ROAD FREIGHT STRATEGY

2017

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MINISTER'S FOREWORD

Firstly, I would like to say how elated I am to be launching the Road Freight Strategy for South Africa. As a developing country, we have for a long time struggled to ensure an effectively co-ordinated Road Freight Industry. Ours has always been to facilitate the seamless movement of cargo along all the major freight routes, primary and secondary networks as well as all freight corridors.

We have worked tirelessly to find solution-based strategic interventions for the challenges which cause the most damage to the industry; these being pollution (noise and greenhouse gas emissions), damage to the infrastructure, spillages, trucking intrusions, congestion, accidents and anti-social activities.

We are proud to have worked with the industry in its entirety; ensuring that the voices of all the relevant stakeholders have been heard, after engaging in consultations which have garnered their support for this Road Freight Strategy.

It is important to note that for the past two decades the Road Freight Industry has excessively grown in size and stature. This growth is a direct result of the 1988 deregulation of the sector. The decision led to previously banned commodities such as break bulk, which was previously moved exclusively by rail, now moving on road - a mode not developed nor maintained for heavy bulk movements.

The shift of the moving of break bulk from rail to road led to the rapid expansion of the sector, not withstanding attempts which followed to try to salvage the situation. This sector has grown exponentially and rapidly on infrastructure that was created for commercial use (passenger and cargo). It thus became more urgent to develop a solution to this problem.

This strategy has been developed to ensure a proficient and active regulatory and institutional framework. To achieve this, we have taken a leaf from international best practices and efficient management with the aim of providing a high standard of operational quality. This is intended to reduce the externalities and pave a way for the creation of a sustainable Road Freight sector which provides efficient services to the South African economy.

The Road Freight Strategy represents a significant shift from the current modus operandi. It enriches the sector through a more harmonised way of providing services and allows the government to pro-actively invest in the sector and related infrastructure.

I would like to extend my appreciation and gratitude to the role played by the industry in ensuring that this Strategy is developed. Further to this, I would like to encourage all role players to take an active role in the full implementation of the Strategy as its success rests on the shoulders of all of us.

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ACRONYMS AND ABBREVIATIONS

AADTT	Annual Average Daily Truck Traffic
AARTO	Administrative Adjudication of Road Traffic Offences
ARF	Accident Report Form
BBBEE	Broad Based Black Economic Empowerment
BCOCC	Border Control Operational Co-ordinating Committee
BICO	Bureau for Industrial Co-operation (Dar es Salaam)
BMA	Border Management Agency
CBRTA	Cross Border Road Transport Authority (double check)
COR	Certificate of Roadworthiness
CSIR	Council for Scientific and Industrial Research
DIRCO	Department of International Relations and Co-operation
DLTC	Driving Licence Testing Centres
DoT	Department of Transport
eNATIS	Electronic National Traffic Information System
ETA	eThekwini Transport Authority
FESARTA	Federation of East and Southern African Transport Associations
GCM	Gross Combined Mass
GDP	Gross Domestic Products
GHG	Greenhouse Gases
HGV	Heavy Goods Vehicle
HSRC	Human Sciences Research Council
IMO	International Maritime Organisation
ITP	Integrated Transport Plan
LCV	Longer Combination Vehicles
LDV	Light Delivery Vehicle
LAM	Legal Axle Mass Load
MCBRTA	Multilateral Cross Border Road Transport Agreement
MTPA	Million Tons Per Annum
MSA	Moving South Africa
NAMA	Nationally Appropriate Mitigation Action
NATMAP	National Transport Master Plan
NDP	National Development Plan
NFLS	National Freight Logistics Strategy
NFMF	National Freight Monitoring Framework
NLTA	National Land Transport Act.
NRCS	National Registrar for Compulsory Specifications
NSDP	National Skills Development Plan
NRSS	National Road Safety Strategy
NPA	National Prosecuting Authority
NRTA	National Road Traffic Act
NTPS	National Transport Policy Study
NQF	National Qualifications Framework
PBS	Performance-Based Standards
PLTF	Provincial Land Transport Framework
PrDP	Professional Driving Permit
PTS	Public Transport Strategy
RAU	Rand Afrikaans University
RCP	Responsible Competent Person
RFI	Road Freight Industry
RFS	Road Freight Strategy
RLV	Registration and Licencing of Vehicle Form
RTMC	Road Traffic Management Co-operation
RTIA	Road Traffic Infringement Agency
RTMS	Road Transport Management System
RTQS	Road Transport Quality System
RWTC	Roadworthiness Testing Centres
SAAFF	South African Association of Freight Forwarders
SABS	South African Bureau of Standards
SADC	Southern Africa Development Community
SANRAL	South African National Road Agency Limited
SANS	South African National Standards Authority
SAPS	South African Police Service
SAR&H	South African Railways and Harbours
SETA	Sectoral Education and Training Authority
SIPS	Strategic Infrastructure Plan
SOC	State-Owned Companies
SOLAS	Safety of Life at Sea
STER	Single Transport Economic Regulator
TCSP	Technical Committee for Standard Procedures for Law Enforcement Equipment
TETA	Transport Education and Training Authority
TOR	Terms of Reference
TVET	Technical Vocational Education and Training
UJ	University of Johannesburg
UNFCCC	United Nations Framework Convention on Climate Change





EXECUTIVE SUMMARY





EXECUTIVE SUMMARY

The intention of the Road Freight Strategy is to explore the effectiveness of the road freight sector and make recommendations.

The recommendations, which include best practices, aim to ensure an effective and seamless movement of cargo domestically and regionally, and also cater for an efficient modal split. In order to develop a comprehensive strategy covering all relevant aspects of the road freight sector, the study has examined the scope and nature of current operations; the regulatory and institutional framework and the current control of operational quality.

In addition, the implications of negative externalities of the mode; issues of road-user cost recovery; road safety; road freight infrastructure; regional integration; cross-border logistics and intermodal competition have been addressed.

It is recognised that it is essential that the RFS is compatible with the several policy studies which were initiated by the Department of Transport (DoT) in 2015. These include, but are not limited to, the review of the NATMAP (National Transport Master Plan), the National Freight Logistics Strategy (NFLS), the National Land Freight Strategic Framework (NLFSF) and the White Paper on National Transport Policy. It is also important that the RFS is in line with the development of the Green Paper on Road Policy, the Green Paper on Railway Policy, and the development of a transport economic regulatory framework with a Single Transport Economic Regulator (STER).

The RFS was broadly defined within the Road Transport Quality System (RTQS), which was devised in response to the deregulation of road freight transport in 1988. The deficiencies in the legislation and regulatory systems developed at that time have become more evident as the industry has expanded and changed in character in response to the demands of the economy.

The wide range of sub-standard features in the regulation and management of the mode underscore the need for the re-definition of the South African Road Freight Strategy.

The regulation of commercial transport (passenger and goods) is an essential function of transport authorities in all countries. This is necessary because transport activities take place in the public space using state-owned infrastructure. Accordingly transport operators must be held accountable for externalities (accidents, noise, pollution, infrastructure damage and congestion). It is also essential to ensure quality-regulated competition in the industry in the interests of optimal efficiency, reduce externalities and avoid cut-throat and anti-social competitive practices.

The current situation in South Africa is that there are a number of highly-effective road freight operations that are managed to world class standards. These operations are the lifeblood of the national freight logistics systems, moving more than 80% of all industrial cargoes. At the same time there are large and growing numbers of sub-standard operations which are generally under-capitalised, lack managerial and technical skills, use poorly-maintained vehicles and depend on the generally low-level of enforcement to survive.

The vision for the RFS is a transition from the current situation to:

"An effective regulatory and institutional framework using international best practice systems, technology and efficient management to provide high standards of operational quality and minimal externalities in a sustainable road freight sector which provides efficient service to the South African industry."

The strategic objectives of the RFS are to:

- Improve the effectiveness of regulation and enforcement of quality standards while ensuring equity between road freight transport operators within a system of quality-regulated competition;
- Optimise the efficiency of road freight services to the industry and reduce externalities of the mode in terms of accidents,pollution, congestion, infrastructure damage and anti-social activities;
- Create effective training and skills development options for all functions in the industry in order to encourage professionalism in the management, operation and support of road freight operations. It also encourages increasing B-BBEE (Broad-Based Black Economic Empowerment) participation in the industry;
- Provide for the effective liaison between all role-players in the sector, including all tiers of government, private sector operators and industrial users. The plan further promotes optimal intermodal co-ordination and logistical efficiency, as well as improving the planning of road freight infrastructure provision and management;
- Promote regional trade integration and improve cross-border transport efficiency in order to enhance national competitiveness; and
- Propose an effective, fair road-rail split.

The project methodology applied includes literature analysis regarding road freight regulation and management in other countries and the principles of transport regulation. It further involves a review of the South African road freight sector from available statistics and an examination of the current legislative framework.The research has identified the major issues that have an impact on operational efficiency, control of quality, road safety and enforcement effectiveness. Other matters identified include skills deficiencies, co-ordination and liaison between industry and government, and the current status of infrastructure.

The proposed interventions are based on international best practices and include the results of consultations with role-players, legal experts, industry participants, the DoT steering committee and academics, to test the proposals.

The Strategy makes detailed recommendations and provides suggestions for the implementation with due recognition for the fact that some aspects of the freight transport modes also involve other departments and agencies. The intention is that there be liaison and discussions to agree on processes to create and manage the various programmes that are recommended in this strategy.

The identified issues in need of strategic interventions include a wide range of regulatory and institutional changes which can be described briefly as follows:

There is need for an effective Transport Operator Regulation (TOR) system as economic pressures and profit motives frequently lead to sub-standard operations and externalities which can endanger public safety. It is international best practice to define the criteria for the evaluation of applications to be registered as commercial vehicle operators and monitor the management of their operations, as evidenced by compliance with legislation and safe operating standards.

The lack of effective control of operator quality is a national problem in South Africa. This resulted from the defective system design of the RTQS in the 1980s. The current system where operator identity is recorded via the vehicle registration forms has several negative consequences.

There are various aspects of the current operational quality control systems that are mentioned in the National Road Traffic Act (NRTA) but are ineffective in controlling the quality of road freight operations. These include problems with enforcement capacity, systems deficiencies, lack of modern equipment, insufficiently-trained manpower and ineffective forms of communication in the enforcement agencies at all levels. Prosecution and the collection of fines are also problematic with widespread allegations of collusion and corruption.

There is evidence that supports an urgent need to improve the facilities, standards and levels of transport industrial training and skills development at the technical, managerial, and operational levels, as described in the NFLS study . There are also deficiencies in the systems for the training of drivers, operations staff, managers and technicians due to skills, systems, institutional and resource limitations in road freight transport at all levels.

The issue of sustainability of the road freight sector is in need of urgent evaluation due to the deteriorating road conditions and funding limitations for maintenance on provincial roads.

This is causing increased vehicle operation costs (which are tax deductible), inflationary pressures on commodity prices and reduced competitiveness of the local industry and agriculture. In addition, there are serious congestion and safety issues at specific points on the corridors and in urban areas that are in need of urgent attention as they cause inefficiencies in road freight logistics.

System development is required to permit third party development of co-ordinated road-rail logistics systems. This as the current railway system is only highly effective for the transporting of bulk commodities but does not offer services for short-haul and break-bulk cargoes.

South Africa is part of the Southern African Development Community (SADC) and therefore party to the drive for liberalisation of inter-state transport and promotion of regional trade. The current tripartite initiative to harmonise quality regulation in the road freight sector through a regionally-linked operator registration system, (TRIPS), will require the participation of the South African government.

The repeal of quantity regulation (permits) and engagement in the Multilateral Cross-Border Road Transport Agreement (MCBRTA) will require some institutional changes and presents opportunities for improving the road freight regulatory system in the region and country. There is an evident need for improvement of the logistical efficiency of the border posts with neighbouring countries in the interests of improving the cost-efficient movement of goods regionally.
The current communication and co-ordination structures do not provide adequate liaison with the large numbers of road freight operators in all sectors of the economy. This is due, in part, to the fact that road freight operations are “embedded” in industries.

The situation minimises the contacts between government decision-makers and the users and providers of road freight logistics. Moreover, it hampers co-operation with the industry management and decision-makers. The need for improved co-ordination is also evident between different levels of government and also between the many authorities, agencies and departments that are the regulators of the road freight sector.

There is an on-going need for more information about road freight movements as a tool for planning and regulation of the sector. The lack of road accident and crash statistics is a major problem in the development of road safety strategies for improvement to the currently high level of road fatalities and injuries. The abovementioned issues and challenges are described in some detail and the recommended remedial actions are described below.

Recommendations regarding the definition of the Operator Registration system will require amendments to the NRTA and other legislation. The DoT will facilitate consultations with key stakeholders to ensure co-ordination with the SADC TRIPS system. Also, the implementation of the Administrative Adjudication of Road Traffic Offenses Act (AARTO) will support the improvement of the Operator Quality and co-ordination with all provinces in the revision of overloading control strategies. This will be an on-going process requiring a high level of interaction between all tiers of government.

The road-to-rail strategic actions will be dependent on the implementation of the recommendations of the Rail Policy. This is because the creation of railway capacity must precede any plans to shift cargo from road - to - rail. To this effect private sector producers, importers and exporters of goods will make the required decisions.

Improvements in the training of drivers will require the development of a strategy to provide for training institutions and the funding of suitably professional training institutions. It will also require provision for training bursaries for aspirant trainees.

This should be co-ordinated with the TETA (Transport Education and Training Authority) and provinces. The DoT will co-ordinate the responses to the current SADC liberalisation and harmonisation initiatives in road transport which will also involve the Department of International Relations and Co-operation (DIRCO), the Border Management Agency (BMA) and the C-BRTA.

The DoT should review the arrangements for the collection and reporting of national accident statistics in order to permit planning and monitoring of road safety measures in terms of international agreements. The Road Freight B-BBEE Charter has been accepted by the road freight sector to create opportunities for BEE (Black Economic Empowerment).

The Department should also evaluate options for supporting training and skills development to optimise the potential for the creation of new black entrepreneurs (and the development of existing ones) to take advantage of economic opportunities throughout the industry value chain.

The DoT will need to plan and define strategies to provide for improved co-ordination with various agencies, provinces, the National Treasury, State-Owned Companies (SOCs), and other relevant government departments in order to implement all the recommendations in the RFS.

The private sector and suppliers of road freight transport will also need to be on-board. In addition to the abovementioned broad issues, there are a number of incomplete, unresolved, or outstanding legislation items that are described in this Strategy which are in need of resolution and implementation. These are:

- AARTO (23rd Amendment to NRTA) Feb 2016;
- PrDP (Professional Driver Permit);
- Driving Hours (Reg. 272 A-E);
- Provisional Driving Licences (Reg. 107, 1 108,109);
- Driver Age Limits;
- Driving Instructors (Reg.114 A-F);
- Driving School Regulations (Reg. 114 G – Q);
- Speed limiters (Reg.215);
- Driving Hours;
- PBS (Performance-Based Standards) Vehicles; and
- RTMS (Road Transport Management System)

EXECUTIVE SUMMARY

1 INTRODUCTION

INTRODUCTION

In the process of developing the RFS, the DoT seeks to address the issues which have current negative impacts on the efficiency of the sector. The intention of the RFS is to create an integrated regulatory and operational framework which will enable South Africa to achieve best international standards of road freight operations. This is essential for the future logistical support of industrial growth, road safety, limitation of externalities, and the creation of opportunities for employment.

In the development of the RFS for South Africa, it is useful to note the historical developments which have led to the current situation. The South African freight transport policy was established at Union in 1910 with high levels of monopoly operation of State-owned transport services in all modes to support the developing economy of the country. Subsequent economic development has led to transition from dependence on agriculture and mining to a sophisticated manufacturing and commercial economy with the need for a wide range of efficient freight logistics services.

The first major changes in the freight transport institutional structure came in 1985 when the National Transport Policy Study (NTPS), commissioned by the DoT, led to supply-side (quantity) deregulation of road freight transport . In the same period, the four Provincial Road Traffic Ordinances were unified in the National Road Traffic Act (No. 29 of 1989) to create the Road Transport Quality System (RTQS). The deregulation of supply of road transport led to rapid expansion of the industry to support the growth of manufacturing and increasing international import and export volumes of industrial and consumer goods.

Road freight transport continues to increase (48% in last 10 years) with heavy goods vehicles (HGVs) making up 34% of traffic on the N3, and HGV accidents on that route at the same level as light vehicles. The levels of enforcement are not keeping pace with the growth of traffic thereby aggravating the cost of accidents (R300 billion p.a.) . The accident management and reporting systems are failing to monitor the causes and extent of the deficiencies in the enforcement systems effectively, thereby hampering efforts to improve road safety. Further, overloading control is ineffective due to systemic failures.

The National Development Plan (NDP) is based on a projected average annual growth in Gross Domestic Product (GDP) of 5.44% p.a., whereas the actual expansion of GDP was 2.66% between 2006 and 2013. This has now been reduced further to an estimated 1.4% p.a. in 2016. The fiscal constraints resulting from the depressed economy have serious implications for the maintenance of infrastructure, industrial growth, employment and the balance of payments.

It is estimated that the total transport sector contribution to the GDP was 5.5% in 2013, The sector contributed 4% to total employment in the same year - with the road freight sector being the largest section of the overall freight transport sector. The road freight industry faces a reduction of business activity, decreased revenues, and rising costs due to deteriorating roads and the closure of businesses, leading to a rise in unemployment.

The transport and logistics sector has failed to support effective regional integration and the development of trade within the region. It further faces increasing pressures for harmonisation of standards and liberalisation of transport in the interests of effective cross-border trade. This is affected by the speed of development of effective corridors and improved systems to support import/export trade in the region. There is decreasing availability of technical, managerial and operational skills in the road freight sector. This has led to calls for an urgent need for the revision and improvement of the processes and standards of training for trainers, drivers and examiners -, particularly commercial vehicles. The condition of heavy goods and passenger vehicles is unsatisfactory (with roadside inspections showing 65-80% defective vehicles) with the annual inspection system unable to achieve the effective enforcement of quality standards.

The pressures of increasing costs of fuel, labour, vehicle finance and lower turnover are forcing transport operators to embark on all possible actions to contain costs and increase efficiency. In many cases, these processes lead to reduced vehicle maintenance and extending vehicle life, overloading and undercutting quotations in order to maximise vehicle utilisation. In order to control the externalities of road damage, pollution, speeding, accidents and other negative actions by operators, the DoT has identified the need for the revision of existing regulatory measures and enhancement of the planning, co-ordination and strategic framework of the road freight sector.

The recommendations in this RFS will enhance the efficiency of enforcement, promote road safety, improve the protection of the infrastructure, and reduce environmental impact. and the recommendations are also expected to create an integrated framework of quality-regulated competition within which the road freight sector can continue to serve the needs of the South African economy.

2 STRATEGIC FOCUS

STRATEGIC FOCUS

2.1 Vision

The vision for the RFS is a transition from the current situation to:

"An effective regulatory and institutional framework using international best practice systems, technology and efficient management to provide high standards of operational quality and minimal externalities in a sustainable road freight sector which provides efficient service to the South African industry."

2.2 Mission

The mission of the current process of development of the RFS for the country is, therefore, to identify the deficiencies in the current systems, procedures, structures, processes, standards and responsibilities and to devise improvements and changes and to remedy current defects by introducing best possible practices and systems.

2.3 Values

The values that define the effectiveness of the road freight regulatory system cover a range of different facets of operations and are described as follows:

Enforcement	- monitoring and control of standards
Operator Fitness	- competent freight transport operators
Road Safety	- competent drivers
Vehicles Fitness	- vehicle condition, driving behaviour
Legal Loading	- compliance with axle load limits
Infrastructure	- protection of roads, bridges, urban property
Externalities	- pollution, congestion, anti-social behaviour
Operations	- load securement, driver hours, routing
Competence	- competent management of operations
Competition	- quality-regulated competition

The guiding principles and strategic focus of the recommended changes to the RFS are the improvement of efficiency of all aspects of the sector, and optimising the use of resources. This includes improvements to the efficiency of the regulatory system for control of all aspects of road freight operations such as driver competence, accident recording and reporting and the control of overloading. , Improvements to the regulations also cover the control of speed, fatigue, transport of dangerous goods and abnormal loads.
These improvements will be achieved within the proposed framework provided by effective Operator Registration with a Road Freight Authority and the development of supporting systems. They will include the combating of corruption and collusion through improved systems, monitoring and reporting. They will also include the improvement of cross-border transport to reduce delay and costs.

Improvements to communications between the government and the private sector industrial users and suppliers of freight transport will help to support the national initiatives to accelerate the economic growth. These include better communication in planning, formulation of regulations and allocating of costs for externalities. Moreover, they also cover a whole range of mutually important improvements required in the road freight and logistics sectors.

In order to achieve all the above-mentioned improvements to the existing situation there will be a need for a well-planned execution of the recommendations in this report. The mission will be driven by the DoT but will require extensive consultation, negotiation, co-ordination, and legislative and institutional change. The measures required to achieve international standards of "quality" of road freight operations are covered by the Strategic Initiatives described in this Strategy.

The improvements to systems and processes described in this Strategy will contribute to improved use of resources such as infrastructure, policing and enforcement costs, definition of cost responsibilities and recoveries, and reduced wastage by co-ordinating intra-governmental communications and systems.

2.4 Strategic Objectives

- To optimise the efficiency of road freight services to industry, and to reduce the externalities of the mode in terms of accidents, pollution, congestion, infrastructure damage and anti-social activities;

- To improve the effectiveness of regulation and enforcement of quality standards and to ensure equity between road freight transport operators within a system of quality-regulated competition;

- To create effective training and skills development options for all functions in the industry, to encourage professionalism in the management, operation and support of road freight operations, and to encourage increasing B-BBEE participation in the industry;

- To provide for effective liaison between all role players in the sector; all tiers of government, private sector operators and industrial users and to promote optimal intermodal co-ordination and logistical efficiency as well as improving the planning of road freight infrastructure provision and management;

- To promote regional trade integration and improve cross-border transport efficiency to enhance national competitiveness, and

- To propose an effective, fair rail/road.

3 POLICY AND LEGISLATIVE MANDATE

POLICY AND LEGISLATIVE MANDATE

The main policy and regulatory structures that have an impact on the road freight sector are described belo

3.1 Constitution

In terms of the South African Constitution, the overall responsibility for transport policy resides with the DoT. The Constitution stipulates (in Sections 4 and 5 on concurrent functions) that transport is one of the concurrent functions of government. This means that more than one sphere of government is responsible for making policy, legislating, administrating or monitoring performance in relation to the transport function.

In relation to these functions, the national government generally takes the lead in formulating policy, determining regulatory frameworks, setting norms and standards and monitoring overall implementation. Provinces, on the other hand, are mainly responsible for implementation - in line with the nationally determined frameworks. All local government functions listed in Parts B of Schedules 4 and 5 of the Constitution are concurrent functions. This is because, in all instances, either national or provincial government may regulate how municipalities exercise their executive authority in relation to these functions. Municipalities are responsible for municipal planning, which encompasses planning related to the spatial, economic and social development.

The derogation of authority to provinces and municipalities means that freight logistics is impacted by provincial regulations, municipal bylaws, and regulations enforced by local authorities. These are done in the interest of reducing the impact of freight transport on urban populations. Municipal bylaws and regulations are, unfortunately, developed in isolation. Although there is a commonality of purpose, the exact detail of municipal regulation with regard to road freight presents a problem to operators and enforcement authorities.

Traffic management by provinces and municipalities includes the definition of permissible speed, road signage and demarcation of prohibited areas. It also comprises parking for freight vehicles; with the enforcement of stopping, parking and, in some areas, the control of overloading. The transporting of dangerous goods in urban areas is ineffectively managed by local authorities and very little preparation is made for emergencies. The planning in urban areas by municipal authorities for effective freight transport movements is inadequate in even the largest and busiest municipal areas.

