

NATIONAL DEPARTMENT OF TRANSPORT

Road Infrastructure Strategic Framework for South Africa

A Discussion Document

1. INTRODUCTION

1.1. Background

The South African road network is a major asset that gives the country a significant comparative advantage. It is, however, deteriorating rapidly as a result of a protracted period of under-funding, which, in combination with other factors, has given rise to the crisis now addressed in this report. The total extent of the road network is approximately 752 000 km, comprising approximately 532 000 km of classified roads and approximately 220 000 km of unclassified roads. Historically, many of the unclassified community access roads have been neglected.

Transport plays an important dual role in the economy, both as a direct provider of services and as a catalyst for economic integration, redistribution and development. As such, it is a sector that cannot be allowed to lag behind, despite the historical contradictions and the present constraints with which South Africa is faced.

Globally, transport is recognised as an important economic driver and the New Partnership for African Development (NEPAD) also specifically recognises the role of transport in realising Africa's economic potential. In order to address the main socio-economic challenges that South Africa faces (i.e. on the one hand competing in the global arena and on the other, redressing the serious imbalances that exist between urban and rural areas regarding, for instance, basic road infrastructure), all role players in the transport arena need to commit themselves to a thorough examination of and rethink about transport, specifically roads.

Since 1994, government has accorded roads some priority – particularly at national level with the establishment of the South African National Roads Agency Limited (SANRAL) in 1998. Road policy was spelt out in the 1996 White Paper on National Transport Policy and, to a limited extent, in the 1999 Moving South Africa (MSA) Action Agenda. Co-ordination mechanisms between the national and provincial spheres have been implemented under the umbrella of the Ministerial Committee of Ministers of Transport (MINCOM). Requirements for the integration of transport planning have been legislated in terms of the National Land Transport Transition Act of 2000, which is currently being implemented.

At present, the National Department of Transport is in the process of creating a Transport Infrastructure Division. In accordance with the prime role of national government, the Transport Infrastructure Division will co-ordinate transport infrastructure across the three spheres of government, between government departments, parastatals and agencies and across all modes of transport. In order for this new Division to fulfil its potential and purpose, it will need a well-researched and consulted strategic framework and action plan, as well as a comprehensive database on which to base future decisions and actions.

Following the consultative process initiated following the 2001 National Department of Transport discussion document, An approach to a long-term national roads plan for South Africa to meet the economic, social and development needs of South Africa, the Department undertook a comprehensive study in 2002 to develop an integrated road infrastructure development plan. The ultimate purpose of the study was to provide a practical plan of action for improved road infrastructure delivery, with buy-in from key stakeholders in both the public and private sectors.

As a complementary initiative, in September 2002 the Department submitted a Memorandum to Cabinet

(see Appendix A) in which a multi-faceted approach was recommended to deal with the roads backlog, i.e. both with regard to maintenance and rehabilitation, as well as with new developments in historically neglected areas. The memorandum contains an action plan for utilising the Medium Term Expenditure Framework (MTEF) funds, in terms of which a total amount of R 30 billion has been allocated over a five-year period to road maintenance, rehabilitation and construction. Some 10 per cent of this is specifically earmarked for rural municipal community access roads.

The above Memorandum to Cabinet has two distinct parts, namely the addressing of immediate short term road maintenance and repair needs, including the provision of roads in the rural areas and, secondly, the development of a medium- to long-term Road Strategic Framework for South Africa.

1.2. Purpose

The need for a road infrastructure strategic framework stems from the recognised fact that the South African road network of the national, provincial and municipal spheres of government is facing a number of challenges, which have to be addressed if road transport is to play a meaningful role as a catalyst for development and as an economic enabler. Examples of such challenges are:

- The improvement of integrated planning of the road network, and coordination with the rail, air and shipping modes;
- Rendering the freight modal mix more efficient, enabling some traffic currently being carried on roads to be carried by rail;
- Defining an integrated, realistic, balanced and appropriately classified network to provide necessary mobility and access to stimulate economic growth and social development;
- Creating an environment towards improving road traffic operations and maintaining assets, in which network performance and condition will be monitored regularly;
- The allocation of adequate and consistent funding for maintenance and rehabilitation, and of sufficient funding for capacity enhancement or extension of the infrastructure, thus enabling the general deterioration of the condition of the system to be halted, and enabling roads to meet their socio-economic objectives;
- Rendering law enforcement more effective, especially with regard to overloaded vehicles causing premature damage to the road infrastructure;
- Addressing the capacity shortages in some road authorities, which limit their ability to manage the road system and to implement programmes, and
- Institutional reform to increase efficiency and effectiveness in delivery and to minimise fragmentation, whilst catering for the total network, with due recognition of the current constraints in the municipal sphere.

