Establishing the South African National Roads Agency: A Lesson in Organizational Leadership and Learning

By Nazir Alli and Neil Tolmie

A modern example of leadership and learning in the creation of a roads authority can be found in the South African National Roads Agency Ltd. (SANRAL), established in April 1998. The agency was created by an act of Parliament in accordance with the South African government’s commitment to transforming the public sector to make it more effective and cost-efficient.

In support of the government’s overall objective of creating “a better South Africa for all,” the Ministry of Transport produced the Transport White Paper. Among the ministry objectives listed in the paper are (1) “to improve the safety, security, reliability, and quality of transporting goods and people”; and (2) to improve the competitiveness of South Africa and its transport infrastructure and operations ... “to better meet the needs of different customer groups, both locally and globally.” As the model to implement its objectives, the ministry chose to create a roads agency, SANRAL.
speed, well-designed and -maintained roads that afford predictable and reliable travel times.

Provincial roads, making up 340,000 kilometers of the country’s roadways, provide access and mobility regionally and are provided for various economic and social reasons, such as to offer a distribution network for goods and people within the provincial boundaries linking towns, cities, and commercial and recreational centers. They are managed by the country’s provincial authorities. Finally, urban roads, managed by South Africa’s municipal authorities, are roads that provide access and mobility in urban areas. They cover a distance of 165,000 kilometers.

SANRAL was created through an initiative to transform a government department (the chief directorate, national roads, or CD:NR) into a public company. This form of operation was chosen because a public company uses business and commercial principles as its foundation and is governed by various commercial acts. The company model also introduces responsibility and accountability. The initiative was driven by the CD:NR management team with the support of its board and minister. The transformation provided an opportunity to separate the role of the policymaker/regulator (the government) from that of the operator (SANRAL), thereby allowing business and politics to be kept separate in the agency’s day-to-day operations.

As a public company operating along commercial lines, SANRAL is governed by a board of directors, with the minister of transport its sole shareholder. The eight-member board consists of six independent, nonexecutive members (including the chairman), the chief executive officer, and a representative of the minister of finance. Considering the typical reform process in South Africa, it is clear

Figure 1: The South African National Road Network

The SANRAL Mandate

SANRAL’s mandate is to plan, finance, develop, manage, and maintain the 10,800-kilometer South African National Road Network (see Figure 1). A unique feature of SANRAL is that it manages both toll and nontoll roads. A further distinctive aspect of SANRAL’s operation is that its toll-road portfolio is made up of privately concessioned toll roads and SANRAL-owned toll roads financed by loans backed by government guarantees.

South Africa’s roads are classified as either national, provincial, or urban. National roads, as their categorization implies, provide mobility in a national context. These roads, which make up the South African National Road Network, are provided primarily for economic reasons, including to link provinces and neighboring countries; ensure competitive transport modes for business, holiday, and import and export travel; and provide high-
SANRAL is operating within the public-sector reform and public-private partnership transitional phases (see Figure 2).

**Figure 2: Public-Sector Reform**

<table>
<thead>
<tr>
<th>Government</th>
<th>Private Sector</th>
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<tbody>
<tr>
<td>- National interest</td>
<td>- Profit motive</td>
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<td>- Policy levers – incentives</td>
<td>- Technology</td>
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<td>- Co-ordinate planning and development strategies</td>
<td>- Human resources – project management</td>
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<td>- Spatial integration – regional focus</td>
<td>- Access to capital</td>
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<td>- Making markets – user charges</td>
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**National-Road Reform and Commercialization**

Effective and efficient delivery through commercialization was the key concept behind the transformation of CD:NR to SANRAL. In this way, South Africa’s national roads would be brought into the marketplace, placed on a fee-for-service basis, and managed like any other business enterprise. Because roads are a public monopoly, however, and ownership of most of them will remain in government hands for some time, commercialization of the roads agency required a focus on the following:

- Creating ownership by involving road users in road management to win public support for more road funding, control potential monopoly power, and constrain road spending to what is affordable;
- Stabilizing road financing by securing an adequate and stable flow of funds;
- Clarifying responsibility by clearly establishing who is responsible for what; and
- Intensifying managerial accountability.

These principles are interdependent and should ideally be implemented concurrently in the commercialization process. Without all four, the reforms individually might only achieve part of their objectives. For example, it is not possible to solve the financing problem without the strong support of road users, and one can’t win the support of road users without taking steps to ensure that resources are used efficiently. Likewise, it is not possible to improve resource utilization unless road spending is kept affordable and managerial accountability is increased. Similarly, managers can’t be held accountable unless they have clearly defined responsibilities without bureaucratic shackles.