While the South African Constitution gives the DoT the overall responsibility for transport policy, it must, however, be noted that several other entities have jurisdiction over specified functions. Some of the roles include the provincial implementation of the National Road Traffic Act and responsibility for roads. In addition, there are several other state entities and agencies of the DoT that have specific powers and mandates relating to freight transport, such as C-BRTA (Cross-Border Road Transport Agency), RTMC (Road Traffic Management Corporation), RTIA (Road Traffic Infringement Agency), CSIR (Council for Scientific and Industrial Research) and the SABS (South African Bureau of Standards)/NRCS (National Register for Compulsory Specifications)

3.2 National Development Plan (NDP)

The emphasis of the NDP is on promoting efficiency in transport and effective regulation of externalities. The NDP vision includes recognition of the need for private sector participation, stating:

"Government should recognise where competing service providers would best meet transport needs and enable licensing where appropriate, all within a framework of strong effective regulation of public and private transport."

3.3 National Road Traffic Act (No. 29 of 1989)

The National Road Traffic Act (No.29 of 1989) (NRTA) was promulgated to create a uniform set of road traffic regulations for the entire country. The intention of the Act was to introduce the harmonised Road Transport Quality System (RTQS) throughout the country. The elements of the system included registration of operators, responsible persons, professional driver permits, and standardised credit card driver licences. The system also included a national vehicle register, unified licence fees, scale of fines, and measures for control of overloading.

The regulations cover standardisation of transport of abnormal loads, uniform terms for transport of dangerous goods, requirements for training and licensing of drivers and annual inspections for certificates of roadworthiness (COR). Initially, regulations also covered the standardisation of number plate formats for vehicles. Several of the abovementioned provisions were never implemented and the current performance of some regulatory activities is sub-standard and in need of further strategic interventions as recommended in later sections of this report.

The standardisation of traffic enforcement operations in all provinces was addressed in the NRTA in order to achieve uniform (or similar) standards for issues such as speed limits, road design, and road signage. The RTQS included a requirement for mandatory national third-party insurance on all vehicles. The control of road traffic in relation to registrations, payments and enforcement, was derogated to the provincial administrations. The co-ordination of transport regulatory functions is fragmented and levels of control and enforcement are not optimal due to the need for improved co-ordination between different spheres of government.

With the growth of the South African economy and the increasing emphasis on the export of bulk mineral mining products, there were very rapid increases in the use of road transport for distribution of consumer goods from centralised distribution centres to smaller communities. There was also a trend to the usage of heavy goods vehicles (HGVs) to transport agricultural commodities such as maize, wheat, fertiliser, sugarcane, timber and specialised transport of products such as fruit, vegetables and meat. The lack of adequate regulatory control of operational quality in the road freight sector has resulted from the defects in the legislation as described in later sections of this report.

3.4 TRH 11 – Abnormal Loads and Vehicles - 8th Ed: CSIR: Aug 2009

The TRH 11 regulations for control of abnormal loads is the standard by which all abnormal vehicle and load movements are controlled by the nine provinces. The current application of the regulations is sub-optimal, with provincial authorities administering the processes and procedures in ways that frustrate the hauliers in this specialised and very expensive sector of the road freight industry. There is a need for standardisation of the abnormal load application and permit systems and processes - both domestically and regionally - in the interests of reducing delays and costs. It is to be noted that the Western Cape Province has commissioned an IT system which may prove suitable for wider usage.

3.5 Regulation of Transport of Dangerous Goods

The transport of dangerous goods is regulated in terms the National Road Traffic Act, as well as by references to a range of South African Bureau of Standards (SABS). It is further regulated through standards for performance of the various activities involved in the storage, loading, transport and unloading of dangerous goods. The very detailed legislation developed by the SABS (now National Registrar for Compulsory Specifications (NRCS)) covers the specifications for vehicles, and the description of the Hazchem signage system, which is intended to inform authorities and emergency services in the event of accidents.

Although the detailed regulatory framework and standards have been developed and conform to international best practice; they are not supported by adequately trained and equipped enforcement authorities and emergency services. In many areas they are inadequate, unsatisfactory, or incomplete.

The large number of origins and destinations, and the fact that much of the transport takes place within the urban areas, controlled by a range of municipalities, complicate the control of transport of dangerous goods. There is need for a national study of the application of current standards and development of monitoring and control systems.

3.6 Administrative Adjudication of Road Traffic Offenses Act (AARTO) (No 46 of 1998)

In response to the problems with control of light and heavy vehicle operations, the DoT promulgated the Administrative Adjudication of Road Traffic Offenses Act (No 46 of 1998) in order to introduce a points-demerit system. The system has been extensively tested and modified but, after 18 years, has not been successfully implemented on a national scale. This is due to inherent problems with tracing offending individuals and entities.

The problem is that many of the drivers and vehicles move and change contact details frequently, whereas owner and operator records are linked to annual vehicle registrations. The definition of the terms and processes of AARTO has faced numerous challenges such that in 2016 the system was still not practically operational. For freight transport, the introduction of operator registration will provide positive business identification and greatly enhance the potential for the successful implementation of the AARTO.

3.7 Road Traffic Infringement Agency (RTIA)

The RTIA was created as an agency to administer the "infringements" incurred in terms of AARTO. However, as the AARTO is still inoperative, the only activity of the RTIA to the present has been the commissioning of the South African Road Safety Audit Manual (Second Edition in May 2012).

3.8 Road Traffic Management Corporation Act (No. 20 of 1999)

The Road Traffic Management Corporation (RTMC) commenced its operations in April 2005 with the objective of pooling powers and resources to eliminate the fragmentation of responsibilities for all aspects of road traffic management across the various levels of government in South Africa. The RTMC was established in terms of Section 3 of the Road Traffic Management Corporation Act, No. 20 of 1999, for co-operative and co-ordinated strategic planning, regulation, facilitation and law enforcement in respect of road traffic matters by the national, provincial and local spheres of government.

3.9 National Land Transport Strategic Framework (NLTSF) (2006)

The National Land Transport Strategic Framework (NLTSF 2006 - 2011) was initiated in 2006 by the DoT. It was reviewed and gazetted in 2015. The NLTSF describes a broad overview of the various frameworks and plans that have been approved by government, including the NDP, SIPs, NLTA, Public Transport Strategy, ITPs, and PLTFs. With regard to freight transport, the NLTSF notes the importance of planning to limit externalities and the need for action on the National Road Safety Strategy: 2011 - 2020 (NRSS).

3.10 National Land Transport Act (No.5 of 2009)

The National Land Transport Act (NLTA), promulgated in 2009, made very brief reference to freight transport (Course 37). In terms of the Act, the Minister is required to develop the freight transport strategy with due regard to national and provincial policies covering the following issues:

1) Movement of goods to/from and through per area by rail or pipeline;
2) Movement of goods to and from ports and airports;
3) Identification of routes to promote seamless movements and avoid conflict with road traffic;
4) Strategic plans for movement of dangerous substances;
5) Designation of authorisation of persons transporting dangerous goods;
6) Sanctions for infringements of the above;
7) Requirement for registering authorities to apply effective regulation of fleet operations by means of the operator card system in Chapter 6 of the National Road Traffic Act (to prevent damage to the road system and achieve the other objectives of this Act); and the
8) Publication of transport plans, recording of substantial changes in land use, public transport infrastructure and services.

4 PROJECT METHODOLOGY

PROJECT METHODOLOGY

The methodology used in the development of this Road Freight Strategy followed a 6-step approach, which comprised the following activities:

4.1 Literature analysis, which included the current regulatory framework, legislation, and institutional responsibilities regarding road freight regulation and management. Review of regulation in other countries, including the historical development of the mode and the principles of transport regulation that are universally applicable to achieve quality regulation and limitation of externalities. The literature analysis also included the review of the various policy studies done in South Africa over the past 30 years and the recent policy documents produced by the DoT;

4.2 Review of the South African road freight sector from available statistics and examination of the current industry structure and activities. The process included contacts with legal and operational experts in the mode as well as many of the supporting activities such as roadworthiness test centres, weighbridges, driver training schools, technical training centre and the provincial transport and traffic authorities.

The study has also drawn extensively on the past research activities of the consultants in the projects such as NATMAP, review of freight logistics on the N3 corridor, freight logistics studies in KZN, Western Cape, Gauteng and at the borders;

4.3 Identification and description of the major issues that have impacts on operational efficiency; control of quality; road safety; enforcement effectiveness; skills deficiencies; co-ordination and liaison between industry and government and the current status of infrastructure;

4.4 Development of proposed interventions based on international best practices to address the identified challenges. In this phase, the consultants made contact with associations, transporters, provincial traffic authorities, academics and industry consultants and publishers to test the impacts of the identified issues and proposed recommended interventions;

4.5 Preparation of a report describing the need, purpose and detailed proposals for the strategic interventions that should be included in the Road Freight Strategy and presentation of the recommendations to an industry stakeholder round table; and the

4.6 Compilation of the Final Report on the Road Freight Strategy, including the feedback from the stakeholder consultations.

There is no system for the monitoring of the performance of commercial road freight operations in South Africa. The regulation of commercial transport as a separate activity from road traffic management is necessary because transport activities take place in the public space, using State-owned infrastructure and the transport operators must be held accountable for the externalities (noise, accidents, pollution, and infrastructure damage).

Quality-regulated competition in the industry “levels the playing field” for operators and increases efficiency whilst reducing externality costs to society and government. Regulation of the standards of operation of commercial transport (passenger and goods) is an essential function of the transport authorities (national, provincial and municipal) in all countries.

The current regulatory framework and processes are not adequate to achieve the goal of operational compliance within a quality-regulated monitoring system. Current information system (eNATIS) is traffic-related and does not link operators, responsible persons, drivers, vehicles and offences to provide for monitoring of operating standards.

The deficiency is historical; in South Africa prior to 1988, the road freight industry was regulated by the Road Transportation Act, which imposed a requirement for permits for road haulage over 80 kms in order to protect the railways. The Road Freight Strategy was broadly re-defined within the Road Transport Quality System (RTQS), which was devised in response to the deregulation of road freight transport in 1988.

The deregulation of road freight transport since 1988 and the simultaneous withdrawal of break-bulk railway services led to the rapid expansion of the road freight sector. This expansion was foreseen, and the regulatory measures for road traffic were improved but not effectively implemented. Further, the proposed regulations for control of commercial transport quality were not adopted.

The lack of a single Road Transport Authority to manage the monitoring and control of commercial transport has left decision-making fragmented and ineffective. This is due to the various authorities and agencies now involved in managing the regulation of the sector. The deficiencies in the legislation and regulatory systems which were developed at that time have become more evident as the industry has expanded and changed in character in response to the demands of the economy. The wide range of sub-standard features in the regulation and management of the mode underscore the need for the re-definition of the South African Road Freight Strategy.

5 PROBLEM STATEMENT

PROBLEM STATEMENT

5.1 Operator Registration

A key issue with regard to the quality of road freight operations is the lack of competence and responsibility of the management for all the activities undertaken by the firm. The lack of regulation of access to the profession of "transport management" is a major reason for many of the currently sub-standard aspects of freight operations.

These include poor vehicle maintenance, poorly trained drivers, lack of operational control of drivers, extended driving periods and damage to infrastructure. In addition, there is no system for monitoring all the elements of the operations of road freight operators such as vehicles, drivers, loads, offences, compliance with regulations and safe operational practices.

In South Africa, contrary to international best practice and basic principles of transport regulation, there is no effective regulation of road transport operators as business entities. It is essential that road freight operators are held responsible for compliance with all standards defined for vehicles, drivers, loads, operations and elimination of externalities caused by their activities.

The standards for compliance are described in the National Road Traffic Act (No. 29 of 1989) (NRTA), which is designed to control all traffic on public roads. The omission was caused by failure to define criteria for the mandatory nomination of responsible competent persons as a pre-condition for operator registration.

5.2 Law Enforcement

5.2.1 Inadequate Enforcement

There is a need for the re-definition of the South African Road Freight Strategy. This is evident from the current problems with accidents, overloading and low levels of enforcement caused by sub-standard features in the regulation and management of the mode. The ineffectiveness of enforcement of the quality of road freight transport operations is evident in areas such as driving hours; drivers; facilities; lifestyle; fatigue; operations pressures and schedules.

Added to those are the effects of delays; speeding; vehicle condition; overloading; and lack of operator accountability. These are aggravated by many areas of limitations to enforcement capacity which include policing inefficiency, hours, shortage of vehicles, communications gaps to emergency centres and Emergency Medical Rescue Services (EMRS) capacity shortages.

There are also problems with emergency response capabilities; on-site controls; ineffective accident monitoring and reporting systems. This is coupled with ineffective overloading control; minimal practical national road safety co-ordination and ineffective control of vehicle condition. The situation is worsened by aggressive light vehicle drivers, damaged roads, urban and freeway congestion and a lack of truck stops, rest and parking facilities. This is further complicated by widespread corruption and collusion in the enforcement processes and complex legal processes in the application of penalties.

The establishment of the RTMC was intended to address a number of these issues by improving co-ordination between the authorities and providing national guidelines for regulation and enforcement. Little has changed in the past 10 years and the situation with accident recording and statistical analysis has deteriorated.

5.2.2 Ineffective Regulations

There have been several amendments to standards and the introduction of regulations that have proved to be difficult to enforce and control. There has also been a very apparent lack of co-ordination between authorities and freight transport operators. This is aggravated by the fact that the biggest proportion of road freight transport is “embedded” in other industries which operate vehicles for their own account.

The lack of co-ordination is also apparent between levels of government and various agencies with involvement in the sector. Freight regulations are being introduced independently by the DoT, provinces and municipalities with minimal attempts at co-ordination; leading to frustration and resistance by the operators.

There are a number of current regulatory anomalies, including ineffective or impractical legislation, widespread avoidance, abuse and instances of collusion and corruption, which are in urgent need of effective strategic intervention. Current regulatory issues include the following:

- The management of Roadworthiness Testing Centres (RWTCs)
  (widespread avoidance and collusion);
- The future status of Performance Based Standards (PBS) Vehicles
  (uncertain future competitive relationship between “PBS abnormals” and “standard” vehicle configurations);
- Implementation of Decriminalisation of Road Regulations – AARTO
  (un-resolved issues, after 14 years of implementation);
- Professional Driving Permit (PrDP)
  (need for overhaul or scrapping, as it does nothing to “professionalise drivers”);
- Consignor /consignee regulations
  (need to revise or scrap, as current terms are impractical to enforce);
- Driving hours
  (principles are correct, but current terms of application are unenforceable);
- Truck-stops
  (need for co-ordinated planning if authorities intend to address this issue);
- Speed limiters
  (merit is unproven, but if applied to freight vehicles, there is need for further research to make it practical and enforceable); and
- Municipal permits for Dangerous Goods
  (a bureaucratic revenue ploy with minimal useful purpose in the control of the D-G of Transport)

There are a further series of negative issues relating to the externalities of road freight such as:

- air pollution (noise, dust and smells);
  (minimal official monitoring of pollution)
- spillage and leakage
  (minimal emphasis on load securement, containment and vehicle condition);
- littering on roads and verges
  (lack of control in urban areas and on most roads in country);
- wear and damage to roads
  (damage to roads, sidewalks, verges and structures in urban areas);
- road congestion
  (minimal current measures to plan and alleviate congestion in key areas
  e.g. ports of Durban and Cape Town);
- improper use of verges pavements, and open spaces
  (minimal control of premises used for road freight operations);
- lack of control of road space; road obstruction or blockage
  (slow travel, parking, load handling, breakdowns and crashes);
- road accidents and fatalities
  (accident recording and analysis is inefficient and inadequate);
- anti-social behaviour, alcohol, smuggling, human trafficking, prostitution, drugs
  (lack of control of freight operators aggravates policing difficulties); and the
- need for policing, emergency rescue services and hospital casualty capacity
  (inadequate policing levels and efficiency to cope with increasing traffic volumes).

The current levels of emphasis on road safety, including promotion, education, enforcement and engineering aspects at both national and provincial level, is very low, with minimal effective action being planned or implemented apart from some pockets of sustained activity e.g. eThekwini and Cape Town.

5.3 Integrated Planning

The road freight sector includes both professional carriers (25% of vehicles) and own account operators (75%) in a wide range of industries, which complicates liaison between the operators and the government.

This intensifies the problem of communication and co-ordination structures between the government and the road transport sector as they are currently inadequate to cover all sectors of the economy. The current isolation of lawmakers from users and providers of road freight logistics hampers co-operation. A proposed high-level liaison panel is recommended in the National Freight Logistics Strategy.

There are also problems with the co-ordination between the three different levels of government and between the many authorities, agencies and departments that are the regulators of the road freight sector. Co-ordination is currently managed in complex committee structures, often without the necessary authority to make clear resolutions and lack of individual accountability for action.

The need for integrated planning between authorities and industries is urgent with regard to planning of infrastructure. The road freight corridors are the major arteries of the South African industrial logistics systems for intercity and urban distribution of consumer goods.

There are serious congestion and safety issues at specific points on the corridors that are in need of urgent attention. There are also inefficiencies in road freight logistics in urban and rural areas and an evident need for integrated planning to address the problems, including all tiers of government and relevant authorities.

The road freight corridors are the major arteries of the South African industrial logistics systems for urban and intercity consumer goods. There are problems with congestion and safety issues at specific points on the corridors that are in need of urgent attention. Slightly more than a third of vehicles passing on the section of the N3 at Van Reenen are HGVs and the accident levels involving heavy vehicles is approximately the same as for light vehicles - giving an over-representation of HGVs of 300%.

There are 8 900 vehicles per day on the main access roads around the port of Durban and this is e estimated to rise to 22 000 vehicles per day by 2030.

The issue of funding sustainability of the road freight sector is in need of urgent evaluation due to deteriorating road conditions on provincial roads and funding limitations for maintenance. This is causing increased vehicle operation costs, inflationary pressures on commodity prices and reduced competitiveness of local industry and agriculture. There is deteriorating road infrastructure even in the currently depressed state of the economy and it can be anticipated that road conditions will worsen rapidly if the economy begins to expand. Recommendations are made in later sections of this report.

5.4 Road-to-Rail (Back to Rail)

The government has stated that freight policy will include the maximisation of the use of railways in order to limit the usage of roads for freight movement. The problem is that although the current railway system is highly effective for transport of bulk commodities, it does not offer services for short-haul and break-bulk cargoes. This inadequacy thwarts the policy intention of promoting rail freight as a means to reduce road freight congestion and limit the usage of the roads.

As the basic problem is the lack of rail services for some bulk and all break-bulk commodities due to lack of capacity, there is need for expansion of railways. This is not currently possible due to the current structures which have limitations of finances, equipment, staffing and operational capacity. The problem is, therefore, to restructure the railways to promote system development that will permit third party development of co-ordinated road-rail logistics systems as mentioned in the NFLS study .

5.5 Training and Skills

One of the most disturbing features of the current road freight situation is the growing problems with road safety in relation to road freight operations. There are problems and a large number of deficiencies in the existing training systems for creation of capacity, competence and skills development. These include driver training and competence; driver licensing – age, categories, testing; technicians training; vehicle inspectors training; driver examiners training; supervisory and operations managerial training.

With South Africa's dismal road accident track record, it is estimated that road accidents involving freight vehicles amounted to another R15 billion that was not reflected in the transport costs for 2012. Noise, congestion, land use and policing are other externalities incurred by the public. Together, externality costs amounted to R40 billion in 2012 – this would have been a 10% increase in total logistics costs for 2012 if these costs were reflected on financial statements .

The skills shortage in South Africa remains critical. The World Economic Forum's Global Competitiveness Report 2013 - 2014 identifies that an inadequately educated workforce is the most problematic factor for doing business in South Africa. The 2014 Barloworld Logistics' annual supply chain foresight report identifies the lack of relevant skills/talent as the key strategic business constraint and the fourth highest supply chain constraint.

There is a current and growing shortage of technical skills due to the deficiencies in the primary education system, which is failing to teach the mathematics and language skills - which are prerequisites for technical training. The report on Basic Education released in 2015 shows that less than 3.5% of learners achieved adequate levels of proficiency in mathematics whilst 88.4% failed to achieve even elementary standards. This has very serious implications for necessary training of technicians to ensure the quality of road freight operations in the future.

5.6 Cross-Border Freight

There are numerous current problems with the management of cross-border road freight caused by different processes. These include the proposed creation of a Border Management Agency (BMA), potential repeal of the permit system, the need for customs integration to facilitate interstate movements, and the changing terms of the SADC Transport Protocol to which the Republic a signatory.

South Africa is part of SADC and, therefore, party to the drive for liberalisation of inter-state transport and promotion of regional trade. The country is currently failing to develop optimal trade with the region due to border inefficiencies, high cross-border permit fees, and failure to integrate custom procedures within the region. It must, however, be recognised that many of the challenges are related to trade issues which are outside the control of the transport authorities.

The current permit system is, however, a negative feature in the liberalisation process as it represents an "exit tax" on South African goods, lowering competitiveness without achieving any utility for exporters. There are also serious problems with the logistical efficiency of the border posts with neighbouring countries and this is in need of attention to improve the cost-efficient movement of goods as recommended in later sections of this report.

While the repeal of quantity regulation (permits) and engagement in the Multilateral Cross-Border Road Transport Agreement (MCBRTA) will pose institutional challenges, it will also present opportunities for improving the road freight regulatory system in the region and country.

The co-ordination of road freight regulations with neighbouring states will include the need to align operator registration in terms of the current tripartite initiative. This will help harmonise quality regulation in the road freight sector through a regionally-linked operator registration system (TRIPS). This will improve the regulation of drivers and vehicles engaged in cross-border trade.

5.7 Lack of Road Freight Information

There is a problem with the current lack of information about road freight operations and an on-going need for more statistical data about road freight movements as a tool for planning and regulation of the sector. The information system must be developed to provide an integrated view of the total transport activities in all modes. However, this requires definition of appropriate, necessary information to avoid impractical plans for the collection of statistics.

The lack of national accident statistics is a major issue with impacts on road safety planning and monitoring of enforcement activities. The reduction of road traffic monitoring by provinces and municipalities is hampering the effective planning for maintenance of infrastructure. Recommendations are made in later sections of this report.

5.8 Promotion of B-BBEE

There is a problem with implementing policy for the expansion of B-BBEE business in the road freight sector as opportunities are hampered by the currently depressed transport market due to the international and local economic situation. It can be anticipated that as the sector expands with increasing industrial output it will create further potential for B-BBEE business creation. Current government procurement policies are promoting the development of B-BBEE enterprises in the supply of road freight transport to Eskom, Transnet, SASOL and other businesses with state investments.

The current deficiencies in the training of technical and managerial staff are barriers to effective promotion of B-BBEE in the road freight sector. This can be greatly improved by the upgrading and expansion of the training and education systems as managerial and technical skills deficiencies are major barriers to entry to the transport sector.

Trucking companies tend to be relatively small businesses with limited managerial staff and limited equity in relation to operational liabilities. Transport departments in industrial concerns are often a small non-core portion of the business with relatively low numbers of managerial employees. The road freight transport industry is totally dependent on the levels of industrial output and is highly competitive; it therefore offers limited opportunities for extensive additional employment.