The primary purpose of this document is then to identify suitable mechanisms and to define an action agenda for addressing the most critical challenges that prevent part of our road infrastructure fulfilling its meaningful role as a catalyst for development and as a key provider of accessibility and mobility. It addresses the following main questions:

- How should institutional arrangements be improved upon to optimise efficiency and effectiveness?
- How should the network be classified, taking functionality and ownership into account?
- How should information systems be implemented to enable optimal decision-making processes?
- What sustainable funding mechanisms should be put into place to ensure system sustainability, and how should the funding of access roads in the poorest rural and urban communities be addressed?
- How should the human capital of the roads sector be developed and capacity be extended to satisfy the demands, and what role should this sector play in alleviating poverty and unemployment?

The road infrastructure strategic framework has been developed within the context of the role that roads should play in South Africa and the present constraints in terms of delivery.

With regard to the role of roads in South Africa, the road infrastructure framework:

- Is developed within the context of South Africa as a developmental state, as described by the President, but without neglecting the need to reduce transport costs;
- Devotes detailed attention to assessing and understanding the needs of the significant user segments;
- Promotes rural development;
- Promotes the access of historically disadvantaged citizens to economic and social opportunities;
- Is developmental in nature and not exclusively orientated to financial efficiency;
- Supports government macro-economic objectives by removing constraints in latent demand in accepted development corridors and areas;
- Acknowledges the role of roads in promoting economic growth and social development within overall government policy and its role in encouraging growth potential in:
 - Minerals and their beneficiation;
 - Agriculture;
 - Agri-business, and
 - Tourism;
- Is aligned with the integrated manufacturing strategy of the Department of Trade and Industry and with developmental strategies of Government;
- Gives proper recognition to the significant role of municipal road authorities in the economic and social fabric of the country;
- Takes cognisance of the "road/rail" debate on freight haulage;
- Acknowledges possible duplication of roads within the network, but also that all demand criteria need to be satisfied, and
- Acknowledges the importance of linking up and harmonising with the SADC road network.

With regard to the efficient and effective delivery of road infrastructure, the road infrastructure framework:

- Embraces all road authorities and recognises constitutional rights;
- Embraces practicality and efficiency in institutional arrangements;
- Supports the establishment of effective co-ordinating structures throughout government (horizontally and vertically) to promote efficiency in road service delivery;
- Is based on practical and effective management procedures;
- Promotes the broadening of participation in the road programme delivery within the confines of efficiency;
- Promotes the integration of transport service delivery (not only roads);
- Promotes the concept that investment criteria should satisfy social, economic and strategic demands;
- Is founded on a sound and sustainable financial base, and
- Examines the involvement of the private sector in all aspects, including financing, in the light of potential long-term negative effects, as well as short-term gains.

1.3. Outcomes

The primary outcome is a practical plan of action for the efficient and effective service delivery of roads, for deliberation with public and private sector stakeholders.

The action plans address short- to medium-term priority areas that deleteriously affect the movement of people and goods by road safely, predictably, efficiently and at a reasonable cost, as well as the basic structural deficiencies in the system that prevent the roads function performing adequately.

For many reasons, these basic issues will need time to implement (a few months to 5 years), not the least of which is the necessity to obtain "buy in" from all involved parties. Furthermore, they must be sustainable and not viewed as a "quick fix" but as a necessity for the optimal development of the road network and system.

Priority areas that are addressed in this document include, amongst others:

- The review and the re-declaration of the separate elements of the total road network based on a revised classification approach to reflect the country's overall roads needs more appropriately;
- The assignment of the separate elements of the revised total road network to the appropriate institutional authority, with due cognisance being taken of the need to bring municipalities into the "road administration family" so that the road system operates as an integrated whole and not in a disjointed fashion as at present;
- The review of and, where necessary, the restructuring of the institutional arrangements for road planning and delivery at provincial and municipal level;
- The revision of the funding arrangements for roads, including a review of toll road policies and strategies, and recommendations for charging appropriate levies to freight transport haulers, which funds would be dedicated to road preservation, and
- The setting in place of a "capacity enhancement" process to ensure that adequate and sufficient road engineering expertise is available in the country.

Some of the proposals relating to institutional arrangements and financing currently being considered are innovative and would go a long way toward addressing the current constraints, but would mean significant changes to current practice in the medium to long term.

1.4. Layout of the Document

This document sets the framework within which detailed policies will be taken forward. Some of the proposals, upon deliberation and acceptance by the roads sector, will require legislation, which will be tabled in Parliament.

In essence, the document addresses the five main questions solicited in Section 1.2, and has been structured accordingly.

