that environment.

### **3.2.6 Airports Company of South Africa**

The upgrading of ACSA airports has been taking place for some time and is nearing completion as a programme of work. It is this activity, together with the ongoing

monitoring of daily air transport movements in terms of aspects such as noise pollution that has been covered by ACSA in terms of its recognised obligations under the Environmental Conservation Act. Each of the upgrading components has met the requirements in terms of an EIA and the function of the environment is clearly defined in the organization with an acknowledgement of key documentation to DEAT where appropriate.

**3.2.7 Air Traffic and Navigation Services Company**

The main activity of the ATNS Company is providing air traffic control services to major airports in South Africa. The environmental impacts of this activity are comparatively small. Nevertheless, these impacts do merit some examination by the organisation, even if the environmental function is a shared activity.

**3.2.8 South African Rail Commuter Corporation**

The day-to-day operation of commuter rail services in the urban environment in South Africa does involve some environmental impact on and from commuters, e.g. litter, extension of the commuter rail networks, upgrade of stations and widespread vandalism. In addition, the envisaged refurbishment of infrastructure will entail some level of environmental impact and the programme will have to comply with the Environmental Conservation Act and EIAs on the projects concerned. This will have to be a feature of the work undertaken for each of the concession projects in the programme. Also, the environmental impact of the closure of railway lines in the future will have to be addressed.

## **4. RECOMMENDATIONS FOR ENVIRONMENTAL MANAGEMENT**

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This section contains the NDOT recommendations aimed at ensuring that the policies, plans and programmes of the Department, its Agencies and parastatals can be made to comply with the principles of environmental management. This conforms to the requirements of Section 13(1)(b) of the NEMA which stipulates that the EIP must contain a description of the manner in which the NDOT "...will ensure that the policies, plans and programmes referred to in paragraph (a) will comply with the principles set out in Section 2". Moreover, by subscribing to the national sustainable development framework, the NDOT undertakes to implement policy using the principles of sustainable development as a guideline.

The section also contains recommendations regarding the manner in which the NDOT will ensure that its functions are so organised as to comply with relevant legislative provisions (Section 13(1)(c) of the NEMA). Section 13(1)(d) of the NEMA stipulates that recommendations must also be made regarding the promotion of the implementation plan in line with Chapter 5 of the NEMA, i.e. the objectives of the NDOT must conform to the principles of IEM.

### **4.1. ENVIRONMENTAL FUNCTION AT AN NDOT AGENCY AND PARASTATAL COMPANY LEVEL**

Although the environmental impacts of transport activities are taken into account by some NDOT Agencies and parastatal companies, most notably SANRA and ACSA, the following Agencies still need to build an environmental function into their structure and work:

- CBRTA
- SARCC
- CAA

Ideally, this ought to be done by establishing the post of Environmental Officer within each body. In the absence of such a post, the very least that must be done is to assign the environmental function to a specific section or department within the agency or company.

#### 4.2. ENSURING CO-OPERATIVE GOVERNANCE IN ENVIRONMENTAL MANAGEMENT: NDOT, AGENCIES AND PARASTATAL COMPANIES

The NDOT, its agencies and parastatal companies must meet their obligations in terms of establishing an environmental function to monitor the impact of their activities on the environment. Moreover, a formal link still needs to be established between the NDOT, the Agencies and the parastatal companies to meet the objective of co-operative governance in terms of environmental management. The fact that the NDOT has assigned certain functions to these entities implies the continuous co-ordination of the actions of these bodies in terms of environmental impacts.

Therefore, it is recommended that an Environmental Unit be established within the NDOT. The functions of this unit will be:

- Assess the environmental impacts of NDOT policies, plans and programmes and liaise with divisions within the NDOT, the agencies and parastatal companies in respect of the various programmes.
- Perform a co-ordinating role to assist all agencies and parastatal companies in the EIP to incorporate an environmental function within their organisational structures.
- Compile an environmental policy for the NDOT.
- Make agencies and parastatal companies aware of relevant environmental legislation for completion of EIAs, and assist, where appropriate, all agencies and parastatal companies to meet their obligations (legal and otherwise) in terms of assessing the environmental implications of their activities. This would include making them aware of the contents and implications of the EIP compiled by NDOT.
- Establish a co-operative mechanism on transport and the environment involving the NDOT, the agencies and the parastatal companies, and covering the *internal* relationships identified in this EIP.
- Establish a co-operative mechanism (i.e. an interdepartmental committee) involving the NDOT and other national government departments as well as other levels of government, e.g. Provincial Departments of Transport, which would co-ordinate responses to environmental issues arising in terms of the *external* relationships identified in this EIP. An important example in this regard is that of Transnet, which falls under DPE.

The proposed plan of action for the implementation of the goals and objectives is set out in Table 4.1.