6 SITUATION ANALYSIS

SITUATION ANALYSIS

6.1 Land Freight Transport

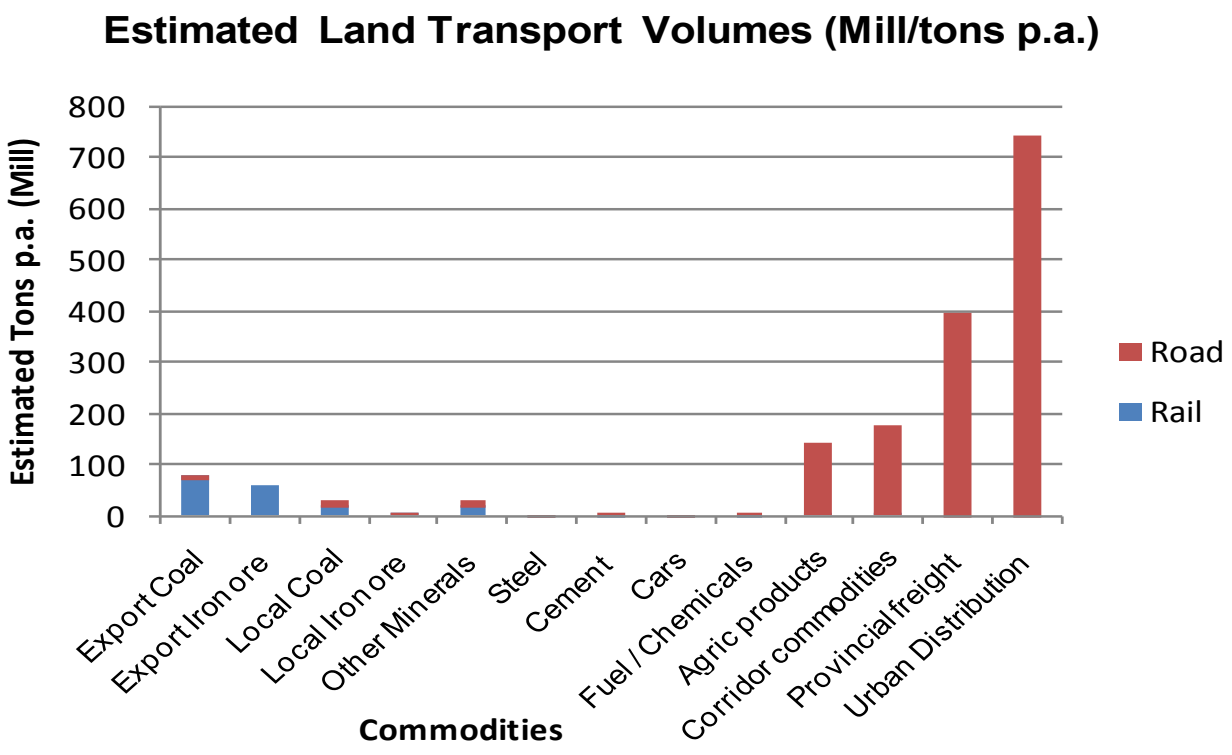
The road freight mode is the dominant means of land freight transport in South Africa. The current situation in South Africa is that there are a number of highly effective road freight operations that are managed to world-class standards. Those operations are the life blood of the national freight logistics systems, moving more than 80% of all industrial cargoes.

At the same time, there are large and growing numbers of sub-standard operations which are generally under-capitalised, lack managerial and technical skills, use poorly-maintained vehicles and depend on the generally-low level of enforcement to survive. Many of the recommendations in this report are directed to resolving these issues whilst creating a level playing field for quality-regulated competition.

The current market shares of the land transport modes in South Africa are shown in Figure 6.1 below.

As shown in Figure 6.1 below, the total land freight volume is approximately 1.67 billion tons p.a. with road freight transporting 1.5 billion and rail about 220 million tons p.a.

Figure 6.1: Estimated Land Freight Volumes by Mode (Mill/tons p.a. 2014)



In the evaluation of modal potential and the scope for competition between modes the major determinants of modal choice are the “freight characteristics” of the commodities; as well as the service demand of the industries which form the market for transport services for specific commodities.

The characteristics of the freight transport markets define which modes are most suitable to transport various commodities within the different transport market segments. These markets can be described as a continuum of industry and commodity characteristics from bulk to mixed and casual transport requirements, as shown in Table 6.1 on the next page (page 26).

The upper section of the table shows the bulk commodities that are primarily transported by rail. The lower section shows the much larger break-bulk volumes of industrial and FMCG (Fast-Moving Consumer Goods) commodities that are primarily transported by road. The bulk of these movements are in areas where there is no railway service; or in volumes too small for railage while product characteristics make others unsuitable for handling by bulk railways.

It must also be noted that many commodities are transported several times due to movements from point of production as raw materials to their final form as finished industrial goods or consumer goods, foods and/or materials.

Table 6.1: Indicative Annual Volumes of Land Freight in South Africa byFreight Characteristics and Current Modal Usage (2014)

Commodity Characteristics	Commodities	Annual Tons	Typical origins	Typical destinations	Modal Usage%		Primary reason for modal choice	Rail	Road
		mtpa			Rail	Rail		Mtpa	Mtpa
Bulk-coal ink Bulk-Orex Bulk-GFB	Export coal	76.3	Mines	Ports	100	0	Full rail facilities	76.3	0.0
	Export iron ore	59.7	Mines	Ports	100	0	Full rail facilities	59.7	0.0
	Local coal	24.6	Mines	PowerStation	85	15	Some rail facilities	21.0	3.6
	Local iron ore	12.0	Mines	Foundries	100	0	Some rail facilities	12.0	0.0
	Local coal	9.5	Mines	Factories/ports	74	26	Few rail facilities	7.0	2.5
	Other minerals	8.5	Mines	Factories/ports	72	28	Some rail facilities	6.1	2.4
	Other minerals	8.6	Quarries	Smelters	81	19	Some rail facilities	7.0	1.6
	Clinker	5.8	Quarries	Factories	86	14	Some rail facilities	5.0	0.8
	Fuel/chemicals	3.9	Plants	Ports	90	10	Some rail facilities	3.5	0.4
	Grain	10.0	Silos/ports	Milers	40	60	Some rail facilities	4.0	6.0
	Steel	2.1	Foundries	Ports	53	47	Some rail facilities	1.1	1.0
	Timber	8.0	Forest	Mills/ports	75	25	Some rail facilities	6.0	2.0
	Paper and pulp	1.5	Port/plats	Ports/plants	67	33	Some rail facilities	1.0	0.5
	Other bulk	4.0	Mines/agri c	Plant/ports	100	0	Some rail facilities	4.0	0.0
Total Bulk		234.5			91	9		213.7	20.8
Break bulk	Steel	1.0	Foundries	Wholesaler	1	99	No rail facilities	0.0	1.0
	Cars	1.0	Ports/plant s	Ports/plants	40	60	Few rail facilities	0.4	0.6
	Cars	1.0	Ports/plant s	Retailer	20	80	Few rail facilities	0.2	0.8
	Containers	6.0	Port/termin als	Plants	30	70	Few rail facilities	1.8	4.2
	Containers	14.0	Port/termin al	Ports/terminals	36	64. 3	Few rail facilities	5.0	9.0
	Chemicals	20.0	Factories	Users	0	100	No rail facilities	0.0	20.0
	Fuel	30.0	Plant	Retailers	0	100	No rail facilities	0.0	30.0
Mixed	Agric prods	111.0	Farms/ silos	Farms/mills	5	95. 5	Few rail facilities	5.0	106.0
	Industrial goods	550.0	Ports/facto ries	User industries	0	100	No rail facilities	0.0	550.0
	FMCG	500.0	Processors	Wholesale/reta il	0	100	No rail facilities	0.0	500.0
	Beverages	90.0	Plants	Wholesale/reta il	0	100	No rail facilities	0.0	90.0
	Packaging	40.0	Plants	Factories/proc essors	0	100	No rail facilities	0.0	40.0
Casual	Construction	40.0	Suppliers	Sites	0	100	No rail facilities	0.0	40.0
	Building	20.0	Suppliers	Sites	0	100	No rail facilities	0.0	20.0
	Retail	20.0	Distribution	Stores	0	100	No rail facilities	0.0	20.0
Total Break Bulk		1444			1	99. 1		12	1432
Total Land Freight		1679	Million tons p.a		13	86. 5		226	1452

As shown in Table 6.1, out of approximately 1 679 million tons of freight p.a., there are about 20 million tons of bulk cargo on road; some of which is not subject to inter-modal competition. This is mainly due to consignments of less-than-train-load (LTL) proportions, (for which services are not offered by the railways) or due to a lack of sidings (either abandoned or at premises without rail access). In addition, there are about 30 million tons of break-bulk cargo on rail, such as cars, containers and some agricultural commodities that are potentially vulnerable to road competition. This is because they are either seasonal, require flexibility or have fluctuating volumes and variable O&D (origin and destination) requirements, making them only marginally attractive to rail.

The total volume of profitable rail freight that is available for transfer from road to rail is likely to be considerably less than 30 million tons p.a. for reasons that are discussed further in later sections of this report.

6.2 Road Freight Sector

The total volume of road and rail (land surface transport) freight transport in South Africa is not known. This is due to the diversity of operations; the fact that a large proportion of cargoes are not weighed; and the lack of legal requirements to record or report any aspects of transport performance.

The total freight vehicle population in 2014 is shown in Table 6.2 below. The total number of Heavy Goods Vehicles (HGV), including some of the “other and unknown” category, is about 370 000 which amounts to 3.5% of the total motorised vehicles. Heavy load trailers, which includes semi-trailers, amount to 178 681, which indicates that approximately 60% of HGVs are rigid vehicles and 40% are truck-tractors.

Table 6.2: Total Vehicle Population in South Africa – 2014

Descriptions	GP	KZN	WC	EC	FS	MP	NW	L	NC	Total	%
Motor cars and station wagons	2773847	913984	1144817	414645	295704	382495	287897	289051	118451	6620891	64.7
Minibuses	116114	47615	32202	21912	12005	21553	17144	20695	4518	293758	2.9
Buses ,bus trains, midibuses	18699	7354	5237	3672	2751	7284	3674	5513	1630	55814	0.6
Motorcycles, quadrucycles, tricycles	148035	35379	84339	23850	21202	20853	15230	106007	8548	368043	3.6
LDVs, panel vans, other light load veh’s GVM<=3500kg	755381	331183	296246	185422	124484	194689	140555	200769	74384	2303113	22.5
Trucks(Heavy load vehicles GVM>3500kg_	135228	49346	39644	22225	21587	40488	18213	23400	9631	359762	3.5
Other self-propelled vehicles	35957	31938	35622	15031	37442	26720	23336	15794	8669	230509	2.3
Total self-propelled vehicles	3983261	1416799	1638107	686757	515175	694082	506049	565829	225831	10232890	100.0
Provincial % of total	38.93	13.85	16.02	6.71	5.03	6.78	4.95	5.53	2.21	100.01	100.0
Caravans	40704	7828	16771	5364	7940	10251	6692	5524	2987	104061	9.4
Light load trailers GVM<=3500kg	319823	79191	130844	52736	61369	60847	507433	38590	26923	821066	74.4
Heavy load trailer GVM>3500kg	57611	24247	17948	7397	16622	29618	11233	8259	5746	178681	16.2
Total trailer	418138	111266	165563	65497	85931	100716	68668	52373	35636	1103808	
Provincial % of total	37.88	10.08	15	5.93	7.78	9.12	6.22	4.74	3.23	99.98	100.0
All other and unknown vehicles	5387	3205	4606	2712	4123	4216	4901	2655	1422	33227	
Total number of lives vehicles5.1	4406786	1531270	1808276	754966	605229	799014	579618	620857	262909	11368925	100.0
Provincial % of total	38.76	13.47	15.91	6.64	7.03	7.03		5.46	2.31	100	100.0

By using the numbers in the above table and the mix of vehicle configurations from road surveys it is possible to categorise the freight vehicles by carrying capacity. When the categories are assigned typical annual kilometres and utilisation, it is possible to derive the estimated annual tons conveyed.

The estimated tons derived from such a calculation are approximately 1.6 billion tons, which can be broken down as follows:

Table 6.3: Estimated Tonnage by Distribution Area

National Corridors	140 million tons p.a
Provincial Main Routes	500 million tons p.a
Urban Distribution	750 million tons p.a
Rural	210 million tons p.a
Total	**1600 million tons p.a**

This agrees reasonably well with the calculations done by the CSIR in the Annual Logistics Survey . The calculation of average vehicle usage does not give indications of the commodities carried, weight of loads or routes used; so it is necessary to derive route and commodity information by other means. The lack of information about road freight movements is discussed in a later section of this report.

The 10th State of Logistics Report 2013 estimates that all transport costs in 2012 were 7.6% of GDP and amounted to R3 138 billion per annum. The report goes on to say:

"Simultaneously, the performance of the logistics industry, specifically the cost of logistics, affects the global competitiveness of South African industries. Logistics costs as a percentage of transportable GDP have grown significantly over the past four years. A deeper investigation of individual cost components and cost drivers shows that the increase in logistics costs is perhaps not so much the result of deteriorating efficiency in the industry but the disproportionate growth in cost drivers – especially fuel. To change the trends in underlying cost drivers or significantly mitigate their impact requires more than just operational efficiency enhancements, it requires bold steps in addressing the ingrained issues that stifle the economy as well as new directions in how supply chains operate."

The comment in the above-mentioned report lends further motivation for the development of more effective systems and the removal of the institutional and regulatory sources of inefficiency in the road freight transport sector. It must be noted that the transport cost figure does not include the very extensive logistics industry that is required to co-ordinate and support the effective import, export and distribution of goods throughout the country. It is also important to note that the "logistics" industry is not regulated by road transport legislation; only the road freight operators are.

The total of 1.6 billion tons of freight on road compares to 220 million total tons on rail (13%) - which is mainly 170 million tons of bulk cargo. This freight iscarried on "corridor" routes to ports, and the major users of coal, iron ore, chemicals and fuels with smaller proportions of bulk general freight commodities to industries, ports and power stations. The road-rail market share is discussed in a later section of this report, but it can be noted that the private sector road freight and logistics industry is by far the largest component of the South African freight transport system, currently growing at a rate of 2 - 3% p.a.

A large proportion of road freight vehicles are owned and operated by manufacturers, wholesalers, retailers, farmers and other industries, in the course of their business (estimated to be about 75%). The remaining vehicles are for hire and reward (25%) by professional transporters that engage in the transport of a wide range of goods. The proportion of own account operators is higher in the urban and agricultural areas whilst professional carriers are more prevalent on the major long-distance routes and in areas where bulk and high-volume commodities such as coal, timber, grains and sugar cane are transported.

6.3 Road Freight Operations

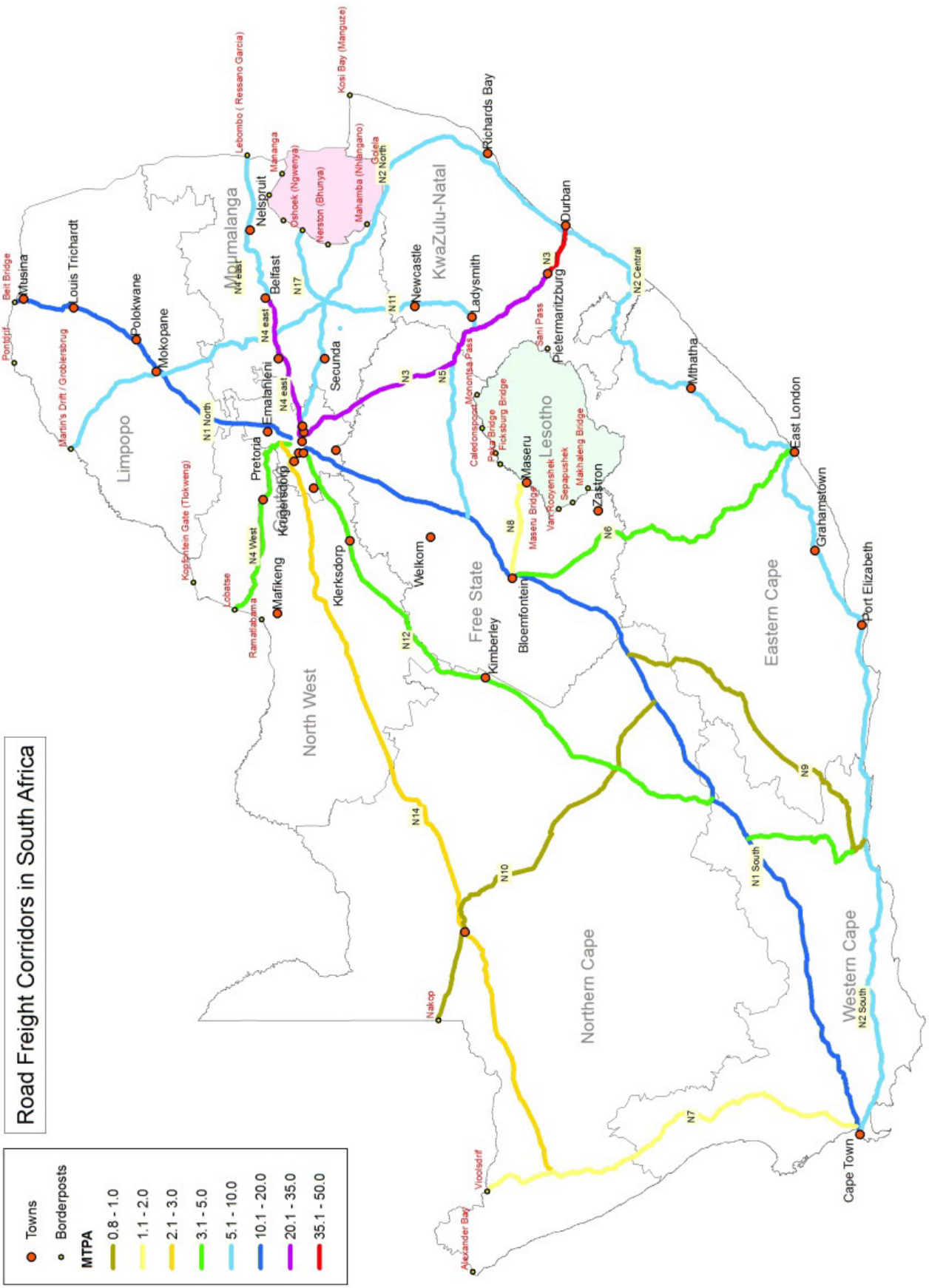
6.3.1 Corridors

The road freight mode has expanded rapidly over the past twenty years, with volumes on the major corridors now 300% higher than in the 1980s. The expansion of the long-distance freight traffic was initially into high value commodities that were formerly on rail. However, it has continued to absorb the transport of commodities such as maize, fuel, coal, timber, vehicles, fertiliser, containers, cement and mineral ores. These commodities have been shed by the railways due to unsuitability. This unsuitability derives mainly due to consignment size, origins or destinations, and capacity constraints arising from the railways' primary focus of serving their major customers for bulk commodities.

Estimation of corridor cargo volumes is dependent on records of road vehicle movements. On national roads, they are monitored by the South African National Roads Agency Limited (SANRAL) and some provinces employ civil engineering and specialised traffic monitoring companies to produce data on traffic movements. The information is used for the management of the roads maintenance programmes of the different agencies.

The vehicle data is divided into light and heavy vehicles and then heavy vehicles are sub-divided into short, medium and long vehicles or combinations. Axle loads are estimated and can therefore be used to derive route tonnage estimates. The information released from the systems is typically 12-18 months old and not all count points are surveyed every year. That means that the data for some count-points on national routes may be up to 3 years old and for provinces, even older. The distribution of the road freight tonnage on corridors is shown in Map 6.1 on the next page (page31).

Map 6.1: Road Freight on National Corridors



There is no readily available information about road freight origin and destination volumes as there are no systems in place to record such data. Most of the information that is published has been derived from calculations based on road traffic volumes, surveys and industry data.

Table 6.4 (below) shows the current estimated tonnage on the different corridors updated with information from SANRAL

The "Corridor" concept, as shown in the above table, includes both the main national road and in some areas, the parallel provincial routes that are also used by road transporters between the major centres. A complicating factor in any discussion of corridor tonnage is the fact that there are varying levels of traffic and tonnage at different points on the "corridor". This makes it difficult to define the extent of the "corridor" traffic as opposed to local and short distance traffic that uses a section of the route. Vehicle journeys may also include varying distances on several corridors.

Table 6.4: Estimated Road Freight on National Corridors (2014)

	Corridor	Corridor Name	MTPA
1	N1 South	Gauteng - Cape Town	17.0
2	N1 North	Gauteng - Beit Bridge	11.0
3	N2 South	Cape Town - East London	7.0
4	N2 Central	East London - Durban	8.1
5	N2 North	Durban - Ermelo	7.7
6	N3	Gauteng - Durban	44.0
7	N4 West	Gauteng - Skilpadshek	4.5
8	N4 East	Gauteng - Lebombo	6.6
9	N5	Harrismith - Winburg	6.5
10	N6	East London - Bloemfontein	3.1
11	N7	Cape Town - Vioolsdrif	1.8
12	N8	Bloemfontein - Maseru	1.3
13	N9	George - Colesburg	1.0
14	N10	Britstown - Nakop	0.8
15	N11	Ladysmith - Groblersbrug	6.9
16	N12	Gauteng - Beaufort West	5.0
17	N14	Gauteng - Springbok	3.0
18	N17	Gauteng - Oshoek	5.6
			140.9

Source: SANRAL Traffic Counts: NP&A Estimates

The NFLS 2005 made a comment on the N3 corridor capacity:

"The required capacity for the Gauteng-Durban corridor was projected by MSA to reach 57 million tons in 2020 ... the corridor is already close to this capacity (53 million tons in 2004, 16 years sooner) and is expected to have grown by 38% by 2020. "

Due to reduced economic growth the increase in volume has been lower than the MSA projection, and current volumes are about 44 million tons in 2015 (only slightly higher than 2009). The most congested section is the Durban to Pietermaritzburg part of the route where HGVs account for 35% - 40% of total traffic.

In order to be able to evaluate the realities of "corridor freight" it is necessary to identify the various vehicle configurations and the cargoes carried. Analysis of the Heavy Goods Vehicle (HGV) traffic on corridor routes gives indications of the amount of bulk cargo, containers, liquid bulk tanker and other cargo types. An example of such an analysis at Cato Ridge on the N3 national route in 2013 is shown in Table 6.5 below

As shown in Table 6.5 the total number of containers transported is approximately 651 000 p.a. with about 488 250 being transported beyond the borders of KwaZulu-Natal (KZN). There were approximately 2.6 million tons of dry bulk commodities and liquid bulk commodities amounted to about 4 million tons. The 11 million tons of break-bulk cargo in box and curtain-sided vehicles includes a large amount of import and export cargo that is de-stuffed from containers as well as goods delivered between industrial concerns.

Table 6.5: Analysis of Road Freight on N3 Corridor (Cato Ridge) 2013

Call No.	Vehicles Types	North	South	Total		North	South	Total		North	South	Total
		%	%	%		Vehicles p.a	Vehicles p.a	Vehicles p.a		Estimated Tons p.a.	Estimated Tons p.a.	Estimated Tons p.a.
1	Tanker dry bulk	0.01	0.00	0.01		6,982	3,695	10,678		115,168	81,514	236,682
2	Tanker liquid bulk	0.09	0.11	0.10		73,682	108,894	182,576		1,637,293	2,401,937	4,039,230
3	Flat deck	0.25	0.27	0.26		209,488	263,859	473,346		4,655,048	5,820,078	10,475,126
4	Dropside/ Gateside	0.09	0.09	0.09		71,756	90,663	162,419		1,594,488	1,999,803	3,594,290
5	Beverage	0.01	0.00	0.01		4,575	4,681	9,256		101,662	103,251	204,913
6	Container skeletal	0.08	0.06	0.07		64,532	54,447	118,979		1,433,969	1,200,969	2,634,937
7	Box/ Pantechnican	0.28	0.28	0.28		227,547	276,423	503,970		5,056,345	6,097,225	11,153,570
8	Refrigerated	0.09	0.08	0.09		73,682	80,316	153,997		1,637,293	1,771564	3,408,857
9	Tipper	0.07		0.07		61,402	56,418	117,820		1,364,411	1,244,443	2,608,853
10	Car carrier	0.02	0.03	0.03		17,337	30,303	47,640		385,245	668,412	1,053,658
11	Lowbed	0.01	0.01	0.01		11,317	10,101	21,418		251,480	222,804	474,284
12	Other											
		1.00	1.00			822,300	979,800	1,802,100		18,272,400	21,612,000	39,884,400

Source: ETA: NP&A 2013
Note 1: Flatdecks (Cat.3) 363600 carry container- 109746 carry general cargo.
Note 2: Total TEUs 651000 p.a. (31.2% of port volume transportable)
Note 3: Approximately 25% of containers have O&D in KZN. (Inland proportion 488,250)
Note 4: General breakbulk cargo (Cat, 2, 4,&7) 14,747,860 tons p.a

6.3.2 Urban Freight

In several of the major cities, there are indications of conflict between road freight vehicles and private motorists due to the increasing use of the road space for private and public transport, as well as increased freight volumes in some areas. In Durban, congestion around the port and South Durban Basin is already a major cause of inefficiency and cost and is projected to become critical in the future. In Johannesburg, the primary congestion occurs to the east of the CBD and residential areas as well as the older industrial areas to the south of the CBD such as Kaserne and City Deep. In Cape Town, congestion occurs on the N1 in the vicinity of the port as well as the links from N2 to the industrial areas and port.