Chapter 2 deals with the efficient and effective delivery of roads in South Africa and, because delivery is to a very large extent dependent on appropriate institutional structures, deals with issues associated with improved institutional arrangements, leading to a proposed institutional restructuring. It proposes the establishment of a statutory roads co-ordinating body with representation from all three spheres of government, as well as from the National Treasury, the Department of Provincial and Local Government (DPLG) and the South African Local Government Association (SALGA). The functions of the roads co-ordinating body would include the development of uniform standards and policies, the review and normalisation of road proposals for developing provincial and municipal entities and the allocation of earmarked road funding. The chapter also makes recommendations for the establishment of roads service delivery entities in the provincial and municipal spheres of government. These recommendations have been structured in as far as possible around existing legislation to enable implementation to be fast-tracked.

Chapter 3 deals with road classification and administrative responsibility. Based on the information and arguments presented in the chapter, a functional road classification system consisting of seven classes of roads is recommended for adoption in South Africa, in which roads would be classified according to the function that they perform. The basis of this re-definition is the functional classification of the total integrated road network so that specific travel functions are allocated to the individual segments of the network. In this approach roads and streets are grouped according to the character of service they provide, so that the total network can be planned in a logical and efficient manner. With the functional classification system as a basis, the optimum allocation of segments of the local network to those authorities best suited for efficient delivery would be possible, and draft proposals to this effect are presented in the chapter. It is recommended that the proposed roads co-ordinating body carry out the allocation of administrative responsibility and delivery functions for these roads, and that financial allocations be tailored to this classification system. This approach would allow the total network to be managed more effectively for overall efficiency.

Chapter 4 deals with the need to implement and maintain appropriate information and decision support systems (referred to as intra-authority systems) in all spheres of government to support optimal decision-making processes. Current shortcomings in this regard are highlighted by the evaluation of available visual condition data obtained from the provinces. The chapter also identifies the need to implement a national information system (referred to as an inter-authority system) to support decision-making processes at the National Department of Transport and the proposed roads co-ordinating body.

Chapter 5 proposes a strategy for achieving financial sustainability. It acknowledges that financial sustainability is integrally linked with the network classification and condition, institutional arrangements, funding mechanisms and capacity for delivery. It proposes a phased approach for the allocation of additional funding for normal maintenance and for the reduction of rehabilitation backlogs on non-tolled roads, and proposes a new entity (Road Fund Administration) or, alternatively, the National Treasury, for the allocation of funds according to an agreed process. In terms of funding sources, it makes a case for increasing the fuel tax and vehicle licence fees in the short term, and for introducing externality costs, weight-distance taxes and/or congestion pricing in the medium term. With regard to toll roads, it recommends an independent review of current practice that would also formulate principles and guidelines for future toll proposals and would formalise the country's position on such roads. In terms of asset preservation, it calls for the rollout of the vehicle overloading control strategy, a substantial improvement in traffic law enforcement and the achievement of a better road/rail modal split. It also calls for the commissioning of a road needs study involving the National Treasury and comprising economists, planners, financial experts and engineers. Finally, the chapter presents proposals for supporting community access roads using the Integrated Sustainable Rural Development Programme (ISRDP) and the Urban Renewal Programme (URP) as points of departure, but which would include all community access roads in due course. Rural and urban anchor projects aligned with the rural development and urban renewal policies and strategies of government have been identified and their costs estimated. These are listed in Appendices B and C. The identified projects could be rolled out within a time horizon not exceeding 18 months.

Chapter 6 addresses the need for capacity development in line with the demands for delivery, the development of a competent, appropriately skilled work force and the role of the roads sector in employment creation and poverty alleviation. It highlights the critical shortages in human capital, particularly civil engineers, and recommends that special initiatives be mounted to increase the number of engineers through (short-term) immigration and/or to increase throughput at South African universities with fast-track mentoring towards registration. It also recommends that a Roads Academy be established to assist in the development of practitioners in the roads sector. It acknowledges that the roads sector has the capacity to absorb a significant number of workers, and, hence, that the sector is ideally positioned to create employment and alleviate poverty through targeted programmes.

Chapter 7 explores agendas for future improvements in road infrastructure so as to align it with the evolving socio-economic needs of the country. It addresses aspects such as improved integration of road transport with other modes of transport; upgrading of unpaved roads; development of more durable ("perpetual") pavements, thus reducing maintenance and rehabilitation costs; means by which the cost of transport can be reduced, leading to increased, or more efficient, economic activity; solutions for alleviating congestion; improved integration between land use planning and infrastructure provision; measures for integrating roads with the environment, etc. Most of the concepts presented would require substantial studies to assess their viability in the long term.

Chapter 8 presents the conclusions and recommendations emanating from Chapters 2 to 6. These have been translated into preliminary action agendas, which are presented in Appendix D (Action Plans) and Appendix E (Gantt charts).

1.5. Acknowledgements

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