**Table 4.1: Action plan for implementation of goals and objectives:**

GOAL	ACTION REQUIRED & TIMEFRAME FOR IMPLEMENTATION
Assignment of Transport-Environmental function within the NDOT	Assignment of function – June 2002
Establishment of co-operative mechanism covering internal relationships (including establishment of structure & function aimed at ensuring compliance of agencies & parastatals with environmental legislation)	Mechanism established by October 2002
Establishment of co-operative mechanism covering external relationships	Mechanism established – October 2002
Assignment of environmental function by NDOT agencies and parastatals	Assignment of function – December 2002
Assessment of environmental impacts of transport projects under the NDOT: Agencies and parastatals to conform to legislation	Awareness of agency and parastatal obligations in terms of environmental legislation to be communicated to them & extent of compliance assessed by March 2003
Compilation of environmental policy for the NDOT	Submission of policy paper – March 2003
Establishment of Environmental Unit within the NDOT	Establishment of unit and appointment of staff by December 2003
Assessment of environmental impacts of NDOT policies, plans and programmes, and liaison with agencies and parastatals	Submission of assessment report – December 2003

#### 4.3. ASSESSMENT OF POLICIES, PLANS AND PROGRAMMES

The NDOT undertakes to ascertain properly the extent to which each of the policies, plans and programmes outlined in this EIP will have an impact on the environment. As a key component of this, all the pilot projects initiated by the NDOT must include an environmental impact component if this is not yet the case. This will ensure that these programmes and projects conform to the principles of IEM as set out in Chapter 5 of the NEMA, as well as the direct requirements of the Environmental Conservation Act, No. 73 of 1989. The NDOT also undertakes to compile a consolidated action plan for the

recommendations as an important follow-on to the EIP and ensuring the implementation of the EIP.

It is acknowledged that although the promotion of public transport, the integration of land use, the national bicycle programme and the adoption of travel demand measures are key elements of an environmentally friendly transport system in the long term, they themselves need to be understood in terms of what their respective possible environmental impacts. This is particularly the case given the fact that these programmes were not explicitly aimed at environmental objectives per se when they were formulated.

## 5. REFERENCES

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### KEY LEGISLATION

Environmental Conservation Act, No. 73 of 1989.

National Environmental Management Act, No. 107 of 1998.

National Land Transport Transition Act, No. 22 of 2000.

South African National Roads Agency Limited and National Roads Act, No. 7 of 1998.

6. ADDENDUM 1: ENVIRONMENTAL MANAGEMENT AND THE TRANSPORT SECTOR

ENVIRONMENTAL MANAGEMENT AND THE NATIONAL ROAD MANAGEMENT PROCESS

National road management process	Relevant legislation/programme	Relevant stakeholder	Comment	Alignment and extent of compliance with NEMA principles
Project identification	SANRA Business plan SANRA road management system	SANRA SANRA Board DEAT NDOT	NDOT's role as policy unit and arrangement with SANRA means that construction, rehabilitation & maintenance activities on the SANRA network (i.e. specific national roads only) are identified and prioritized by SANRA	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (k), (l), (m) Full compliance
Stakeholder/community participation	DEAT guidelines on EIAs Environmental Conservation Act NEMA principles	Road users Communities in proximity to road reserves Local authorities	Stakeholder/community participation does occur on SANRA projects in line with DEAT guideline documents and Environmental Conservation Act	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Approval of management programme of national road network (construction,	SANRA Act Environmental Conservation Act	SANRA Board approves business plan Min of Transport approves SANRA	EIAs undertaken on construction & rehabilitation activities. EIAs submitted to DEAT (Directorate: Environmental Management).	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m)

rehabilitation & maintenance)		business plan DEAT receives copy of EIA where appropriate	SANRA requests exemption from DEAT on routine & specialist maintenance. Local & provincial government have opportunity to comment on SANRA projects (concession projects included), EIAs. Final decision on projects lies with SANRA executive	Full compliance
National road construction & maintenance	SANRA Act Environmental Conservation Act	Contractors carry out construction, rehabilitation & maintenance under supervision of SANRA (incl. concession projects)	Supervisory role of SANRA in management of contractors vital	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Project inspection	SANRA Act Environmental Conservation Act	SANRA carry out inspection of contractor activity. Where applicable, EIA on project submitted to SANRA Environmental Officer	SANRA environmental function ensures EIAs carried out on construction & rehabilitation projects on the SANRA network of national roads.	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance

## ENVIRONMENTAL MANAGEMENT AND THE AIRPORT MANAGEMENT AND DEVELOPMENT PROCESS

Airport process	Relevant management	Relevant legislation/programme	Relevant stakeholder	Comments	Alignment and extent of compliance with NEMA principles
Project identification		ACSA (infrastructure planning division) develops business plan for renovation & expansion of ACSA airports	ACSA Airport management Local authorities DEAT	ACSA plans for expansion of airport facilities approved by Board & Minister of Transport (majority shareholder)	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Stakeholder participation		Stakeholder participation in terms of DEAT EIA guidelines & Environmental Conservation Act	Local authorities informed of plans for respective airports in their areas. Residents in local area also given opportunity for input.	Stakeholder participation mainly relevant at a local level according to location of airport, e.g. Johannesburg International Airport - Kempton Park	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Approval of projects		EIA guidelines & Environmental Conservation Act	Local authorities & DEAT given access to plans & evaluation results	Local authorities can approve or reject plans for expansion of facilities (capital investment)	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Airport construction & development process		Construction & expansion plans subject to EIA guidelines & Environmental Conservation Act	Local authorities & DEAT	EIAs of major expansion projects submitted to DEAT	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Noise pollution monitoring		Routine activity	ACSA	Noise levels monitored	Yes - NEMA section 2,

		Local authorities	regularly at ACSA airports by ACSA & local authorities. Noise levels generally within IATA/ICAO limits due to compliance of airlines	(2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
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## ENVIRONMENTAL MANAGEMENT AND THE AIR TRAFFIC &amp; NAVIGATION SERVICES PROCESS

ATNS process	Relevant legislation/programme	Relevant stakeholder	Comments	Alignment and extent of compliance with NEMA principles
Project identification	ATNS Company business plan	ATNS Company Minister of Transport	ATNS Company submits business plan to Minister of Transport for approval	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Stakeholder participation	EIA guidelines & Environmental Conservation Act	ATNS Company DEAT Individuals affected by new development		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Approval of projects	EIA guidelines & Environmental Conservation Act	ATNS Company DEAT	Approval of EIA required for erection of new ATNS facilities, e.g. radar, but not for routine operation of ATNS facilities	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
ATNS construction & development process	EIA guidelines & Environmental Conservation Act	ATNS Company DEAT		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Routine operation of ATNS	Normal activity	ATNS Company		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance

## ENVIRONMENTAL MANAGEMENT AND THE MARITIME SAFETY PROCESS

Maritime monitoring process	Relevant legislation/programme	Relevant stakeholder	Comments	Alignment and extent of compliance with NEMA principles
Programme identification	SAMSA business plan SAMSA Act	SAMSA Min. of Transport NDOT Maritime operators	SAMSA submits business plan to minister for approval	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Stakeholder participation	SAMSA Act	SAMSA Min. of Transport Maritime operators monitored		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Approval of programme	Minister of Transport approves SAMSA business plan	As above		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Maritime safety process	As above	As above	Safety issues dealt with under SAMSA routine operations & enforcement	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Environmental pollution	SAMSA Act	As above plus DEAT	SAMSA responsible for pollution prevention; DEAT responsible for pollution combating	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance

## ENVIRONMENTAL MANAGEMENT AND THE CROSS BORDER TRANSPORT PROCESS

Cross border transport process	Relevant legislation/programme	Relevant stakeholder	Comments	Alignment and extent of compliance with NEMA principles
Programme identification	CBRTA business plan CBRTA legislation	CBRTA Min. of Transport NDOT Road users	Key function of CBRTA is awarding of cross border permits for road transport (passenger & freight)	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) No compliance - permits do not include environmental considerations
Stakeholder participation	Road users briefed as to conditions of permit approval, e.g. safety	Cross border transport operators		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) No compliance - environmental issues not included
Approval of permits	CBRTA function		Permits awarded, but no reference made to environmental considerations, e.g. conveyance of hazardous goods	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) No compliance

## ENVIRONMENTAL MANAGEMENT AND THE RAIL COMMUTER PROCESS

Rail commuter transport process	Relevant legislation/programme	Relevant stakeholder	Comments	Alignment and extent of compliance with NEMA principles
Programme identification	SARCC business plan	SARCC Min. of Transport NDOT Rail commuters Local authorities	SARCC routinely involved in rail commuter transport.	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Compliance with NEMA & other legislation
Stakeholder participation	Stakeholder participation included in major expansion of infrastructure	As above, with rail commuters represented by commuter groups		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Compliance - stakeholder consultation routinely undertaken
Approval of projects	EIA guidelines & Environmental Conservation Act	SARCC DEAT	Major improvements to infrastructure must be submitted to DEAT	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Compliance - major projects dealt with under legislation

ENVIRONMENTAL MANAGEMENT AND THE CIVIL AVIATION AUTHORITY PROCESS

Civil aviation management process	Relevant legislation/programme	Relevant stakeholder	Comments	Alignment and extent of compliance with NEMA principles
Programme identification	CAA business plan	CAA Min. of Transport NDOT Airlines ACSA ATNS Local authorities	The CAA annually submits to the Minister of Transport a business plan, which should be approved by the Minister.	Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Stakeholder participation	CAA co-ordinates issues with stakeholders	As above		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance
Approval of programmes		CAA NDOT		Yes - NEMA section 2, (2), (3) & (4)(a), (b), (f), (k), (l), (m) Full compliance