There is scope for the DoT to engage with industry and commerce, as well as the municipal authorities, to identify areas where freight transport is being negatively impacted by congestion, urban restrictions and crowding out by light vehicles. This will help determine, where further trunk routes are required in order to improve the flow of freight transport in the interest of efficiency and in support of industrial growth. This is very necessary as the major metropolitan authorities are all seeking processes to “reduce the freight transport problem” rather than planning for the ever-increasing road freight load that will result from successful promotion of industrial growth.
The volumes of urban traffic continue to grow, with light vehicle growth of 5-7% p.a. and HGVs at about 3% p.a. The incidence of HGVs in urban traffic is highly localised to industrial areas and the routes between them and corridors. Several large municipalities have urgent traffic congestion problems, but they are due primarily to a lack of public transport rather than increased freight traffic.

Studies in Durban , Gauteng and Cape Town indicate that there is need for those municipalities to improve planning of freight routes, land use and provision for truck parking and logistics areas in the major freight handling areas such as ports, terminals and large manufacturing and storage zones. The approaches to ports are of particular concern as the congestion is reducing logistical efficiency and increasing the costs of import-export cargoes.

The issue of defining dedicated freight routes through cities and imposing bans for Longer Combination Vehicles (LCVs) is discussed in a later section of this report.

6.3.3 Rural Freight

Rural road freight operations can be classified as “agricultural rural” and “homeland rural” areas. There are significant differences between these two categories in that the agricultural rural areas are relatively well served with transport contractors which provide services to farmers. There is also widespread provision of own account transport in areas where there are larger agricultural undertakings.

On the other hand, rural areas in the former homelands experience severe problems with lack of freight transport due to the difficulty imposed by various factors. Those factors include bad roads and the underlying problem of sporadic demand, lower incomes, and further difficulties regarding communications, financing, and in many areas the lack of facilities and equipment. As in many other countries, the provision of transport services into areas where minimal demand exists poses a severe challenge that has generally proved intractable. The cost of transport imposes the most severe challenges to development of micro-agriculture in the remote areas, with road freight transport offering the only potential for the movement of limited quantities of goods.

In order to examine the realities of freight transport demand in former homeland rural areas it is essential for objective research, by area, to assess the needs and practical solutions. In many areas, the freight volumes cannot sustain any form of transport undertaking and the distances to markets make all commercial production unviable; thereby reducing the potential of those areas to barter and local sales.

The provision of services for former homeland rural areas poses serious challenges as the very low volumes, seasonality, lack of processing facilities, quality of roads and the need for subsidisation are all very real challenges. There is a need for area-specific research into the. transport economic potential of these areas to support transport services. This must include the new Agripark developments.

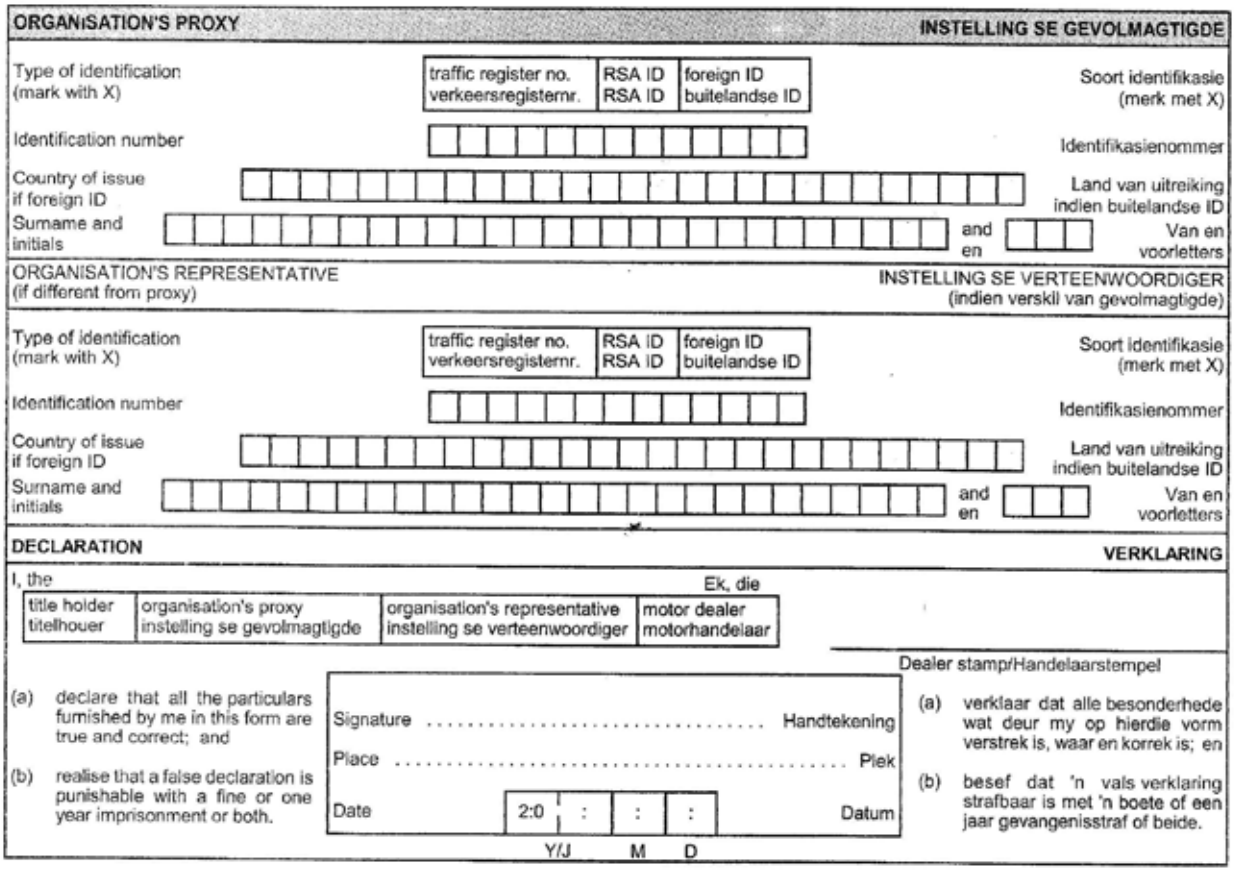
6.4 Operator Registration

The current situation is that the lack of effective control of operator quality is a national problem in South Africa. This is a result from the defective system design of the RTQS in the 1980s. The current system where operator identity is recorded via the vehicle registration forms (RLV) has several negative consequences.

The "proxy" for the vehicle owner is registered as the "operator" without any indications of position, suitability or competence (NRTA Reg. 267). In most cases the "proxy" is the person who submitted the RLV form. The proxy must, theoretically, be identified by means of a board resolution of the company that empowers the person to sign the registration and licensing forms on behalf of the company. A representative must also be appointed but there is no definition of the term proxy or representative (Reg. 8 (2) (b)). The registration form (RLV) is shown below.

The information held in eNATIS relates to individual vehicles, making it almost impossible to "examine the operators record" as contemplated in Reg. 267(4)(a) as there are no links between operator and all vehicles registered in the name of the firm. Many authorities do not load the offences against the vehicles of an operator on (Electronic National Traffic Information Systems) eNaTIS. There is no national database where operator offences and infringements can be checked. The AARTO, with the National Contraventions Register, will hopefully change this in future.

The eNaTIS does have a function where the operator's identity can be checked but there is no automatic checking system in place. There is no provision for evaluating the "application" to become an operator. There is no provision for ensuring that the operator (or his staff are competent to operate vehicles on public roads) thereby rendering sections 45-51 of the NRTA ineffective. There is no provision for the authorities to monitor operator "quality" as there are no links between operators, drivers and vehicles used in the operations.



ORGANISATION'S PROXY — **INSTELLING SE GEVOLMAGTIGDE**

Type of identification (mark with X) — traffic register no. verkeersregisternr. | RSA ID RSA ID | foreign ID buitelandse ID — Soort identifikasie (merk met X)

Identification number — Identifikasienommer

Country of issue if foreign ID — Land van uitreiking indien buitelandse ID

Surname and initials — and en — Van en voorletters

ORGANISATION'S REPRESENTATIVE (if different from proxy) — **INSTELLING SE VERTEENWOORDIGER** (indien verskil van gevolmagtigde)

Type of identification (mark with X) — traffic register no. verkeersregisternr. | RSA ID RSA ID | foreign ID buitelandse ID — Soort identifikasie (merk met X)

Identification number — Identifikasienommer

Country of issue if foreign ID — Land van uitreiking indien buitelandse ID

Surname and initials — and en — Van en voorletters

DECLARATION — **VERKLARING**

I, the — Ek, die

title holder titelhouer | organisation's proxy instelling se gevolmagtigde | organisation's representative instelling se verteenwoordiger | motor dealer motorhandelaar

Dealer stamp/Handelaarstempel

(a) declare that all the particulars furnished by me in this form are true and correct; and

(b) realise that a false declaration is punishable with a fine or one year imprisonment or both.

Signature ..... Handtekening

Place ..... Plek

Date 2:0 : : : Datum

Y/J M D

(a) verklaar dat alle besonderhede wat deur my op hierdie vorm verstrek is, waar en korrek is; en

(b) besef dat 'n vals verklaring strafbaar is met 'n boete of een jaar gevangenisstraf of beide.

There is no regular reporting or updating of operator details so that all information on file relates to the original vehicle registration form, which could be unchanged for many years of the vehicle life. The Act requires updates but it is not controlled. There is no single authority that monitors and controls commercial transport operators. That means the system fails to identify all the continually-changing elements of operator quality. Those elements include drivers, vehicles, operations, management and offences committed by any of the foregoing, which are the responsibility of the operator. There is no distinction between hire and reward and own-account operators and no requirement for "owners" to apply to be operators. There is also no barrier to anyone who wishes to operate a freight vehicle on a road by simply hiring or borrowing a vehicle to move a load.

The basic quality standards are well defined in the NRTA which provides the framework for the RTQS . The NRTA includes all the necessary regulations to achieve safety and protection of the infrastructure, but is not achieving optimal quality of road freight operations due to ineffective current procedures and functional limitations in the supporting systems.

There are currently major problems with several aspects of enforcement of operator standards. All too often it is the driver who receives the summons, and the operators are not implicated due to the overall ineffectiveness of the operator registration system. If the situation is to be changed, in order to achieve effective regulation of the road freight industry, it is necessary to introduce a more effective Road Transport Operator Registration and Licensing System as described in the recommendations below.

6.5 Law Enforcement

6.5.1 Regulations

The current situation is that there are a number of deficiencies in the regulatory and institutional structures that are creating inefficiency, obstructing the effective enforcement of legislation, and having an impact on the competitiveness of South African industry. The current systems give considerable scope for corruption, collusion and profiteering due to defective systems, lack of monitoring and a culture of avoidance by "negotiation".

The regulations that are in need of review cover a wide spectrum of the total freight operations as described in a later section of this report regarding challenges and recommendations. The review should include both the regulatory content and the application and enforcement of the regulations, with some interaction between the two processes. The review process should include various aspects of overloading control; operator registration; vehicle condition; HGV driver training and qualification; licensing (including PrDP); driving hours; high cube containers; monitoring of offences; and reporting of accidents.

6.5.2 Enforcement Capacity

There are several aspects of the current operational quality control systems that are mentioned in the NRTA but are ineffective in controlling the quality of road freight operations. There are problems with capacity, systems deficiencies, need for modern equipment, more trained manpower and better communications in the enforcement agencies at all levels. Prosecution and collection of fines are problematic with widespread allegations of collusion and corruption. The current situation with the law enforcement processes are described in the following sections.

6.5.3 Overloading Control

The current situation is that there is a failure to adequately control the overloading of goods vehicles throughout South Africa. The primary causes of the ineffectiveness of the monitoring and control systems are a lack of co-ordinating management, personnel, and unavailability of funds for sustained 24-hour operations. This is worsened by a lack of weighbridges to achieve geographic coverage, and inadequate legal support for the overloading enforcement system - all of which permit operators to practice avoidance of the system.

In terms of the International Maritime Organisation (IMO) SOLAS convention there will be a requirement from July 2016 for mandatory declaration of the weights of all cargo submitted for loading on vessels, including containers and break-bulk cargo. No South African ports have operative road weighbridges, including Durban, which is the busiest port in the country. It is not yet clear how container weights can be checked at the ports.
There are very significant variations in the control the overloading of goods vehicles in different parts of the country. It is also significant that the weighbridges that weigh large numbers of vehicles are located on the major freeways where there is the least impact from overloading due to the high standards of construction of the major corridor routes. The lowest levels of overloading control take place where the roads are most vulnerable to overloading, and the limited operational hours at those weighbridges allow operators to easily avoid them when open.

It is particularly noteworthy that there is virtually no overloading control in the major metropolitan areas and on large proportions of rural provincial roads, despite the fact that the 2-4 axle short haul vehicle groups tend to have the highest proportional overloads. It is also questionable whether there is effective use of the capital invested in weighbridges as 50% of weighbridges weigh less than 20 vehicles per day.

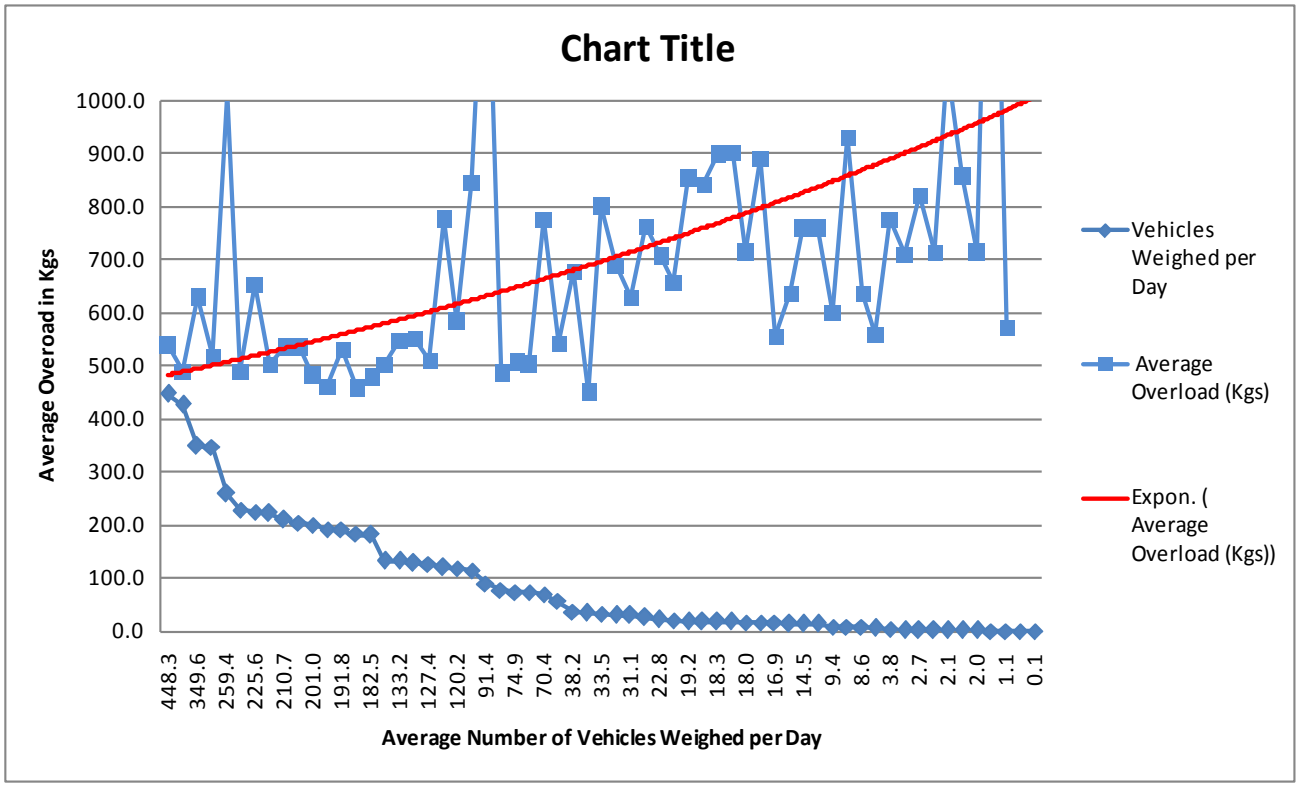
There is a continual temptation for operators to overload in order to increase profit and it is therefore necessary for the control system to provide for 24-hour monitoring. The very large overloads that are apprehended on the main corridors, and persistent overloading by some carriers, are flagrant non-compliance which will be much more effectively controlled after the introduction of the proposed National Operator Registration System. This is borne out by the comments regarding identifiable repeat offenders in the 2015 KZN Weighbridge report.

"There are still companies clearly disregarding the NRTA with respect to the mass regulations by continuing to implement policies of deliberate overloading."

It is noteworthy that wherever there is effective overloading control and continual weighing activity throughout the 24-hour day, the levels of overloading are such that they pose no threat to the condition of the roads.

The impact of regular weighing on levels of overloading is shown in Figure 6.2 on the next page (page 38) from the analysis of 195 000 loads in all provinces. The lower curve shows the numbers of vehicles weighed per day at each weighbridge and the upper curve shows the average weight of overloads recorded at each weighbridge. The correlation between the level of weighing activities and the weight of overloads is very clear, with reduced weighing activity leading to operator complacence.

Figure 6.2: Correlation between Frequency of Weighing Activity and Average Overloads for 195 000 loads in all provinces

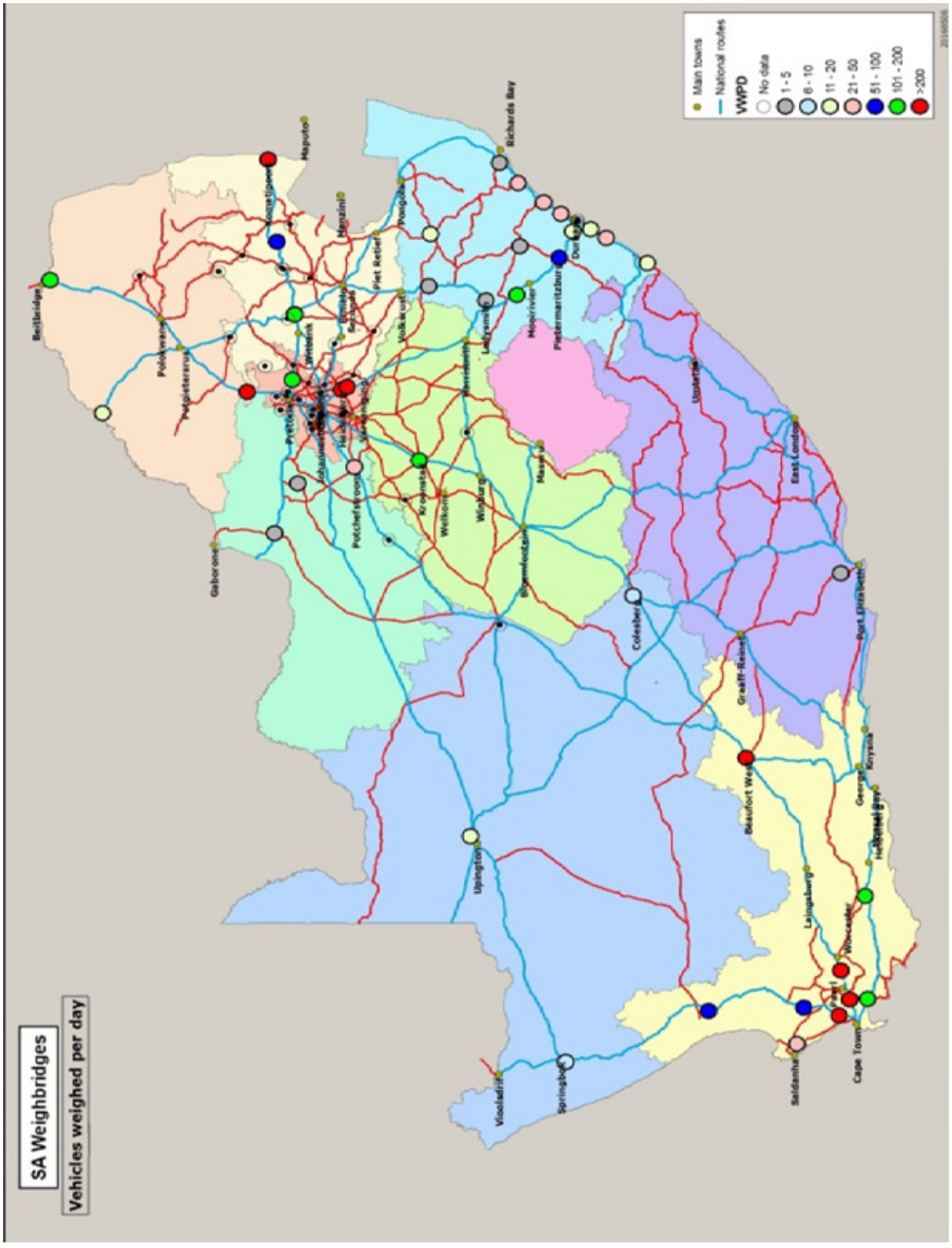


Source: CSIR: NP&A

As shown in Figure 6.2 there is a direct correlation between the numbers of vehicles weighed per day and the level of overloading. The average level of overloading in the sample was 813 kgs, which is relatively insignificant in relation to the 56 000 kgs Gross Combination Mass (GCM) of the vehicles and the national 9 000 kgs Legal Axle Mass load.

The abovementioned analysis reiterates the need for a centrally-controlled reporting and overloading control system that can monitor the effectiveness of the weighbridge activities as well as the performance of the transport operators. In the sample of 60 weighbridges, there were about 20 that weighed less than 50 vehicles per 24-hour day, and only 20 that weighed over 100 vehicles per day. There are also about 20 weighbridges that do not report performance to the CSIR at all. The locations of weighbridges are shown in Map 6.2. on the next page (page 39).

Map 6.2: Location of Weighbridges and the weighings per Day (WPD) (2014)



6.5.4 Vehicle Condition

The current situation in South Africa is that commercial goods and passenger vehicles are required to be inspected annually at registered Roadworthiness Testing Centres (RWTC) to monitor their maintenance and condition. This process (defined by the SABS) is intended to control commercial vehicle quality to ensure safe and efficient operations. Heavy commercial vehicles receive special attention due to size of the vehicles and their impact on other road users. Monitoring of the mechanical condition of commercial vehicles is currently the responsibility of the provincial traffic authorities to promote public safety and protect infrastructure and the environment. The vehicle inspections or tests are regarded as key elements of the overall control processes introduced by authorities to check that vehicles are maintained in roadworthy condition. It has been estimated that 7-10% of accidents involve vehicle defects.

The efficacy of the system is, however, somewhat dubious. As noted in international literature, annual or biannual inspections of heavy commercial vehicles do not make a significant impact on the quality of vehicle maintenance . Reports of independent examinations of freight vehicles on the road confirm that the system is not currently achieving control, with reports of 60-80% of commercial vehicles being found to be unroadworthy when inspected at roadblocks. Recommendations are made in later sections of this report.

6.6 Integrated Planning

Studies in Durban , Gauteng and Cape Town indicate that there is need for those municipalities to improve planning of freight routes, land use and provision for truck parking and logistics areas in the major freight handling areas such as ports, terminals and large manufacturing and storage zones. The approaches to ports are of particular concern as the congestion reduces logistical efficiency and increases the costs of import-export cargoes. All the major cities are making plans but the planning process is complicated by the number of authorities, agencies, parastatals, government departments and private sector property owners involved. This is exaggerated by the lack of co-ordinative structures between all parties.

In all the major cities, there are extensive areas of residential property interspersed with retail and services clusters. The major industrial areas have, in many cases, been surrounded by the growth of residential areas. This has led to increasing conflicts between commuters and heavy freight traffic (e.g. City Deep, Phoenix, Bayhead, Epping and Paarden Eiland). It is important for the future of logistics efficiency to analyse land use patterns to identify the main origins and destinations of freight to and from corridors, ports, industrial areas and primary services. The analysis should also include utilities such as waste disposal operations, power stations and ports.

6.7 Road-to-Rail (Back to Rail)

As noted above, the present situation is a dominance of road freight transport despite the government policy intentions to move freight from road to rail. The reality is that road transport services for bulk and semi-bulk commodities are often a more expensive second-best option which is used by industry and logistics providers as the default option in the absence of available railway services. For a large number of industrial supply chain and distribution operations, attempts at using railways have been abandoned due to unreliability, arbitrary commercial policies and the competing attraction of highly responsive flexible road transport, even if offered at a cost disadvantage.

Commodities such as steel, chemicals, fuel, sugar, timber, fertiliser and many others, gravitated to road transport due to the impracticability of trying to manage a supply chain logistics system with erratic railway services. For many other commodities, there are currently no railway services, often for very good commercial reasons from the railway perspective. The failure to provide rail services has had the negative effect of increasing road haulage of bulk commodities .

The bulk commodities currently transported on road are shown in Table 6.6 on the next page (page 42). The table does not include containers and motor vehicles as these are not generally measured in tons. Current annual rail transport of containers is approximately 330 000 between Durban and Gauteng. Motor vehicles are transported in special trains between the ports and Gauteng. It must be noted that the cost of containers and vehicles by road and rail on the N3 corridor favour road haulage; (mainly due to the terminal and cross haulage costs that are inevitable for rail).

Some of the 20 million tons p.a. of bulk cargo currently on road could possibly be attracted to rail if service was available at attractive rates. It must, however, be recognised that the vast bulk of road freight is “off rail” or “not railable” and is, therefore, not potentially transferable. This means that the impacts of modal transfer within the current railway dispensation are likely to be insignificant in relation to road traffic volumes. It must also be recognised that the objectives of increasing the future competitiveness of the manufacturing and industrial sectors of the economy will result in higher proportions of road than rail freight in the future. Recommendations regarding the redevelopment of rail freight logistics were made in the NFLS report, and are not repeated, as it is not a road freight issue.

Table 6.6: Estimated Tonnage of Bulk Cargo on Road (2015)

Commodities	Estimated Tons p.a
Steel	1 000 000
Oil	2 500 000
Domestic Coal	3 500 000
Export sized coal	1 500 000
Manganese	400 000
Grain	6 000 000
Timber	2 000 000
Pulp and Paper	500 000
Minerals	2 000 000
Total	**19 400 000**

Source: freight train

6.8 Training and Skill Development

The situation regarding industrial skills development was described in the 10th State of Logistics Survey by the CSIR, which made the following comments:

"South Africa spends more than 20% of its budget on education. It, however, remains doubtful whether this money is well-spent. It is plainly visible across industries that the current education system does not provide the human skills needed in the public and private sectors. Without the appropriate human capital, the country will not sustainably obtain a growth rate of more than 2 – 3%, which in turn will cause a further rise in the official unemployment rate of 25%. Skills are either unavailable due to an inadequate education system or unattainable due to unrealistic wage requirements and stringent employment regulations."

It was also noted in the NFLS 2005 that one of the severe pressures being experienced by the industry is the skills shortage and lack of adequately trained and competent personnel in a wide range of disciplines.

"The Transport Education and Training Authority (TETA), through the Sector Education and Training Authority (SETA), provides scope for enhancing and fast-tracking skills development. It is proposed that a skills enhancement programme be set in place as part of the strategy implementation process."

The national technical training structures are inadequate to ensure supply of competent technicians in the automotive trades. The failure to connect technical and academic training with industrial practice means that growing skills and experience shortages are experienced throughout the industry. The DoT document "Careers in Transportation" quotes the TETA identification of critical and scarce skills in the transport sector, which includes automotive electricians and mechanics, as well as transport managers. However, nothing positive has been planned to remedy the situation apart from the TVET short course training which does not provide for the necessary level of technical skills to meet industry requirements.

The TETA Sectoral Skills Plan for 2015 confirms that the situation is still in urgent need of attention:

"Road transport, according to Stats SA (2011), makes up 62% of the total (transport) sector. (The)TETA, therefore, should focus considerably on improving skills in this sector... High skills occupations (Managers/Professionals/ Technicians) constitute 26.1%; intermediate skills (Clerks/Sales and Service/Crafts and Trades) make up 20.6% and low-level skills; (Plant and Machinery/Elementary) comprise 53.3%. A high percentage of people are in the low skills category (53%)...There is an opportunity to move people with low-level skills into the intermediate category. Likewise, there are opportunities for those with intermediate skills to move into the high skills category with meaningful education and training interventions.

"TETA should focus on creating extended apprenticeship training and industry level qualifications since a large number of workers (308 035 and 106 347) need to access education and training in this band. This effectively makes up 66% of the workforce.

"A strong feature of the transport sector is that Whites dominate the upper end of the occupational spectrum, whilst Blacks (Indians, Coloureds and Africans) are located at intermediate and lower levels. The mandatory grant system is not being effectively utilised by firms in the transport sector. The very low penetration rate (the total number of workers compared to the number actually trained per occupational level) means that training interventions do not reach scale in the transport industry and are unlikely to have a meaningful impact of improving the skills base of the industry. In short, more people need to receive training in the industry than is currently the case...There is a strong demand for engineering-type occupations in the sector, but as explained in the problem statement there is a severe shortage of suitable trainees due to the current limitations of the basic education system."

6.9 Cross-Border Freight

South Africa is part of SADC and party to the drive for liberalisation of inter-state transport and promotion of regional trade. The current permit system is a negative feature in the liberalisation process as it represents an "exit tax" on South African goods, lowering competitiveness without achieving any utility for exporters. The current tripartite initiative to harmonise quality regulation in the road freight sector through a regionally-linked operator registration system (TRIPS) will replace the supply side regulation in the current bi-lateral agreements with neighbouring states.

It is also clear that South Africa is failing to develop optimal trade with the region due to border inefficiencies and failure to integrate custom procedures within the region. Research by Shoprite/Checkers reveals that 634 pages of documentation are required to send one container across the border. The firm does 15 000 shipments per year to 14 countries requiring 758 462 pages of documentation. These, and other system challenges, indicate that there is a need for a resolution of trade issues that are outside the control of the transport authorities. There are, however, serious problems with the logistical efficiency of the border posts with neighbouring countries due to lack of road space, parking, outdated border post layout and a lack of facilities for drivers and travellers. These are in need of attention to improve the cost-efficient movement of goods as recommended in later sections of this report.

6.10 Lack of Road Freight Information

There is a current lack of information about road freight operations and an on-going need for more statistical data about road freight movements as a tool for planning and regulation of the sector. The information system development must provide definition of appropriate, necessary information on the movement of vehicles and commodities to avoid impractical plans for collection of detailed but unusable statistics.

South Africa has one of the worst accident experience levels in the world, with approximately 13 802 freight or other vehicle accidents per annum . South Africa is ranked as the 25th worst, out of 181 countries, in terms of the frequency of accidents per 100 000 of the population.

The rate of 27.5 deaths per 100 000 of population is considerably higher than UK (3.59) and Australia (5.7) and ranks with some of the least developed countries in the region . The lack of national accident statistics since 2011 is a major issue which impacts on road safety planning and monitoring of enforcement activities. The reduction in road count stations on provincial roads has also reduced the amount of information available to roads engineers and planners.

6.11 Promotion of B-BBEE

The situation with B-BBEE in the road freight sector is that there are approximately 700 000 commercial vehicles, the largest proportion of which are driven by black drivers. It can be assumed that employment in road freight transport amounts to many more than 700 000 - without including the many people engaged in the logistics activities that are complementary to the sector. In addition to the 75% of drivers working for industrial firms, there is an estimated 175 000 drivers working for transport companies with an unknown number working as one-man truckers (owner-drivers).

It is noteworthy that the national statistics do not reflect the total workforce in road freight transport due to the large proportion of transport workers in the entire range of industrial sectors. There will also be increasing future scope for aspirant supervisors and managers with experience and initiative when the industrial economy expands. However, this will be heavily dependent on the provision of practical training in the necessary disciplines.

The TETA records show only 504 road freight companies as registered employers , which is unsatisfactory in an industry employing a million people. This underscores the need to revise the processes of upgrading training and competence to create employment opportunities in the sector. The table 6.7 on the next page (page 46) provides a breakdown of employment in the transport sector by race group and gender between 2013 and 201437

In 2014, the racial composition of the sector was as follows: Africans (74.2%), Coloureds (10%), Indians (4.1%) and Whites (11.6%). These percentages are broadly reflective of national demographics.

- About 80% of all employed in the sector are male compared to 20% females. The need to achieve gender equality in the sector is complicated by the fact of the vulnerability of females when operating alone on the roads at all hours of day

Table 6.7: Employment by Race and Gender, 2013-2014

Population Group	Gender	2nd Quarter 2013	1st Quarter 2014	% Change
African/Black	Male	502770	561244	10.4%
	Female	95159	103209	7.8%
Total		597929	664454	10.0%
Coloured	Male	66101	64860	-1.9%
	Female	26791	24719	-8.4%
Total		92892	89579	-3.7%
Indian/Asian	Male	26856	25320	-6.1%
	Female	9129	11721	22.1%
Total		35984	37041	2.9%
White	Male	66312	67814	2.2%
	Female	38582	36113	-6.8%
Total		**104895**	**103926**	**-0.9%**
GRAND TOTAL		**831700**	**895000**	**7.1%**
Total		**104895**	**103926**	**-0.9%**
GRAND TOTAL		**831700**	**895000**	**7.1%**

Source: Stats SA, Nesstar, QLFS, 2nd Quarter, 2013 & 1st Quarter 2014
(*The above figures are rounded off*).

7 CHALLENGE

CHALLENGES

The major current challenge is to update the Road Freight Logistics Strategy to international standards as an integrated framework within the limited resources available and within the existing institutional structures.

7.1 Operator Regulation

There is a challenge to introduce systems to monitor the effectiveness of the regulation of quality standards of commercial road freight transport. This is essential because economic pressures and profit motives frequently lead to sub-standard operations and externalities that can endanger public safety.

7.1.1 System Deficiency

The challenge is to make current systems meet international best practice in order to identify and register commercial transport operators and to monitor the management of their operations and levels of compliance with legislation and safe operating standards. It must be noted that improving the control of quality of operations will have impact on the profitability of some operators that currently benefit from the lack of control. That means not all improvements will be amicably accepted.

7.1.2 Regulate Quality Not Quantity

The regulation of road freight transport has, historically in many countries, including South Africa, been based on the concept of quantity (supply side) regulation (usually to protect railways). This has proved to be unsuccessful due to the impracticality of restricting “demand” and negative impacts of supply side interventions in regulated competition. It is, however, essentail to regulate the quality of road freight operations in the public interest.

The term “regulated competition”, in relation to the supply of transport services, should be construed as reference to the regulation of “quality” of all aspects of the transport operation and this is achieved through a set of standards, processes and procedures.

7.1.3 Control of Access to Road Freight Industry

Admission to the occupation “Road Transport Operator” should be dependent on criteria based on a profile of acceptable standards. Those include the identification of a fixed domicile, legal entity, no criminal record, business registration, business plan that includes maintenance and insurance, and nomination of competent persons. (This may be supported by training, qualifications or affiliation to recognised institutions, and may, initially, include registration of all present incumbents, with a “grandfather clause”).

7.1.4 Equity of Treatment

The processes should be identical for all operators in the country, whether they intend to perform cross-border or local transport operations. The systems must apply to all operators, both for hire and reward and for own account, as well as official vehicles. Transport quality control is a universal requirement in all modes, not limited to specific categories of transport operators.

7.1.5 Quality Standards

Quality regulation must be based on defined, measurable, practicable standards for all aspects of the transport operation. The regulations must achieve the limitation of unwanted externalities at an affordable cost to the end users of the service. Excessively high standards (or costs, and terms of compliance) can price the transport service out of the range of the available market demand.

7.1.6 Monitoring performance

Management of quality regulation requires a process of defining standards and then monitoring them. This process is usually performed by authorities. However, many of the actions can be successfully provided by dedicated service providers (as with vehicle inspections, weighbridges and testing stations). They may also be underwritten and controlled by associations or institutions (e.g. transport associations, insurers, accreditation bureau). The ultimate aim of the regulatory system should be the promotion of voluntary compliance.

7.2 Law Enforcement

7.2.1 Implementation of Regulations

The current situation is that there are a number of deficiencies in the regulatory and institutional structures that are creating inefficiency, obstructing effective enforcement of legislation and having a negative impact on the competitiveness of South African industry. The current systems give considerable scope for corruption, collusion and profiteering due to defective systems, a lack of monitoring and a culture of avoidance by "negotiation". Some examples of the inoperative or unenforceable legislation and the challenges presented can be briefly described as follows:

7.2.2 Administrative Adjudication of Road Traffic offences AARTO (23rd Amendment to NRTA) Feb 2016

There are challenges, as mentioned in the section on Operator Registration, due to lack of effective systems to record offences by operators to achieve effective enforcement. This is supposedly to be addressed by the AARTO. The introduction of the AARTO has been repeatedly delayed for about 10 years due to the failure to resolve some fundamental issues that are blocking effectiveness. The serious challenges are:

7.2.2.1 Funding the system is a major problem. Prosecuting offenders by the National Prosecuting Authority is a government function and the government pays for it with taxpayers' money. A policy that requires an organisation that is responsible for prosecutions of infringements to generate its own funds is fatally flawed. Traffic fines should never form part of a budget as it distorts the law enforcement that is required to create safer roads;

7.2.2.2 The fact that the AARTO is dependent on self-funding means that it needs to be self-sufficient; which is impractical because if the Agency is very efficient it will reduce traffic infringements significantly and therefore will work itself out of funds;

7.2.2.3 Summonses and communications of fines require effective registered postal services. As the SA Post Office is the main supplier of postal services and was largely non-functional over the last few years it has severely affected the effectiveness of the AARTO;

7.2.2.4 A further major problem is that traffic departments budget for traffic fines. It is essential to redesign the system to equitably distribute or compensate for the revenue distribution to the current enforcement agencies. As stated in 7.2.2.1) above, the concept of budgeting for fines is contrary to best practice for enforcement agencies but the reality is that alternative procedures are required if the system is to be made to work;

7.2.2.5 It is apparent that traffic chiefs are resistant to the introduction of AARTO as they complain that it negatively affects the revenue stream that they receive from traffic fines. The main aim of reduced traffic offences and road safety are not the main focus;

7.2.2.6 The application of the AARTO to the general motoring public poses very serious problems because large sections of the population (and businesses) do not have fixed addresses that can be reached by post. This will not be a constraint with regard to transport operators once the registration system is in place but does represent a current barrier to the system;

7.2.2.7 The definition of the penalties will require revision for the processes of notifying the Operator Register of violations by drivers, vehicles, operations and management, which are linked to the specific depots and operating centres of transport operators; and

7.2.2.8 The implications for commercial drivers that exceed the points demerit limits will be instant dismissal and total employability as drivers during the "recovery" period. This will have serious implications for industrial labour relations.

7.2.3 Consignor/consignee Regulations

The introduction of the concept of consignor and consignee liability for overloading offences introduces a number of challenges. This is due to the anomalous possibilities that are likely to make enforcement of the legislation impracticable and fraught with challenges by entities that are not engaged in road freight operations. The inclusion of consignors and consignees into road traffic legislation will include port terminal operators, freight forwarders, farmers, silos operators, mills, foundries, fuel companies, filling stations, country stores and a wide range of industrial undertakings.

The scope of the regulation defining consignors and consignees as "persons named as consignors" or "persons receiving more than 500 tons of goods per month" immediately raises issues of the practicality of expecting either or both parties to all transactions to have weighbridges. It also raises the question of how traffic enforcement agencies will monitor and check the total monthly tonnage for all consignees/consignors for all overloads. The problem is aggravated by the fact that there are no operative weighbridges in most cities and all ports in South Africa.

The regulations include a number of undefined requirements such as "consignor or consignee shall insure goods...", but elsewhere "the insurance must be carried by the operator". There is also a requirement for detailed documentation for each load but in the case of road transport to or from terminals, mills, power stations, railheads, where multiple loads are processed at 3-5-minute intervals, the potential for actual enforcement is problematic.

If the consignor / consignee regulations are to be introduced, the following actions will be needed, but are still unlikely to make minimal contribution for effective overload control:

7.2.3.1 Reg. 330A to D needs to be refined to add all the aspects that have been raised by operators over the last 18 months;

7.2.3.2 Reg. 330C needs to be limited to vehicles with operator cards;

7.2.3.3 The obligations of consignees on record-keeping and weighing of vehicles need to be clarified;

7.2.3.4 The provision of a mechanism to indicate joint or split responsibility need to be put in place;

7.2.3.5 Actual enforcement is required to create an environment of compliance – there is currently virtually no enforcement;

7.2.3.6 Additional provisions need to be put in place to clarify roles, defences, obligations, etc; and the

7.2.3.7 Charge codes are required for all new infringements to ensure the public and transport industry do not lose respect for the law.

A further challenge is that new legislation should, in general, not be implemented without the AARTO schedules being updated. Many provisions are simply unenforceable due to a lack of back-up i.e. charge codes, charge sheets, training, etc. Current indications are that the legislation should be withdrawn for reconsideration as compliance with the law is an operator responsibility and it should not be possible for this to be abrogated by unenforceable regulations.

If the concept of consignor/consignee liability is to be retained, it is recommended that it should only exist in the procedures for charging operators for overloading as "an admissible defence" in cases where an operator wishes to defend his case by proving that the consignor has provided false evidence of the weight of goods offered for carriage. How the consignee can be held liable is not clear. There are better ways to address the overloading control issue as described in other sections of this report.

7.2.4 Driving Hours

The concept of controlling driving hours is well established in international practice. However, the implementation of the current South African legislation presents challenges. This is due to the terms of the 22nd Amendment to the NRTA (Reg. 272 A-E) which spells out the processes, procedures and application of the revised driving hours' legislation. The fact that it applies to all goods vehicles over 3 500 kgs (and buses) is likely to be difficult to enforce as that makes about 500 000 vehicles liable to comply - including city distribution vehicles, rural and farming vehicles and owner-operators.

The regulation requires the operators to supply drivers with logbooks (Reg. 272 (c)). Maximum driving hours are set at 5 hours (or 400 kms) for a single driver who then must rest for 15 minutes out of the vehicle (Reg. 115 910(a), (c), and (f). The logbooks are to be retained for inspection for 3 years.

The maximum driving time permitted in 24 hours is 15 hours with mandatory rest period of 9 hours. For two (2) drivers the maximum driving time when they drive interchangeably is 30 hours. The fact that transgressors will be referred to a bargaining council may prove to be problematic as it will introduce another scene for litigation and delays. It is likely to become necessary to amend the legislation to redefine the vehicles that are liable, either by distance travelled (e.g. trips over 300 kms require logbooks), or by area or route (e.g. national routes where longest distance driving and driver fatigue takes place).

Whilst it is recognised that the objectives are laudable and that action is required, it is recommended that the process is discussed further with the freight transport industry and relevant authorities as the current proposals may not be practicable with existing resources and are likely to become yet another piece of unworkable and, therefore, neglected legislation.

7.2.5 PBS Vehicles

A recent development in South Africa is the Performance-Based Standards vehicles that have abnormal dimensions, but are currently being operated under permit in KwaZulu-Natal (KZN). The concept has been copied from the Australian transport industry and is intended to provide a cost-effective means of transport for high cube commodities such as timber. The concept has been labelled "Smart" Vehicle technology in South Africa.

Following the successful trials in KZN there are now further PBS vehicles in the process of design that include car carriers, flat decks, sugar cane haulers and, no doubt, container carriers. All of these "smart" vehicle designs are effectively abnormal, and are required to operate under permits on specific routes or in defined areas, and must, theoretically, comply with the standards for transport of abnormal loads.

There have been reservations expressed of following traffic on narrow rural roads and there may well be further merit in evaluating the need for defining routes in cities. The concerns regarding road safety due to the potential for obstruction by the longer vehicles as described for Longer Combination Vehicle (LCVs) in a later section of this strategy. In the future development of the regional harmonisation concept it may well be relevant to note the possibility that PBS vehicles will be seeking to cross borders.

It must be noted that these vehicles are currently being approved in KZN only in terms of the Abnormal Vehicle policy. However, that policy does not actually allow vehicles to be issued with abnormal loads permits for divisible loads. The original vehicles were in the timber industry (and timber is a divisible load) but there are currently numbers of the vehicle transporting a range of different cargoes in flat-deck configurations in competition with other operators using "standard" vehicles. This is, therefore, contrary to the national policy in which "standards" are defined in legislation to provide the necessary "level playing field" for effective competition.

There is an urgent need to regularise the situation. This is necessary as they are effectively introducing new standard dimensions and terms outside of the NRTA and if the number of vehicles is allowed to escalate uncontrolled, it will be increasingly difficult to stop the vehicles from operating as they are extremely expensive to build and cancelling the permits will result in conflicts.

7.2.6 Provisional Driving licences (Reg. 107, 108,109)

There are problems with practical application of the legislation as the terms of the regulations for implementation of provisional driving licences do not appear to take any cognisance of the current parlous state of driver licencing centres. The other challenge is the limited capacity to handle existing workloads, let alone the onerous requirements of the revised licensing provisions.

7.2.7 Driving Instructors (Reg.114 A-F)

It is problematic that the intended regulations regarding driving instructors appear to totally ignore several challenges facing the sector. These include the lack of capacity, institutions, course content, equipment and funding to achieve even reasonable proficiency in the training of driving instructors as a prerequisite for improving HGV driver competence.

7.2.8 Road Transport Management System (RTMS)

There are some problems as the RTMS is a voluntary association. Accordingly, the linkage between the RTMS membership and permission to operate a PBS (abnormal) vehicles needs to be defined and introduced into the National Road Traffic Act in order to regularise and nationalise the standard procedures.

The combined effect of the outstanding and ineffective regulatory issues is promoting a culture of avoidance and non-compliance that appears to be partly supported by the failure to address the problems.

7.3 Integrated Planning

Co-ordination between Government and the Road Freight Sector

Current communication and co-ordination structures are not effective for liaison with the large numbers of road freight operators in all sectors of the economy. It is important that the government liaise closely with users and providers of road freight to achieve co-operation with the industry management and decision-makers.

Intra-governmental Co-ordination

It is also apparent that the South African Constitutional separation of powers and responsibilities between national, provincial, municipal and other authorities and agencies currently poses serious challenges to the creation of nationally-cohesive; unified and controllable systems with sufficiently accountable management to ensure that they can give effect to the regulatory processes.

Sustainable Infrastructure

The current challenges with regard to the funding of a sustainable road freight sector is in need of urgent evaluation due to deteriorating road conditions on provincial roads and funding limitations for maintenance. The deteriorating roads are causing increased vehicle operation costs (which are tax deductible), inflationary pressures on commodity prices and reduced competitiveness of local industry and agriculture.

7.4 Road to Rail (Back to Rail)

The current railway system is highly effective for transporting bulk commodities but does not offer services for short-haul and break-bulk cargoes. The challenge is to introduce system changes to permit third party investment in co-ordinated road-rail logistics systems as recommended in the NFLS study . This process does not constitute a challenge to road freight as there is very limited competition between the modes.

With the increasing competition, global market saturation, and reducing profitability of bulk export commodities, the future industrial development of South Africa must necessarily focus on secondary and tertiary industries. These sectors are primarily users of road freight with very limited opportunities for basic bulk railway services. The revitalisation of the railways by inclusion of more sophisticated third-party train operators with advanced logistics capabilities is the only strategy that is likely to change the future of road-rail market competition.

An analysis of the 30 million tons of corridor cargo on road would reveal the proportion that could be handled by the existing system, as well as the cost of providing the necessary facilities and equipment to maximise the tonnage that could be transported by railways.

7.5 Training and Skills Development

Skills Shortages

There is evidence of an urgent need to improve the training and skills development in road freight transport at all levels. This is because of the deficiencies in the systems for the training of drivers, operations staff, managers and technicians due to skills, systems, institutional and resource limitations. The shortage of skills in many areas means that implementation of advanced systems will be dependent on the availability of competent technical and managerial expertise.

Driver Training

There is widespread concern about the ineffectiveness of the driver training systems and institutions in the country. This is due to the fact thatthey are failing to supply adequate numbers of trained drivers of mature age (25-40) who are the typical candidates for employment as Code EC drivers. This situation is being aggravated by the high level of mortality among younger and middle-aged drivers, thereby aggravating the skills and experience shortage.

Shortfalls are currently made up by the significant numbers of drivers from neighbouring countries who are employed in the South African industry. However, they typically have the same training deficiencies as their South African counterparts. Current deficiencies are:

- Inadequate training facilities, course content and vehicles;
- Lack of control of driver training “schools”;
- Lack of qualification and certification of driver trainers;
- Widespread reservations regarding the quality of driver testing;
- Avenues for illegal acquisition of licences;
- Collusion by testing officials;
- Ineffective control systems to ensure the quality of commercial drivers;
- The need for higher age limits for large HGV and PSV drivers;
- Lack of probationary periods between advances to more complex driving tasks;
- Lack of mandatory step-up training courses to equip drivers for more challenging driving duties and vehicle configurations; and the
- Lack of accessible assistance and funding for aspirant driver trainees.

All of the foregoing factors create the situation where the

main uncontrolled learning experiences for commercial drivers take place on the public roads. The reasons for this situation are many, but the most significant is the fact that training is provided by private sector driving schools and paid for by trainees. In many areas, teaching people to drive is regarded as simple way to earn a living by the taxi industry as a source of off-peak revenue.

Some past attempts at introducing improved controls have resulted in violent resistance from the cartels and "associations" that have claimed this turf. This leads to the situation where low cost, low skilled, unprofessional and inadequate training is being provided to people with limited means, many of whom do not know better, and, in any case, are unable to pay for better quality training and just want to get a licence to drive.

The costs of professional HGV driver training are very

high; with Heavy Goods vehicles and Buses costing about R1.5 million each (and R9.00 to R12.00 per kilometre to run). Premises and facilities add a possible R1 million before any training is performed. In order for a training school to make a return on this type of investment, the fees for professional training courses would be beyond the reach of a vast proportion of the population. An experiment conducted in KZN showed that acquisition of an EC (Code14) licence in seven weeks costs R12 500 and provided the owner with a legal licence but total incompetence to drive a commercial (or even a light) vehicle. The system creates the temptation to cut corners, and to "buy" a licence through illicit channels. There is a need for the government, via TETA, to establish new means of funding driver training and offering support to driver applicants as described in later sections of this report.

Situational analysis

Trainers

Throughout the country, there is minimal professional training for driver trainers. The current system presumes that an experienced driver who can complete a brief question and answer session is competent to train would-be driver licence applicants. Furthermore, there is no clearly defined route for trainers to achieve competence, qualification, experience, and to receive professional training. Failure to train the trainers in professional driving is one of the fundamental reasons for the poor standards that prevail throughout the region. Recommendations are made in later sections of this report.

Training Course Content

There is no control of training course content at driving schools in South Africa. In most cases, the providers of driver training are not competent to develop such course material and, as it is not commercially available, the result is that drivers are not taught the basics of legislation, vehicle management, defensive driving, load dynamics, securement and road safety.

The current initiative in KZN to register all driving schools as proposed in the 22nd Amendment to the NRTA (Reg.114) is a very positive first step in the process to improve the quality of driver training. There is, however, a need for very extensive involvement by the national and provincial authorities if this is to achieve improvement in the quality of training in the foreseeable future.

The main issue regarding complex institutionalised training providers is that the courses are, firstly, not available to aspirant driver trainees. Secondly, they are beyond the financial capacity of entry-level aspirant drivers. This means that the system does not address the issue of improving driver competence outside of the large transport fleets (which often have their own in-house training facilities). For small and own account operators the system is also too complicated and expensive. From a national perspective, the net result is that driver incompetence is major contributory factor to road accidents.

There is an urgent need to address the issue of driver competence. However, it is important to avoid perpetuating two streams of driver training; with one stream being professional and effective but unavailable and too expensive for most of the aspirant trainees while the other is the current backyard hit-or-miss learning-by-doing. Economics will continue to dictate that the cheaper route will attract the most trainees, so the challenge is to develop subsidised systems that are sustainable. When viewed against the reported costs of accidents and road fatalities, which run to billions of Rands each year, the money spent to solve the problem will be very cost-effective.

Testing and Licensing

There are challenges with regard to the testing and licensing of drivers as it is currently done by traffic authorities. The focus of the test is on ability to answer a limited number of questions about road traffic codes and then to perform a limited number of manoeuvres in an off-road place, before a brief road test. The performance of the licence applicant is noted by the examiner; and generally-speaking, the system records faults, errors of judgement and the inability to perform specific actions. These are deducted from a theoretical 100% score to decide on a pass or fail mark.

The process is highly subjective, and anecdotal (and experimental) evidence suggests that the testing of drivers is fraught with applicant-to-examiner corruption in many parts of the region. In South Africa, there have been numbers of fraudulent driver licences issued by traffic officials and these have found their way into the National Transport Information System (eNATIS) so that it is very difficult to identify genuine and fraudulent licences.

The devolution of authority to test drivers to regional or municipal authorities aggravates the problems of control and introduces the need for more complicated analysis systems. There have been attempts at monitoring the test procedures with analytical control systems. However, there are some doubts regarding the effectiveness of in-cab video records, taped conversations, use of laptop scoring programmes, etc. to monitor driver testing due to the need for additional independent staff to handle the analyses and evaluations. This is critical if the measures are to achieve control of examiner behaviour.

A further major problem is the testing procedures. Testing of learners is done by driver licence examiners, most of whom are not competent to drive fully-laden modern heavy commercial vehicles. The driving tests are usually performed with the smallest possible, unladen vehicles owned by the driving schools, in order to make it easier to pass the test.

A further problem with the testing and licensing regime is that there are large numbers “foreign” drivers operating throughout the region. A survey of transport companies in Durban revealed approximately 30% of foreign drivers holding licences issued in their home countries. The same survey indicated that less than two out of ten driver applicants with completed South African licence documents were employable by transport companies as competent.

Licensing Criteria

It is an unfortunate feature of the driver development environment that applicants for driver licences are not selected but cover a wide range of personalities and come from all sorts of backgrounds with many trainees not being ideal driver material. This is unavoidable. However, there are some significant criteria that can be used to improve the performance of commercial drivers of trucks and buses. These criteria should form part of the regulatory framework by defining the conditions required for licensing of professional drivers.

Age

One of the primary criteria to be considered in any discussion of training and licensing of drivers is the question of the age of trainees and applicants. Younger persons (of both sexes), tend to have higher accident experience than older drivers. The reasons for this situation are a complex interaction of youth, energy, inexperience, and the generally more adventurous risk-taking propensities of young men and women between the ages of 18 and 24. As shown in studies overseas, the actuarial risk of employing young drivers is considerably higher than for older drivers. Studies have shown that drivers between age of 18 and 22 years are likely to have 3-4 times higher accident risk than 30 and 40-year-old drivers.

7.6 Cross-border Freight

As described in the situational analysis, there is an evident need for improvement of the logistical efficiency of the border posts with neighbouring countries in the interests of improving the cost-efficient movement of goods. The DoT does not have specific authority over border procedures and is not responsible for the efficiency of border post management.

However, the interests of road freight and passenger transport are such that the Department is necessarily involved in any measures to improve the efficiency of cross-border movements.

The fact is that about 14 government departments are involved in the border post management operations and that these are co-ordinated at present by Border Control Operational Co-ordinating Committee (BCOCC) and may, in future, be managed by the Border Management Agency (BMA). This means that the DoT can support and advise, but not make specific changes. The current initiative to create a One-Stop-Border Post between South Africa and Zimbabwe at Beit Bridge will offer opportunities for rationalisation.

There will be challenges to co-ordinate the repeal of quantity regulation (permits) and engagement in the Multilateral Cross-Border Road Transport Agreement (MCBRTA). This will require some institutional changes and will present opportunities for improving the road freight regulatory system in the region and country. South Africa is part of the SADC and therefore party to the drive for liberalisation of inter-state transport and promotion of regional trade.

The current tripartite initiative to harmonise quality regulation in the road freight sector through a regionally-linked operator registration system (TRIPS) will require South Africa's participation.

7.7 Lack of Road Freight Information

There is an ongoing need for more information about road freight movements as a tool for planning and regulation of the sector. The implications for better information as part of improving the regulation of road freight operational quality are described in this report.

Accident Statistics

Resolving the current problems with reporting and recording of national accident statistics will require co-ordinated action between agencies, provinces and the DoT. The problem currently resides with the RTMC as an agency of the DoT which will need to engage in resolving the problems.

The NFLS 2005 made the following statements regarding the need for freight logistics information:

"The lack of detailed, credible information on freight traffic and its patterns is a serious challenge to planning authorities and infrastructure providers, as well as an impediment to the optimal deployment of tactical initiatives ... Currently information is scattered across the transport sector rendering it difficult to determine traffic flows as a result of weak technology integration. This creates problems for industry role players to determine how the sector is performing and, especially, to determine how fast or slow the sector is growing. There is a dire need to enhance technology to ensure that real time information is systematically captured."

7.8 Promotion of B-BBEE

In terms of the Road Freight Sub-Sector Code for B-BBEE, the road freight sector has made a commitment to promote increased access to skills, capital and opportunities and, therefore, raise the economic value add (or productivity) of every employee and enterprise in the industry.

"The challenge is for stakeholders to recruit new black people into the industry and increase their skills (and those of existing employees) to best-practice international levels, while creating a supportive culture for their talents to thrive. It will also require stakeholders to facilitate the creation of new black entrepreneurs (and the development of existing ones) who can participate in economic opportunities throughout the industry value chain."

Achieving these objectives requires the improvement of training and skills development to provide opportunities for B-BBEE employment and ownership in the sector.

Challenges facing B-BBEE in the freight industry

- Freight transport is a capital-intensive industry;
- Difficulty in dealing with international trade;
- Requires knowledge of the industry and skills;
- Strict conditions for trading;
- Difficulty in obtaining funding, as trading needs large amounts of capital;
- Lack of funding for the necessary equipment;
- Low levels of black participating in ownership and control, management, skills development and SMME development;
- Low operating margins – sharp competition;
- The low number of transport organisations registered with TETA (504); and
- Limited numbers of managerial and executive positions available.

8 STRATEGIC RECOMMENDATIONS

STRATEGIC RECOMMENDATIONS

is an important step in supporting industrial efficiency and national competitiveness in the production, import and export of a wide range of commodities. The following sections of this report describe the interventions required to introduce international best practices to the South African road freight sector and to achieve efficient enforcement and regulation in support of the industrial and economic aspirations of the country.

8.1 Operator Registration

It is recommended that a system for road freight operator registration and identification of responsible competent persons should be introduced to cover all commercial transport operations in South Africa. This is necessary in order to achieve quality-regulated competition, enhance the enforcement processes, and encourage voluntary compliance. The need for changes to the "quality" regulation system is motivated by the existence of sub-standard road transport operations as evidenced by overloading, speeding, driver fatigue, illegal parking, poor vehicle condition, as well as high accident levels and costs (total RSA road accidents reportedly cost R300 billion p.a.).

Freight vehicle accidents are usually attributable to fatigue, lack of driver training, operating pressures, poor vehicle condition, unlicensed drivers, overloading, and operational pressures - all of which are the responsibility of the operator. The effectiveness of the enforcement agencies is currently impaired by the difficulty in holding operators directly responsible for non-compliance with quality standards. Current monitoring systems such as eNATIS do not link vehicles and drivers to operators and therefore are unable to identify repeat offenders. The fragmented systems do not provide traffic officials with readily accessible operator information.

The number of registered operators (including own account operators) will be relatively low and manageable by a system within the ambit of the DoT. The establishment of the operator registers, in consultation with transport associations, will ensure that any deviations from standards are reported and remedied. A relatively simple-but-effective IT system is needed to manage the routine interactions between transporters and the registry office.

Regulation and Control of Operational Quality

The Operator Registration will monitor all aspects of the quality of road transport operations based on the National Road Traffic Act. Compliance with all the standards and conditions in the NRTA is effectively the "Road Transport Quality System (RTQS)". Compliance will include licenced drivers, well-maintained vehicles and no overloading. The management of driver behaviour (e.g. speeding, fatigue, no alcohol; load securement, no illegal activities, compliance with vehicle licence regulations) and adequate insurance will also fall under compliance.

The Act is applicable to all users of the public roads in the country and makes no distinctions regarding the road safety aspects of commercial or private vehicle operations. The Act sets the standards for the "quality" of road freight operations. It is international best practice (in all transport modes) to identify and register commercial transport operators and to monitor the management of their operations (as evidenced by compliance with legislation and safe operating standards).

Admission to the Industry

Admission by individuals or firms to the occupation "Road Transport Operator" must be dependent on criteria based on a profile of acceptable standards. This includes the identification of a fixed domicile, legal entity, no criminal record, business registration, a business plan that includes maintenance and insurance; and the nomination of Responsible Competent Persons (RCP), as described below.

Responsible Competent Persons (RCPs)

There are currently major problems with several aspects of enforcement of operator standards. All too often it is the driver who receives the summons and the operators are not implicated due to the overall ineffectiveness of the operator registration system. This problem will be resolved by the introduction of requirements for Responsible Competent persons to be certificated and included in the conditions for the application for Operator Registration.

Register of "Responsible Competent Persons" (RCPs)

Persons wishing to be registered as Responsible Competent Persons (RCP) in the management of transport operations will make an application to the competent authority; the authority will examine the applicant's credentials, qualifications, experience and decide on whether to register the applicant. The measure of "competence" will imply definition of acceptable "standards" (this may be supported by training, qualifications or affiliation to recognised institutions, and may initially include registration of all present incumbents, with a "grandfather clause"). The RCPs who are nominated by operators for each depot will be linked to the Operator in the registration system.

The standards for registration of RCPs will be defined, but will initially be necessary to register present incumbents and allow "grandfather" clauses to kick-start the process. In order to provide for a measure of competence by which the RCP applicants can be judged, it will be necessary to establish training systems and testing procedures. The training must be as simple and effective as possible and the examination questions concise to permit ease and speed of marking. It will be possible to create a computerised program to be available for use throughout the country that covers all aspects and includes the material for training, and an examination and marking system, as has been done in United Kingdom (UK).

Operator Registration System

The Operator registration will record entities (individuals or companies) that have applied for registration as "Road Transport Operators" and have submitted evidence of competence and compliance with regulations. This system will be managed by the DoT.

The elements of such a system are:

- Operators - identification of entity: criteria
- Responsible Competent Persons (RCP) - to be qualified and competent
- Vehicle Records - vehicles to be roadworthy
- Driver Records - drivers to be competent
- Offences records - operator to be responsible
- Certification and Grading - dependent on compliance
- Monthly Updates and reports - performance to be monitored

Register of Operators

The application process must provide sufficient detail to enable a competent registration authority to decide whether the entity (or individual) should be allowed to operate freight (or commercial passenger) vehicles on the public roads. The procedure requires applicants to provide details for evaluation by the competent registering authority. The details include identification of shareholders, directors, business addresses and telephone contact numbers, details of company bankers, insurers, maintenance providers and details of the location and facilities at each depot. All operators registered will be issued with unique numbers that identify the entity and all depots and operating centres of the entity, which are linked to the operator registration number.

Register of Employed Professional Drivers

All drivers (who will be holders of Professional Driving Permits (PrDPs)) will be registered and linked to the specific depot and RCP holder, as well as to the Operator Registration number.
The registration of all professional drivers employed by the applicant entity is necessary in order to link drivers to the depots from which they operate.

Register of Commercial Vehicles

All vehicles of over 3 500 kgs under the control of the operators and their RCPs will be recorded for all depots defined in the in the Operator Register. The lists will include both the prime movers and trailers. Linkage to the existing national vehicle licence register will permit interaction between both databases, but the Operator Registration system must operate independently as it requires continual interaction with the registered operators.

All vehicles (including trailers) to be operated by the entity (including hired leased, borrowed, etc.) will be listed against the depots from which they operate. Theywill be linked to the RCP holder and to the operator registration number. All vehicles will have the Operator Number painted on them. The intention is that all offences recorded against vehicles will be linked to the operator and to the RCP holder, as well the driver (for driving offences).

Record of Certificate of Roadworthiness (COR), Insurance and Other Functions

This register records the declaration of the applicant and covers activities that are required to be performed to defined standards (all linked to the Operator Register). The operator registration will include a record of vehicle insurance, public liability insurance and in the vehicle records section, the date of COR or periodic vehicle inspections.

Incidents and Offences Register

The incidents and offences register will have links from the vehicles to the Operator Register, the Register of Responsible Competent Persons and the Register of Drivers (all violations by vehicles, drivers, operations staff, etc.).

A process will be created for collecting information about offenses and incidents relative to vehicles and drivers operated by the entity. There will be a need to include the Operator Number on all warning, Admission of Guilt, inspection, summonses and prosecution documents in addition to the driver and vehicle details.

This will permit the accumulation of information regarding operating quality. The monitoring process will include parameters for evaluation and non-compliance will result in options for grading as well as sanctions such as curtailment, revocation with deregistration and prohibition, for total non-compliance.

Monthly Update and Reporting System

The IT system will make provision for all registered operators to confirm their current details each month, and supply any amendments to Vehicles, Drivers, Competent Persons and Company details (preferably by EDI or submitted pro-forma lists).

The monthly reporting system is a crucial element of the entire operator registration system as the dynamics of transport operations are such that there are continuous changes of drivers, vehicles and company details, directors, etc. It is, therefore, essential that a means is provided for companies to update the information in the system at least monthly so that any offences performed by drivers and vehicles are linked to the correct entity.

The onus will be on the Registered Operators to ensure that their monthly returns are being received by the registrar and in turn, the IT system will create a return with an updated set of details each month. Where possible, this proceTss will be handled electronically and companies can be enabled to peruse their information online as well as transmitting amendments and updates to the system. A system of passwords and controls is visualised to ensure that the system stays real and live (like a bank's online accounting system).

Monthly Analytical Reports Generated by the Bureau

The IT system will provide analysis and feedback to authorities, associations and to the operators.

IT System Requirements

The development of the IT system will almost certainly rely on existing internet technology. A competent service provider will decide the program and processes to create the necessary interlinked relational database and information system, but the characteristics and specifications of the system can be briefly described as follows.
The registration and database system is required to provide easily accessible interaction between operators and the DoT. The initial applications for registration by transport operators will require the competent authorities to implement a screening process to ensure that only accredited operators are registered into the system. The national database will be linked into a hub to enable access into the defined menu driven enquiry mode.

The system must permit updating of operator information on a regular (monthly) basis to ensure that all elements of the operator registration system are current. The system needs linkages to other databases in order to provide for recording offences and non-compliance with regulations. The inputs of offences must be processed and then recorded in the database against specific operators. In order to perform this function, it is implied that there will be coded linkages between drivers, vehicles, responsible competent persons, operations' depots, and the unique registration number for each operator.

The system will need to provide for various means of communication between operators and the DoT in different areas (online, email, hardcopy returns, mail, and maybe various media connections) to suit the level of sophistication of the operator organisations and the available resources in the administration of the regional offices.

As the system will be designed to manage commercial road transport operations only (freight and passenger bus and coach), the database and number of records will be considerably smaller than the national traffic database (eNATIS). The operator registration system must, however, be dynamic and interactive between the Registered Operators and the DoT. It will be essential to design interfaces between the operators and the system that minimise the clerical and administrative burden, whilst maintaining accurate records. The system should integrate with the SADC-Tripartite regional TRIPS cross-border system.

It will be necessary to create a National Road Transport Authority independent of existing structures; with an efficient registration bureau, reporting, operator interaction and monitoring system to permit grading and achievement of voluntary compliance.

Amendments to the National Road Traffic Act will require revised conditions for applications for Operator registration; registration of RCPs, training of PrDPs, and monthly returns of RCPs, drivers, vehicles, and linkage of offenses to Operators via an effective IT system. (Rationalisation of AARTO will be necessary to serve this purpose)

8.2 Law Enforcement

8.2.1 Enforcement Issues

In order to improve the effectiveness of enforcement procedures for road freight transport it is essential to address the issues of non-compliance, corruption, collusion, and a lack of monitoring of all the quality aspects of the road freight environment.

There is a need to develop efficient monitoring systems at the provincial level to address the widespread disobedience in relation to safety and operational standards. The systems must be designed to stop the practice where drivers and operators can avoid penalties by bribery and corruption at weighbridges, borders, testing grounds, roadside inspections and licencing authorities.

The future development of monitoring and control systems must include measures that deliberately remove the options for manipulation and systems must consist of automatic recording and then control reports to obviate possibilities for human interventions. There are many financial transactions that are performed via secure systems and the technology is widely available and used in the commercial world. The potential for improved performance of officials, better time utilisation, work place monitoring and ensuring accountability and performance must be an integral part of future monitoring system design.

The process of improving the enforcement of road freight legislation must include the revision of some traffic legislation and liaison with the Department of Justice regarding the application of criminal procedures in relation to road freight offences. The introduction of the AARTO will offer a means to relieve some of the current problems. In this regard, there will still be a need to improve the relationship between the enforcement and prosecuting authorities. This will include the DoT engaging the National Prosecuting Authority (NPA) and RTMC through the Technical Committee for Standard Procedures (TCSP) for Law Enforcement Equipment for all possible legislative amendments pertaining the utilisation of weigh-in-motion equipment for prosecution.

The processes recommended in this project will lay the foundation for future efficiency and effectiveness of the road freight sector and improved regulation of all aspects of operational quality.

8.2.2 Administrative Adjudication of Road Traffic Offences (AARTO)

It is recommended that the process of establishing the means to monitor the levels of compliance by road freight operators should be actively pursued as the principle of grading or points demerit is a central requirement of the Operator Registration system. It is clear that if the existing freight transport legislation is coupled with proposed mandatory national operator registration, it can be totally adequate and effective if diligently applied. There is no need or purpose for the imposition of further complex and unenforceable regulations to curb a marginal overloading problem that is more readily solved by professional overloading control systems and management.

8.2.3 Vehicle Condition

It is recommended that the process of controlling roadworthiness test centres and annual Certificate of Roadworthiness (COR) be re-examined to establish whether it contributes to the condition of road freight vehicles. This is necessary as the control of commercial vehicle quality requires continual maintenance of the standards of the components of the vehicles to ensure safe and efficient operations. Heavy commercial vehicles receive special attention due to size of the vehicles and their impact on other road users.

Monitoring of the mechanical condition of commercial vehicles is part of the total responsibility of the authorities to promote public safety and protect infrastructure and the environment. Periodic vehicle inspections or tests at Roadworthiness Testing Centres (RWTC) are elements of the overall control processes introduced by authorities to check that vehicles are maintained in a roadworthy condition. It has been estimated that 7-10% of accidents involve vehicle defects.

As noted in international literature, however, annual or biannual inspections of heavy commercial vehicles do not make a significant impact on the quality of vehicle maintenance .Reports of independent examinations of freight vehicles on the road confirm that the system is not currently achieving control with 60-80% of commercial vehicles being found to be unroadworthy when inspected at roadblocks. A heavy commercial vehicle that travels more than 100 000 kms per annum on indifferent roads requires a large amount of regular maintenance that is far more critical than the preparation of the vehicle for an annual Certificate of Roadworthiness (COR) examination.

Even when annual examinations are professionally undertaken, the effects of the certificate of roadworthiness inspection could be nullified completely in a matter of days by operating conditions and component failures. The annual inspection is, however, effective in identifying irregular modifications to vehicles and provides an opportunity to confirm registration and engine/chassis numbers.

It is, of course, also a fact that testing stations are in competition for business so that there is a definite temptation to perform perfunctory inspections to align the costs with the revenue and a temptation to be accommodating to customers in order to attract business. None of the foregoing observations negates the usefulness of the testing process but they do raise questions regarding the monitoring of testing stations and underscores the need for more frequent, effective roadside inspection systems.

It is recommended that provinces should upgrade the level of inspection of HGVs on the roads. For effective regulation of vehicle quality, it is essential for the roadside inspections to be recorded, monitored and linked in an IT system to the annual COR and the operator registration system. This will help identify loopholes, monitor vehicle inspections and the efficacy of the testing centres.

In order to rectify the situation provincial authorities must urgently develop effective roving roadside vehicle inspection capacity, with specially-trained and equipped registered inspectors using effective inspection and follow-up systems. The roadside inspections must be conducted in a professional manner by uniformed officials with badges displaying their names, position and identification number. They should be suitably uniformed for technical inspections and provided with assistants and fully equipped vehicles. The roadside inspection reports must be captured and linked to the Operator Register along with all other measures of compliance with the regulations.

8.2.4 Driving Hours

It is recommended that the rationale and application of the driving hours legislation be reviewed and revised as it is likely to become necessary to amend the legislation. This is needed to redefine the vehicles that are liable, either by distance travelled (e.g. trips over 300 kms require logbooks); area or route (e.g. national routes where longest distance driving and driver fatigue takes place). Whilst it is recognised that the objectives are laudable and that action is required, it is recommended that the process be discussed further with the freight transport industry and relevant authorities to achieve an initial focus on the most relevant areas.

Limiting to corridors and not urban movements

The 22nd amendment to the NRTA (2014) spells out the processes, procedures and application of the revised driving hours' legislation. This requires the operator to supply drivers with logbooks (Reg. 272 (c)). Maximum driving hours are set at 5 hours (or 400 kms) for a single driver who then must rest for 15 minutes, out of the vehicle (Reg. 115 910(a), (c), and (f). The logbooks are to be retained for inspection for 3 years.

The maximum driving time permitted in 24 hours is 15 hours with a mandatory rest period of 9 hours. For two drivers the maximum driving time when driving interchangeably is 30 hours. The fact that transgressors will be referred to a Bargaining Council may prove to be problematic as it will introduce another scene for litigation and delays.

The fact that it applies to all goods vehicles over 3 500 kgs (and buses) is also likely to be difficult to enforce as that makes about 500 000 vehicles liable to comply, including city distribution vehicles, rural and farming vehicles and owner operators.

8.2.5 Transport of Dangerous Goods

It is recommended that the DoT commission research into the entire system for control of transport of dangerous goods with the objective of defining a practical, integrated, and cohesive system for monitoring and controlling the transport of such.

This is necessary as there is fragmented application of current regulations and the development of additional bureaucratic procedures by municipalities that have minimal effect on the real control issues.

The National Road Traffic Act and Regulations (Act 93 of 1996 - Section VIII) contains specific provisions regarding the transportation of dangerous goods by road. The inclusion of the references to the SABS codes of practice in the National Road Traffic Act (NRTA) has the effect of superseding the terms of the Hazardous Substances Act (introduced by the Department of Health in 1990). The functions necessary for the control of the transport of dangerous goods have been incorporated into a set of "Codes of Practice" by the South African Bureau of Standards (SABS: now NRCS) so that they could be incorporated by reference into South African law.

The inclusion of the control of transport of dangerous goods by road in the National Road Traffic Act also has the effect of placing the responsibility for implementation of the codes of practice and the enforcement of the legislation with the provincial governments through their Traffic Departments, and presumably the municipal police where applicable. There is also specific mention in the National Land Transport Act (No. 5 of 2009) of the responsibilities of provinces and municipalities with regard to the control of transport of dangerous goods (Sections 37-38).

Despite the extent of the regulations for the control of the activity; the actual control systems are ineffective due to a lack of monitoring systems, limited resources, some regulatory anomalies and the fragmented responsibilities of several levels of government and supporting agencies. There is a need to look at the practical application of the "control" system; as, apart from the dangers on the road and in crowded urban streets the road safety problem is particularly relevant in parking areas and truck stops where there are concentrations of loaded vehicles containing dangerous goods. The emergency responses to crashes and spills are often a further source of danger to lives as the first responders are often not fully aware of the dangers of chemicals and explosive substances.

The current situation is that there is minimal control of road transport of dangerous goods by the authorities and a reliance on voluntary compliance by transport operators and their customers. In the current dispensation, the responsibility falls mainly on provincial and municipal authorities, as well the freeway toll concessionaires and SANRAL. The relatively infrequent accidents involving dangerous goods vehicles lend some complacency to the situation. However, there is a need to develop systems to improve the safety of dangerous goods operations on the road and in parking areas. Research into international best practice and professional system development are required.

8.2.6 Transport of Abnormal Loads

The movement of abnormal loads in South Africa is controlled in terms of the National Road Traffic Act No. 93 of 1996, which defines the mass, dimensional limits and some operational parameters such as the turning radius and braking performance for road vehicles using public roads. Any vehicles or loads that exceed the legal limits are defined as abnormal and are then required to conform to specifications laid down in TRH 11 - Dimensional and Mass Limitations and Other Requirements for Abnormal Load Vehicles and, particularly, the Guidelines for Granting Permits for Abnormal Loads.

Abnormal Permit Issues

It is recommended that the DoT research the process for the control of the issue of permits for Abnormal Vehicles and Abnormal Loads. This is handled by the technical section of the provincial Departments of Transport located in the capital cities of the provinces. There is currently minimal co-ordination between the issuing departments and the situation is that all loads must be accompanied by original permit documents, which causes problems for operators due to the time wasted on obtaining permits from each province.

The administrative section of the provincial DoT handles all the recording and paper work processes to provide the carrier with the necessary documentation. The process is manual except for the calculation of the mass distribution and fees which is done with the CSIR AL software program. The Western Cape Province has commissioned the development of a software programme to handle the processing of applications and it will run in parallel trials from July – November 2016.

The permit issuing system poses continual problems for operators as the time available from receipt of order to execution of the transportation often requires permits within hours. When this is extended to days there are losses and complications. The uncertain time period for issuing of permits aggravates planning problems as preparations can take weeks, but cannot be started until permits are approved and actually received. If there are delays in the operation then there is a need for reapplication. This is made worse ed when loads are to enter or leave provinces as there is then the need to collect the permit from another provincial office before leaving and the co-ordination of the permit times is a problem requiring the despatch of vehicles all over the country to collect permits. This is a national system deficiency as it is technically possible to co-ordinate permit issues electronically and to issue through-permits from any agency in the country if the system was so designed and equipped.

Operational Problems

In addition to the abovementioned issues with permit applications there are operational problems. Abnormal vehicles may not travel at night and over weekends. The night ban may be defensible but there is no obvious reason for weekend bans except lack of traffic officials. The result is that abnormal convoys park on deserted roads over weekends and then start to move in time to join the Monday morning rush hour. On most routes, there are inadequate lay-by facilities in which to park abnormal convoys, causing conflict with the authorities over parking on roads. There are conflicts with abnormal loads being transported on national routes.

Permit fees include escort costs, but in many cases the use of own escorts would be cheaper and more effective as all operations cease when officers are diverted to other duties. No refunds are given when escorting officers are deployed elsewhere and own escorts have to be used. Escorts need to be properly trained to ensure public safety, but there are continual problems for operators in that they assist with training police officers who then are redeployed to other duties and totally untrained substitutes are sent to do escort duties. Resolution of these issues will require a review of current abnormal load regulations and practices by the inter-provincial co-ordinating committees and DoT.

There is a need for a well-designed commercial-standard electronic system that communicates with all the provinces to reduce delays, eliminate much of the corruption and increase operational efficiency. The system must also reduce costs and enhance the safety of abnormal load transport. It is to be hoped that the Western Cape system can become national standard and include the collection/payment of all fees electronically as is done in normal commercial transactions; for later distribution to the appropriate authorities.

8.3 Integrated Planning

8.3.1 Freight Route Planning

It is recommended that a series of studies is commissioned to examine the potential for the future resolution of the need for effective access routes into major ports, urban and industrial areas. There is also a need for the testing of the international strategies to manage the growth of road freight traffic and the competition for road space.

There are several key logistics areas which are suffering from the effects of inadequate road space at the current levels of economic activity (e.g. access to the ports of Durban and Cape Town and industrial areas in Gauteng). From recent studies, it is clear that the existing freight routes will definitely not be able to support future industrial growth as increasing the GDP to 4-5% will require supply chains with efficient freight logistics and existing roads are inadequate in several areas.

It is essential that cities develop future logistics strategies to ensure the efficiency of supply chains and to promote industrial growth, employment and prosperity . The objectives of the strategies should include the following:

- Gaining freight sector and industry support for freight strategies and initiatives
- Improving journey time reliability of goods vehicles
- Assisting the journeys of goods vehicle drivers and reducing goods vehicle trips and kilometres
- Assisting freight transport companies at the point of delivering and collection
- Reducing environmental impacts and the risk of accidents involving goods vehicles
- Creating freight handling and parking spaces

It will be necessary for cities to follow international trends in the management of freight vehicle movements within the city limits . These include the following potentially useful measures:

- Freight transport partnerships
- Telematics for urban goods transport
- Signing
- Urban freight information and maps
- Road pricing
- Promoting night deliveries
- Defining truck delivery lanes (or no car lanes)
- Telematics for urban goods transport
- Signage and Directional assistance
- Truck routes (to and from major logistics points)
- Simplification and harmonisation of vehicle weight, size and construction regulations
- Urban freight information and maps
- Urban consolidation centres
- Providing on-street loading bays
- Nearby Delivery Area
- Urban consolidation centres
- Vehicle weight, size and emissions standards regulations
- Time regulations for goods vehicle access and loading
- Environmental zones
- Dedicated truck lanes to high density freight handling facilities
- Infrastructure improvements
- Encourage use of environmentally-friendly vehicles
- Enforcement

The cities will need to define “HGV no-go” zones and establish “corridors” for the Longer Vehicle Combinations (LCVs) to specific industrial logistics areas. In South African terms, this will mean that 22 metre inter-links, super-links and rigid and drawbar and PBS combinations will be confined to the defined “in-city corridors” that link to the national corridor routes. This is likely to require private sector development of “urban consolidation centres” truck parks and transfer facilities at which the loads from LCVs can be disaggregated into shorter combinations for local deliveries. It must be noted that several major FMCG chains have already developed their regional distribution centres in areas with good access to corridors and some cities such as Cape Town have already made major investments in urban traffic control technologies. There is need for professional research and system development for discussion with all involved agencies.

8.3.2 Truck stops

It is recommended that research be commissioned to identify the needs of road freight for parking and handling space on corridors and in urban areas. This is necessary because the efficiency and safety of road freight operations requires that when not actually moving, freight vehicles can be safely parked so as not to obstruct traffic or encroach on property. There are problems on most of the trucking routes in South Africa with very limited space for parking of heavy vehicles. This will be even more problematic if attempts are made to enforce driving hours legislation as the shortage of safe parking will force drivers to park illegally on the side of the road or continue to drive for illegally extended periods. It will be patently unreasonable for authorities to enforce stopping in illegal spaces or prosecuting drivers who are legally forced to stop.

The needs for parking spaces are not all identical. For drivers to be able to drive off the road, stop for short periods to rest, find ablution facilities, buy food and then proceed, requires “truck stops” with all appropriate facilities as conveniently located as possible. The most prevalent “truckstops” in South Africa are provided by filling stations which have limited space behind their shops and restaurant facilities. Truck drivers are not generally very welcome in the sections for the convenience of the motoring public.

In all industrial areas, ports environs and adjacent to bulk handling points, there is a need for “staging areas” in which vehicles can be parked whilst waiting to load or unload without blocking roadways. As these delays can take several hours and the vehicles are “queuing” to be handled in sequence, the parking areas required are often extensive and, if not providedby the businesses, invariably lead to long lines of trucks parking along streets or roads.

A further type of facility required by drivers of long distance heavy goods vehicles is overnight resting and ablution facilities in safe areas. The facilities must have space where the truck and load can be parked under security so that the driver can sleep in or out of the vehicles for several hours. The truck parks that provide these facilities usually also offer recreation, TV lounge, restaurant and full ablution facilities with showers and change rooms, toilets, ATMs, phones, power points and sometimes medical and personal care facilities.

All three of the abovementioned “parking facilities” have a role to play in the safe and efficient movement of freight, and there is generally a need for assistance and motivation by authorities to make any of them sufficiently viable as commercail undertakings. The returns from fuel sales are often minimal as the freight industry uses bulk facilities to fuel trucks at base and destination rather than at retail filling stations.

There is a need for an in-depth study of the need for parking and stopping facilities on major routes and around industrial areas in order to identify ways and means to improve the unsatisfactory current situation with facilities for HGV drivers. In many areas the concentration of drivers and crews in unregulated stopping places is leading to unsafe driving due to sales of alcohol, prostitutes, drugs and a lack of security. Unregulated stopping places are also ideal for fuel thefts and all-night disturbances by vendors and criminals.

8.3.3 Government and Industry Liaison

It is recommended that the government should take the initiative to establish formal effective, active, and continual liaison with the industrial users and service providers in the road freight sector. In the current situation the governmental decision processes are based on the premise that the official pronouncements will result in change, whereas the reality is that the commercial world makes its own decisions, based on the policy pronouncements from the government. In the current South African situation, it is critical that the private sector decision-makers are given reason to support official policies and for that reason they must be party to the decision-making process.

An effective communication structure will prevent some of the impractical proposals for interventions and ensure that planning is based on the realities of the commercial undertakings. The range of negative perceptions is fuelled by stalled, recently-proposed legislation, issues such as cross-border permit charges, perceived failures to manage parastatals, and the continual realities of bribery and corruption.

The current processes of limiting consultation and co-ordination to departments, provinces, parastatals, agencies and quasi-official structures insulates the entire process from the commercial and industrial sectors which are the recipients and payers for all the results of the governmental decision-making. It further fosters litigation. Recommendations for a consultative structure were made in the NFLS 2016.

8.4 Road-to-Rail – (Back to Rail)

As described in the situational analysis, (and in the National Rail Policy Green Paper (2015), there is a need to revitalise the railways to supply a range of industrial supply-chain logistics services. It will be essential to design and manage an orderly and efficient process to achieve the restructuring of railways to create opportunities for investment and to permit third party access for train operators.

The benefits of the restructuring of the railway framework will be increasing efficiency of rail logistics to the industrial sector, which will:

- Lower freight rates and more reliable services, a wider selection of rail services and ability to integrate modal logistics and materials handling solutions;
- Removal of monopoly for rail services will promote private sector investment and involvement in the railway industries, which will then allow integration with the overall freight logistics and supply chain planning of the private sector industries that are currently precluded from use of rail transport due to rigid commercial policies;
- Existing and future rolling stock will be better utilised and more volume on rail will result in a reduction of haulage of bulk commodities on road transport;
- The increased tonnage moved on rail will yield revenues that will assist the current restrictions on maintenance, modernisation and expansion of the network;
- Improved rail services will provide a more competitive export environment by removal of bottlenecks in commodity flows;
- Expansion of the rail industry and integration into the overall logistics framework will reduce the need for government capital expenditure and replace this with private sector investment, profits, taxation, employment, industrial expansion and international export competitiveness;
- The current debt levels incurred in attempts to modernise the railway services will reduce, as opportunities are created for investment by private sector operators;
- The revitalisation and expansion of the railway industry will create opportunities for employment, and will promote the development of additional industrial training to increase the levels of railway sector skill, technical competence and investment in supporting services; and
- The provision of opportunities for investment and involvement by the private sector will permit further B-BBEE company-creation and investment.

Table 6.6: Estimated Tonnage of Bulk Cargo on Road (2015)

Commodities	Estimated Tons p.a
Steel	1 000 000
Oil	2 500 000
Domestic Coal	3 500 000
Export sized coal	1 500 000
Manganese	400 000
Grain	6 000 000
Timber	2 000 000
Pulp and Paper	500 000
Minerals	2 000 000
Total	**19 400 000**

Source: freight train

The recommendations for railway restructuring are described in the NFLS 2015 report and are, therefore, not repeated here, as it is not a road freight issue except in relation to the slight increase in competition for freight.

The bulk commodities currently transported on road are shown in Table 6.6 above (page 70). The table does not include containers and motor vehicles as these are not generally measured in tons. Current annual rail transport of containers is approximately 330 000 between Durban and Gauteng. Motor vehicles are transported in special trains between the ports and Gauteng. It must be noted that the cost of containers and vehicles by road and rail on the N3 corridor favour road haulage (mainly due to the terminal and cross haulage costs that are inevitable for rail).

It is recommended that the 20 million tons p.a. of bulk cargo currently on road must be attracted to rail (Road-to-Rail). It must, however, be recognised that the vast bulk of road freight is “off rail” or “not railable” and is therefore not potentially transferable. This means that the impacts of modal transfer within the current railway dispensation are likely to be insignificant in relation to road traffic volumes.

It must also be recognised that the objectives of increasing the future competitiveness of the manufacturing and industrial sectors of the economy will result in higher proportions of road than rail freight in the future. Recommendations regarding the redevelopment of rail freight logistics were made in the NFLS report, and are not repeated, as it is not a road freight issue.

8.5 Training and Skills Development

8.5.1 Technical Training

As described in the situation analysis, the national technical training structures are inadequate to ensure supply of competent technicians in the automotive trades. The failure to connect technical and academic training with industrial practice means that growing skills and experience shortages are evident throughout the industry. It is recommended that the DoT should engage with industry and the TETA to revitalise the apprenticeship training systems for technical trades.

8.5.2 Supervisory and Management Training

Management training for supervisors and managers in road transport is ineffective as it tends to be offered by universities which makes it more academic than functional. Although some training courses are still available; they are not designed for the practical training of supervisory and managerial staff in the road freight sector. The SETA system locked into the National Qualifications Framework (NQF) creates a complex process for registration of training courses that effectively isolates the NQF structures from practical industrial training needs for hands-on management and technical positions. This means that the National Skills Development Plans (NSDP) have more academic input than serious intentions to rectify the operational skills deficiencies.

It is recommended that the DoT should engage with industry, TETA and training institutions to re-establish suitable road freight transport operational training institutions. There is a very extensive need for industrial training by practicing experts and experienced managers who can impart the realistic knowledge required for operational management of road transport.

8.5.3 Vehicle Examiners Training

As noted in the situation analysis, there are problems with the effectiveness of the RWTC system. It is, therefore, recommended that provincial traffic departments should create the necessary training for “Vehicle Inspectors” to improve the effectiveness of roadside inspections to achieve control of commercial vehicle condition. This will require courses and facilities for training of Traffic Officials to be designated as Vehicle Inspectors. The officials should receive high-grade training in fault detection and be fully cognisant of the design features of modern road freight and passenger vehicles. These include ABS braking, load sensing, retarders of various types, on-board electronics and many other sophisticated technical and safety systems. The role of the Road Side Inspectors is described in the section on vehicle condition.

8.5.4 Driver Licence Examiner Training

It is recommended that provinces take steps to train Driver Licence Examiners in the techniques and practicalities of driving large freight and passenger vehicles. This will equip them with the requisite skills to test aspirant licence and PrDP candidates on fully-loaded maximum mass vehicle combinations. This will pave the way for introduction of testing of drivers on fully-loaded vehicles.

The present situation where drivers are tested on small vehicles and then issued with licences for maximum mass combinations and coaches must be stopped as it is an obvious road safety hazard to permit partially-trained drivers to gain practical experience alone on the public roads. It is also essential that the recommended upgrading of Driving Schools is accompanied by measures to improve the knowledge and skills of the driver examiners.

8.5.5 Training for Responsible Competent Persons

The development of suitable training to qualify RCP holders may take some time to introduce in all areas so that it will initially be necessary to register most incumbents nominated by the applicant Operators, (excepting only those with criminal records or history of transport offences). It will also take time to legislate the gradual introduction of an examination and the training to meet the examination requirements.

Such a process was initiated in South Africa in 1980 with the development of the RAU National Diploma courses on behalf of the DoT. The courses were intended to provide the training for the Certificate of Professional Competence (CPC), which was never implemented. The courses are still offered at the University of Johannesburg (more than 50 000 graduates to date). Typical course content for qualification of Responsible Competent Persons will include the following subjects:

Basic Course Content for RCP Qualification

1. Road Transport
2. Road Traffic Law
3. Vehicle Specification
4. Driver Training and Management
5. Business Management
6. Operations Management
7. Records and Planning
8. Passenger Transport Operations

8.5.6 Heavy Freight Vehicle Driver Training

Recommendations to Improve the Training of Commercial Drivers

It is recommended that the DoT commissions a professional investigation into the issue of HGV driver training (facilities, training process, trainer competence testing process, licensing and licence categories). This should include the PrDP. The following sections of this report describe the various actions that should be considered in such a process.

Training Process

In order to make an impact on the identified problems with the quality of drivers of heavy goods vehicles and buses in the region, it is necessary to adopt some basic principles for the development of effective training systems. These basic training requirements can be conceptualised as three separate steps, each of which is important to the achievement of professional driving standards. The steps can be described as follows.

8.5.6.1 Learning the rules of the road and the regulations regarding use of vehicles on public roads (e.g. the South African K53 test manual);

8.5.6.2 Adequate training in handling the typical goods or passenger vehicle configuration that will actually be driven on the road. This implies training by fully-competent and experienced trainers, with modern fully-loaded vehicles, in a controlled environment, as well as on-road experience; and

8.5.6.3 Essential classroom training in the dynamics of heavy goods vehicles and buses, load securement,

weight distribution, passenger relations, commercial vehicles regulations, safety, breakdown and accident procedures, impacts of speed and gradients on braking distances, fuel conservation, environmental considerations, and the realities of actually working with vehicles in a commercial environment.

All three of these aspects of the driver's profession must be trained by instructors who have themselves been adequately trained and accredited as professional trainers. The creation of an institutional system for the production of trained professional drivers will require a very significant effort on the part of the authorities. The proposals for institutional restructuring are discussed in the section on implementation of the overall quality control system later in this project report.

In order to achieve a phased step-by-step approach to developing professional drivers, it is recommended that the driver licence and the PrDP be regarded as two separate qualifications. For the private motorist, step 8.5.6.1) learning the rules of the road, and demonstrating ability drive a light vehicle can be regarded as adequate training for light vehicle drivers (as long as the instructor is competent to explain the rationale for the aspects to be learned).

For the professional driver, it is recommended that the training described as (8.5.6.2) and (8.5.6.3) above, are applied as conditions for obtaining the Professional Driving Permit. The separation of these categories will reduce the numbers of people to be trained by limiting them to professional drivers, and at the same time will focus the efforts on the critical need for more professionalism in the handling of large commercial vehicles.

It is to be expected that there will be resistance initially to requiring increased qualification for professional drivers. However, the motivation for improving the standard can be explained and justified by increased efficiency and professionalism that should lead to better working conditions and remuneration for really professional drivers.

Training and Testing of Drivers of Trucks and Buses

The current inadequacy of commercial driver training is one of the most critical issues facing the region in the promotion of the quality of road transport operations. In order to equip drivers to handle modern commercial vehicles (trucks and buses), it is essential that training is given on vehicles that are typical of the vehicle configurations that are used in the workplace.

Standards

It is unsatisfactory for drivers to be trained and tested on 2-3-ton vehicles with four speed synchromesh gear box without load, and then to be considered qualified to drive loaded 56-ton articulated interlink combinations or 60-seater passenger buses. Drivers trained on light vehicles have no experience of issues such as reaction time, braking time and overall stopping distances for larger combinations.

Licence Categories

Licence categories are aligned with the SADC standard licence categories, which are as follows:

A and A1	-	(≤ 125 cc)-motor cycles
B	-	Light Motor Vehicles (GVM ≤ 3500 kg) with a Trailer ≤ 750kg
EB	-	Light Motor Vehicles (GVM≤ 3500 kg) with a Caravan
C1	-	Heavy Motor Vehicles (GVM≤ 15000kg)
EC1	-	Heavy Motor Vehicles (GVM≤15000kg) with a Trailer
C	-	Heavy Motor Vehicles (GVM >16000 kg)
EC	-	Heavy Motor Vehicles with trailer (GVM>16000 kg)

Driver Licensing Criteria

It is recommended that the age at which different goods vehicle licence categories can be obtained should be standardised as follows.

Driver Licence Age: Goods Vehicles - (Currently 18 years: NRTA Sec 15. (a))

Recommended:
Minimum age 18 years:

A and A1	–	(≤ 125 cc)-motor cycles
B	–	Light Motor Vehicles (GVM ≤ 3500 kg) with a Trailer ≤ 750kg
EB	–	Light Motor Vehicles (GVM≤ 3500 kg) with a Caravan

Minimum age 20 years

C1	–	Heavy Motor Vehicles (GVM≤ 15000kg)
EC1	–	Heavy Motor Vehicles (GVM≤15000kg) with a Trailer
C	–	Heavy Motor Vehicles (GVM >16000 kg) Goods

Minimum age 22 years

EC	–	Heavy Motor Vehicles with trailer (GVM>16000 kg)

Facilities

In order to improve the quality of training there is an urgent need for the creation of professional institutional capacity. In this respect it would be invaluable to obtain input from professional training institutions and manufacturers that currently provide training for commercial transport undertakings. A further source of expertise in training drivers to handle vehicles is the vehicle dealers, many of which have driver trainers on their staff for the specific purpose of training drivers in the most effective use of their specific vehicle models.

Trainers

As noted in the foregoing sections, the quality of trainers of drivers is a major problem throughout the region. In order to overcome the problem, it will be essential for authorities to introduce revised institutional structures as well as regulatory controls in order to effectively eliminate driver trainers who are not properly trained and duly accredited by registered training institutions. There will be a need for a gradual introduction of qualifications for instructors and there will no doubt be severe resistance in many areas.

The institutional approach appears to offer the best hope for improving the quality of driver training by insisting that trainers attend an Official Transport Academy staffed by professionals who can ensure that the training quality is sufficient to guarantee the competence of Certified Driver Trainers. It may be necessary, initially, to introduce the concept of “advanced driver training” requirements at the same time as the introduction of the Professional Driving Permit as this would relieve some of the antagonism that will result from termination of driving school operations as a “home industry”.

Training Courses

There will be a need to develop the curricula, training material, manuals and course structures and schedules for the training of Professional drivers. These and the institutional issues of driver training and licensing are discussed and possible solutions are suggested in the chapter on Implementation.

Periodic retest and renewals

There is some consensus that it is necessary to retest drivers periodically and to require eye tests, and medical examinations to ensure that their eyesight remains adequate with increasing age. All of these provisions should be built into the Professional Driving Permit. The standards may be different to the measures to control the private motoring population.

Future Driver Training Developments

There are published intentions to change the regulation of driving schools (Reg. 114 g-q) and to introduce probationary licences (Reg. 107 (a-c) as well as regulations for driving instructors (Reg. 114 a-f) and references to a Driver Licence Testing Centre Manual. The proposed measures indicate that there is awareness of the unsatisfactory state of driver training, but do not appear to indicate a holistic approach or clarity of direction and focus on the broader issues described in this report.

There is an urgent need and scope for development of driver training centres to produce competent trainers. The need for standardising the training curricula and course structures is also urgent. The main issues to be resolved are:

1. The creation, funding and equipping of training centres staffed by trained Professional Instructors of the Driver Trainers that will be employed by driving schools. It is essential that private sector professionalism is engaged to ensure that training is practical, professional, effective and relevant to the road transport industry;

2. Material, videos, demonstration models and examination and testing programmes. There will be a need for producing material in several different languages. The material can be distributed to training centres established by all authorities in charge of driver training;

3. Subsidised avenues for aspirant new drivers to be properly trained, before being permitted to drive on public roads. This must include PrDP applicants; and

4. The harmonisation of professional training of currently licensed commercial drivers who should be holders of PrDP.

Additional Training Issues

In addition to the basic rules of the road and the training in the handling of vehicles to obtain specific driver's licences as described in a) and b) above; there is a need for professional drivers to be given basic training in the issues that are critical to safety, environmental protection, relations with other road users, load securement and weight distribution and the handling of emergencies. Professional drivers also need to have basic training in dealing with breakdowns and other issues relevant to the operation of commercial goods vehicles. These are shown in the box below.

Experience

It is also essential for the driver training and mentoring process to provide opportunity for controlled experience both on the road and in a variety of real work situations, before allowing trainee drivers to operate alone on public roads.

This is necessary in order to familiarise and acclimatise trainee drivers with the type of hazards that need to be identified in the course of defensive driving. This is particularly important in South Africa as many young drivers have not had the advantage of prolonged car travel with parents and have had minimal exposure to examples of careful driving, but are influenced by the dare devil advertisements for automobiles.

Personal Habits

It is important that driver training courses promote and encourage good personal habits amongst drivers of heavy commercial vehicles. A disciplined approach to adequate sleep, selective involvement in off-duty activities, avoidance of alcohol and drugs, and disciplined driving and resting behaviour are all the characteristics of steady professional drivers.

The discipline does not come easily to younger more energetic learners, without controlled introduction to sober work practices. As proven overseas there is need to introduce probationary periods of driving under supervision into the overall driver development process with phased progression to driving increasingly large and complex vehicle combinations.

Fatigue

One of the major causes of accidents by heavy commercial vehicles is driver fatigue. This is avoidable but requires a disciplined approach and the support of management in order to ensure that drivers do not continue to drive beyond their physical capability. The incidence of fatigue is a problem for younger drivers due to their relatively more energetic lifestyle and propensity for seeking extramural activities when off-duty. It is necessary for drivers to learn that personal discipline is an essential part of their job as professional drivers.

It should be noted that Driving Hours Regulations for long–distance drivers have been discussed in the region for some time, and new legislation is mooted for all drivers but is likely to need further development. Currently there are no finalised plans to address this important aspect of road safety regulation. This issue should become part of the national and regional transport quality management process.

Operational Quality

It is important for driver trainees to be taught the parameters that indicate true operational quality in order for them to be equipped to resist pressures to induce them to over-drive their capabilities, drive at increased speed, take chances with overloading and other regulations, and to neglect vehicle condition and evidence of imminent mechanical problems.

A certain maturity is required to achieve the confidence necessary for drivers to resist temptations to satisfy performance demands by increasing risks. In many transport operations in the region, drivers are paid for output performance (loads, tons, trips) rather than for time operated, and many transport companies apply pressure to achieve performances that are beyond the capability of the equipment or the drivers.

It will be essential for an independent body under the control of the DoT, such as the RTMC, to promote the development and deployment of the professional capacity to create effective training. The RTMC could also monitor the efficiency and effectiveness of the institutional structures that are created in all provinces. This can be most effectively performed by a national committee involving provinces and TETA with a view to containing costs and improving efficiency by harmonisation of standards throughout the system.

Professional Driver Permit (PrDP)

It is recommended that the professional research into HGV driver training should include the PrDP. Upgrading of the "Professional Driver Permit" concept as a separate qualification from the driving licence, introduction of phased age criteria for licence categories and improved training of driver trainers and examiners will all improve the quality of commercial vehicle drivers. The same concepts should be promoted for training of heavy (buses) and light passenger vehicle (taxi) drivers.

The Professional Driving Permit was introduced as part of the RTQS in 1989 in order to provide a means to improve the competence of drivers employed by road transport operators in the passenger and freight sectors. This is necessary as there are further requirements that are important in the accreditation of professional drivers. In addition to training, licensing and testing to ensure competence to drive a vehicle, these criteria relate to age, health, personal habits and sobriety, fitness and health (requiring a medical examination), police clearance, and evaluation of work history and accident records.

The issuance of Professional Driving Permits (PrDPs) was also intended to provide the opportunity to include a requirement for professional training in the operation of Heavy Goods and Passenger transport. This requirement was dropped from the terms of the PrDP and was never applied. The result is that the PrDP has been a requirement for professional drivers for approximately twenty-five years but due to failure to include professional training as part of the requirement for the PrDP, it is ineffective in the control of driver quality.

Periodic Retests and Licence Renewals

In many developed countries, licence holders are required to undergo periodic retests and licence renewals in order to check deteriorating health, eye sight, and to provide an opportunity for drivers to be retrained on new regulations. The retests are also to ensure that the drivers have maintained their skills and abilities.

There are currently no provisions for these retests. The PrDP in South Africa is subject to routine renewal (every two years), but just as an administrative procedure. A medical examination (or declaration) is required and the submission of the PrDP for renewal can take up to three months during which time the holders continue to operate with only a receipt as evidence of competence. The process is subject to manipulation and is a reportedly a common source of conflict with insurers when drivers are involved in accidents.

The PrDP for all categories should only be issued subject to specific conditions, age limitations for various vehicle classes and proof of completion of advanced driving training courses to be developed for this purpose. The current situation is that applicants for goods transport must be 18 years of age, irrespective of driver licence category; while applicants for PrDP (P - for passenger transport) must be 21 years of age; and for PrDP (D-dangerous goods) applicants must be 25 years of age. The PrDP categories do not relate to the vehicle configurations so that PrDP categories effectively rate a 5-ton load of diesel higher than a 80 seater bus load of passengers and do not require experience or professional training for drivers of maximum GCM articulated combinations.

Interventions and Actions Required

There is an urgent need for revision of the terms of the PrDP to improve the professionalism of commercial drivers in South Africa (and throughout the ESA region).

The original RTQS long-term intended regulations did require a bi-annual written test as well as a practical test. The retesting is an essential element as drivers are currently labelled as professional after a medical and previous conviction check. There is no additional training except for dangerous goods drivers and can hardly be seen as professional driving criteria.

The main current problem is there are no training centres established with certified competent professional trainers and very few properly equipped training centres. There is no "approved" training curriculum and testing for the accreditation of PrDP holders as professionally-competent. This requires urgent national strategic development to overcome the institutional and financial blockages caused by current structures.

There is a need for engagement at provincial level as there is a further problem that will need to be addressed in that existing Driving Licence Testing Centres (DLTC) do not have sufficient capacity to handle the demand, even for learner and driving licences. As the same officials would be required to execute the PrDP tests they will aggravate the problem. Reg. 107 of the NRTA should be amplified to provide for more detailed testing of HGV drivers and PrDP applicants. It must be noted that about 43% of PrDPs have expired and not been renewed.

There is a need for co-ordination and extensive development of professional training for the road freight sector. The DoT and the industry consultation will be needed.

8.6 Cross-border Road Freight

It is recommended that South Africa align with SADC intentions to repeal the bilateral agreements and transit permit arrangements and to ratify a Multilateral Cross-Border Road Transport Agreement (MCBRTA), including 22 mainland States in SADC, COMESA and EAC .

It is recommended that South Africa examine the harmonised quality based regulations for control of commercial freight and passenger vehicle movements across borders, including any necessary institutional changes. This may require some changes to the National Road Traffic Act in order to accommodate the harmonisation envisaged by the SADC-Tripartite initiative.

It is recommended that the DoT should commission a freight logistics evaluation of the main border posts to identify the causes of delays and inefficiency. Such a logistics-based evaluation of border post procedures and activities will isolate the primary causes of delay (many of which are not due to the actions of the authorities) in the interest of longer-term redevelopment of the border posts and improvement of transport efficiency.

8.7 Lack of Road Freight Information

8.7.1 Road Freight Information Systems

It is recommended that the DoT should commission research into the available transport information in all modes and develop a "model" of the information matrix that would provide sufficient information for planning and decision-making in the sector.

With Operator Registration and the use of technology to control overloading, speed and the activities of operators it will be possible to collect real time information of road freight transport data on volumes, flows, origins and destinations as well as the activities of specific operators. The establishment of road surveillance equipment will serve the purpose of improving road safety and accumulation of real time information on the activities of operators as well as enhancing the effectiveness of the enforcement agencies.

8.7.2 Accident Reporting and Statistics

It is recommended that the DoT commission an urgent investigation into the current system of crash data accumulation, analysis and reporting. This is necessary as data is the cornerstone of all road safety activity. It is essential for the diagnosis of the road crash problem and for monitoring road safety efforts. It is important to be able to classify categories of road users involved in crashes and strategically target behaviour patterns that need changing. Essential components of a data system are standardised report forms, as well as means of storing and analysing the data. This information is also useful in providing data to prove a sound business case for investment.

Despite advanced road traffic regulations and a comprehensive National Road Traffic Act, the situation with regard to accident prevention in South Africa has a lamentable history of inaction and ineffective attempts at introducing legislative measures that have made no significant impact on the situation. The failure to address the basic causes of crashes, driver training, fatigue, vehicle condition, lack of effective enforcement of speed and dangerous driving mean that the situation is unlikely to improve.

The overall management of road traffic in South Africa is vested in the National DoT which has derogated authority to the Road Traffic Management Corporation (RTMC). The body has in its 10 years of existence made no significant changes or impact to the issues of road traffic accidents. The fundamental problem is that no attempts have been made to return to the basic causes of accidents therefore various attempts at introducing regulatory controls and new systems such as the AARTO are likely to continue to disappoint.

A large part of the problem goes around the methods of accident recording. The SAPS as first responders attend most accidents and data collection at the scene of accidents is theoretically performed using the ARF form designed by the Human Research Sciences Council (HSRC) and the CSIR. The form is very comprehensive and detailed but requires the on-site responder to attempt to fill in 200 different questions in order to complete the form. Analysis of a sample of completed forms indicate that on average, approximately 30% of the questions are answered with a result that the analysis of the data collected, is necessarily skewed and incomplete. There is need for concerted evaluation of the current system as it is patently impossible for enforcement officers to complete complicated questionnaires at the scene of accidents, whilst performing the necessary control functions to ensure the safety of the crash site.

In addition to the problems of onsite collection of accident data there is the practical need to collect data from the SAPS stations which are located in all areas of South Africa, whereas accident data processing is centralised in major cities, and the systems for data transmission are inadequate.

The net effect of the foregoing is that at a national level, data is incomplete and inaccurate; at the provincial level there are severe problems with backlogs and incomplete data whereas, in some major municipalities (notably eThekwini) accident recording analysis and reporting is excellent and while very poor in others. It is, however, a feature of the current situation that inadequate attention is paid to the monitoring and reporting of traffic accidents, violations and crashes and the implications are that there is inadequate information for decision-making and a masking of the seriousness of the current situation. The Road Safety Strategy Report published by RTMC shows a declining accident rate, but this is contradicted by the sporadic data releases by various departments, usually at holiday periods.

At current levels of accuracy and efficiency of the accident reporting system, it is highly unlikely that any statistics quoted by authorities can be given credibility or reliance as decision-making tools. This situation requires urgent co-ordinated effective action by the DoT in order to ensure that the monitoring and reporting systems are restored to efficiency.

8.8 Promotion of B-BBEE

The road freight sector has committed to recruit new black people into the industry and increase the skills of new and existing employees, and to create opportunities for B-BBEE. The DoT must evaluate options for supporting training and skills development to optimise the potential for creation of new black entrepreneurs (and the development of existing ones) who can participate in economic opportunities throughout the industry value chain.

The implementation of the Road Freight Sub-Sector Code for B-BBEE will assist this development as the Charter underscores the need for improving opportunities for training and development of supporting systems.

The limited opportunities for further development of B-BBEE employment in the road freight industry are hampered by lack of effective training, the structure of road freight undertakings, intense competition in a shrinking market and the uncertainties created by industrial legislation.

8.9 Increased Public-Private Partnerships (PPP)

It is recognised that there are many challenges regarding a lack of capacity, funding and management by the authorities engaged in the road freight sector. There is potential for using Public-Private (sector) Partnerships (PPP) in the operation of the systems that should be developed to provide effective services to the authorities. It is essential that the initiation of such functions is controlled within a framework to be monitored by the regulatory division of the DoT. This is to ensure that there are no opportunities for collaborative contracts designed to benefit individuals or officials by overpricing or lack of definition and monitoring of deliverables.

There is already a trend to professionally-manage PPP weighing installations in several provinces. This can be expanded by use of contracted PPP installations such as the High-Speed Weigh-in-Motion and number plate recognition cameras. The databases can be integrated with an Operator Registration system to give cost-effective control of overloading and improved effectiveness of road freight transport. There is extensive potential for PPP operation of road freight monitoring systems, overloading control, accident data collection, analysis, and reporting, traffic management systems and incident and emergency centres. This can also include EMRS, vehicle inspections, and a range of other activities that currently take up the time of trained traffic and enforcement officials.

From the successful development of the surveillance systems on the national freeways in collaboration with SANRAL, it is apparent that an integrated solution to optimising the overloading (and other enforcement processes) is possible through the use of improved technology. The systems using a range of high tech equipment such as number plate recognition cameras, high speed weigh-in-motion, average speed software programs, in-vehicle computers and centralised monitoring and the analysis of statistics hold the potential to improve control, maximise manpower effectiveness and reduce the capital and operating costs of enforcement infrastructure. It is recommended that the government should actively pursue the use of PPP to address the abovementioned issues.

8.10 Road Funding Mechanisms

The road freight transport system (and by implication, the whole of South African industry, as the users) is very dependent on the availability of road space and roads of suitable condition for transport of freight. The issue of road condition and costs of maintenance is in need of review. As noted in NFLS 2005:

"Road freight movement places a serious fiscal burden on government particular where heavy vehicle overloading is concerned. They heavy vehicle operators are not paying the corresponding cost of damaging the road network; hence, prices appear cheaper than is the case. Secondly, the impact of heavy vehicle accidents on both fiscus and communities has not been accounted for in the costs of road freight transport. Lastly, the environmental impact of road based freight transport through emissions and cargo spillages is often not incorporated"

This situation is unchanged in 2015 and is a major cause for concern regarding the sustainability of the road freight system. There is urgent need for analytical studies to establish to what extent road freight operators (and the user industries) do, or do not contribute adequately to the wear, damage and externalities that they cause. The continual debate, allegations and counter-allegations are not conducive to resolution and implementation of solutions. The continual allegations of the impacts of overloading are not based on fact or reality but are repeated at all levels of public and private debate.

The debate has in the past, to a large extent, been academic, but the reality is that failure to provide sufficient funds for roads is having seriously negative impacts on the cost and efficiency of road freight operations due to the fact that operating costs rise rapidly when road conditions deteriorate. On the other hand, further charges for road usage from all operators of road freight transport may have an excessively inflationary effect on the prices of goods and would cripple some industry's export potential. The issue of equitable road pricing is critical and has severe implications for the economy in the absence of significant alternative transport options. It is crucial that the current process of preparing a "Roads Policy" green paper is aligned with road freight transport policy to ensure that operational and economic issues are considered. It is recommended that the DoT commission research into the current funding of roads.

As the economics of road usage are closely connected to vehicle loading and other operational aspects, there is a need to engage the CSIR and SANRAL - which have the necessary data and technical capacity to produce a definitive analysis to provide an agreed basis for policy formulation.

8.11 Externalities

The externalities associated with the rapid increases in the road freight operations in South Africa are a growing cause for concern with environmental, congestion and safety concerns being the major issues. It is recommended that the DoT should commission professional research as data is not readily available to provide a basis for decision-making. The following areas are in need of more effective monitoring and analysis to support policy formulation and decision-making.

Environmental Pollution

The freight transport industry in South Africa uses approximately 360 000 heavy vehicles (3.5%) and a further 350 000 light commercials (3.5%) out of the total vehicle population of
10.2 million powered vehicles. Road transport is the source of 13% of GHG with the freight transport sector contributing to production of CO2, NO3 and other tailpipe emissions.

In the urban areas there is air pollution, noise and spillage onto roads that contributes to the pollution of water sources and overall degradation of these areas. In mitigating the effects of commercial transport there is a significant move to more efficient HGV engines with reduced emission levels (mainly due to international technology development). The recent growth of the commercial road freight sector has been subdued in line with current industrial output (about 3% p.a.) but will increase with further industrial expansion.
Amongst the Nationally Appropriate Mitigation Actions (NAMAs) proposed to the United Nations Framework Convention on Climate Change (UNFCCC) the potential for switching from road to rail may initially be limited but could, over the longer term and with the recommended institutional changes,become positive in terms of pollution.

Congestion

As mentioned in the situational report, there is considerable congestion in the major cities. This is due mainly to the limited amount of safe, high quality, efficiently scheduled public transport. The situation is aggravated in many areas by the presence of very large vehicles in conflict with light passenger vehicles for road space, although HGVs typically make up less than 7% of the traffic flows. There are rising truck accident rates in the cities and on the main national corridors which are caused partly by the competition for road space (with 10 – 35% HGVs on corridors) and partly by inadequate control of light vehicle speed and driving habits.

Trucking Intrusions

There is anti-social behaviour of drivers and load handling staff in industrial and residential areas, with whole trucking undertakings being based, parked and managed from residential properties. The control of such violations rests with municipal and provincial authorities but is complicated by the lack of off-road facilities for truckers on freeways, provincial roads and in urban areas. Enforcement is hampered by the lack of an effective operator regulation system.

Road Accidents

The current national levels of road accidents involving freight vehicles is not known as national accident statistics are not available. The overall accident experience in South Africa is deteriorating but in the absence of effective data capture and analysis the extent is unknown. The last official data was released in 2011 from the RTMC and material from the Medical Research Council (MRC) in 2015 from research in mortuaries indicated that in 2009 more than 33% of non-natural deaths were road fatalities. Eighty-percent (80%) of those deaths were male. The total number of unnatural deaths recorded in 2009 for the whole of South Africa was 52 493, transport-related deaths for the country made up 17 742.

There are also variances in the data released with KZN Provincial deaths for 2009 recorded as 2 629 by the RTMC, and 2 855 by the province, making up around 18% of the national fatalities. This indicates a total national fatality of road users at 14 817, an obvious under reporting of 16%. With the deterioration of the statistics since 2011 it can be presumed that under-reporting is still rife, and that provincial figures are as inaccurate as the national statistics. The accident data from the N3 in 2014 indicate that accidents involving heavy goods vehicles amounted to about 50% of all accidents on that route, although the proportion of HGVs was about 34.7 % of total vehicles.

The recommendations made in this Road Freight Strategy cover a wide range of issues and identified problem areas that are having negative effects on the performance of the sector. Various current problems are reducing the global and regional competitiveness of South African industries and the adding to externalities such as infrastructure wear and damage, pollution and congestion, while reducing road safety. The issue of increased inter-modalism and transfer of freight from road to rail will be resolved by the introduction of third party railway operations.

There is a need for reform of the regulatory framework and review of current legislation to identify ineffective, anomalous, and impracticable regulations for the purpose of improving efficiency of enforcement and promotion of voluntary compliance.

Tthere is an urgent need to address the issue of skills deficiencies and the creation of training institutions that can produce sufficient competent technical, operational and managerial staff to support future expansion of the road freight sector. Failure to create effective training systems will place restrictions on the potential for industrial growth and economic development. The process to implement the recommendations will be constrained by the current state of the economy and will, therefore, be essential to ensure that the implementation is cost-effective and sustainable

9 CONCLUSION

CONCLUSION

This study of the Road Freight Strategy of South Africa identifies a number of important issues which are detracting from the optimum performance of the mode. There is a need for an effective Transport Operator regulation system as it is a feature of commercial transport that economic pressures and profit motives frequently lead to sub-standard operations and externalities which can endanger public safety.

There are problems with enforcement capacity, systems deficiencies, need for modern equipment, more trained manpower and better communications in the enforcement agencies at all levels. Prosecution and collection of fines are problematic with widespread allegations of collusion and corruption. There is evidence for an urgent need to improve the facilities, standards and levels of transport industrial training and skills development at the technical, managerial, and operational levels with deficiencies in the systems for training of drivers, operations staff, managers and technicians due to skills, systems, institutional and resource limitations.

The issue of sustainability of the road freight sector is in need of urgent evaluation due to deteriorating road conditions on provincial roads and funding limitations for maintenance. This is causing increased vehicle operation costs and reduced competitiveness of local industry and agriculture. There are serious congestion and safety issues at specific points on the corridors and in urban areas that are in need of urgent attention as they cause inefficiencies in road freight logistics.

Several of the recommended interventions will require co-ordinated action by various levels of government, agencies, and the DoT. To this effect a ‘high level’ implementation plan has been developed. However, a more comprehensive, detailed, integrated implementation plan will be developed together with all the relevant implementing agents upon the approval of the Draft Road Freight Strategy by Cabinet.

The integrated implementation plan will, amongst others, seek to ensure that the current Constitutional distribution of regulatory authority for transport does not affect implementation of the Strategy and that the evident lack of capacity and need for training and systems development in some areas is prioritised.

The current systems and structures are hampering the enforcement of quality standards, and there are many aspects of the situation that are unsatisfactory; even at the current low levels of industrial activity and GDP growth.

If South Africa is to raise industrial output, global competitiveness, employment and effective use of the country’s resources, the road freight sector will become a limiting factor to efficiency and cost–effectiveness. The challenge is to revise the current systems, structures and processes to create a framework to equip South Africa to create and manage an international-class road freight industry to support the development of the industrial economy.

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