During the transformation process, SANRAL sought assistance from advisors in areas in which its in-house capacity was limited. This was an important use of resources, as working with advisors lent credibility to the process and comforted those affected by the change with the realization that SANRAL was restructuring for the benefit of society and not for the benefit of SANRAL alone.

Before SANRAL was established, the CD:NR was just one of several directorates in the National Department of Transport and lacked its own vision and mission. Instead, it adhered to the department’s broader vision and mission, which covered all modes of transport. SANRAL was given the opportunity to create its own, focused road-transport vision, which is “to be recognized as a world leader in the provision of a superior primary road network in Southern Africa.” Now, SANRAL strives to be “a commercially driven organization committed to achieving its vision for the economic development of the Southern African community through a
highly motivated and professional team, state-of-the-art technology, proficient service providers, and [promotion of] the ‘user pay principle.”

SANRAL was born three years after these initial thoughts.

Critical Success Factors
Several factors were critical to the success of the transformation process and required special attention:

- Political will,
- Legislation,
- Core and noncore activities,
- Organizational structure, and
- Stable funding.

Political will. Without the necessary political will for public-sector reform, the pre-1998 CD:NR would have been doomed to fail in the transformation process. In South Africa, the advent of democracy in 1994 provided an ideal opportunity for the transformation of the public sector. It now depended on the various service delivery departments within the government to provide the model that would best serve the interest of society at large.

Managing SANRAL as a commercial entity would provide several benefits, including the following:

- The introduction of a sound road management—information system for effective and efficient management of the country’s road network, including operational planning and control;
- The adoption of improved financial management procedures in accordance with generally accepted accounting principles;
- Intensified managerial accountability; and
- A professional focus in decision-making.

Legislation. Prior to April 1998, as a directorate within the National Department of Transport, the CD:NR was governed by the South African Roads Board (SARB), an autonomous body comprising eight members. The CD:NR acted as the secretariat to SARB. Creating the required transformation legislation was, therefore, not a complicated process, as the core of the legislation with respect to the functions performed by SARB was already tried and tested. The SARB legislation thus formed the basis of the new SANRAL legislation, with minor amendments to capture the concept of commercialization.

The legislation established was “to make provision for a national roads agency for South Africa to manage and control the country’s national roads system and take charge ... of the development, maintenance, and rehabilitation of national roads within the framework of government policy.”

Thus was SANRAL born as a public company, wholly owned by the state, whose governance and management would be overseen by a board of directors and a chief executive officer. The legislation also defined SANRAL’s powers and functions and financial and operational accountability, regulated its functioning, and prescribed measures and requirements in keeping with the government’s national-roads policy, including those regarding the use and protection of national roads.

Although the legislation posed one of the lesser hurdles to overcome in the transformation process, as SANRAL was fortunate enough to be able to adapt existing law, caution is advisable in cre-
ating a new agency, as poor or incomplete legislation will stifle implementation and, certainly, operations.

Core and noncore activities. With the adoption of commercial and business principles to promote effectiveness and efficiency, SANRAL had to decide on its core and noncore activities and the degree of vertical integration required; that is, what tasks SANRAL would undertake in-house. The easy part was identifying the core and noncore activities; the difficult part was managing the CD:NR staff members affected by the outsourcing of the following, noncore activities:

- Property portfolio (management of the land required for national-road purposes),
- Land surveying,
- Traffic counting,
- Design drawings, and
- Soil and bitumen testing to ensure road construction quality.

Several models were proposed, from a buyout to tendering for staff, equipment, and services. The process agreed upon by mutual consent between management and the affected staff was to publicly call for a request for proposal (RFP) to take over the identified noncore functions and the affected staff members. Because the intention was not to create any social problems for society (such as adding to the unemployed), and to capture the spirit of entrepreneurship, the RFP contained many nonnegotiable conditions combined with incentives, including:

- Guaranteed job tenure for two years;
- Minimum annual salary adjustments linked to the public sector, for two years;
- Guaranteed work for two years, at rates negotiated at the outset;
- First-right-of-refusal for any work not included in the initial work package;
- No dismissals, except for consistent poor performance and/or ill discipline; and
- Continued training in specific disciplines.

Those not opting for the above or not wishing to join SANRAL were afforded the opportunity to resign, take severance packages, transfer to other government departments, or take early retirement, where appropriate. A prerequisite for joining SANRAL was that all people “transferring” to SANRAL would have to resign from their posts as civil servants, an exceptional feature of the transformation process in keeping with the agency’s commercial nature. SANRAL’s current staff numbers 130, reflecting the agency’s streamlined nature; the CD:NR employed 330 people.

Today, the outsourcing initiative is considered a success. All initially outsourced functions remain outsourced, with some of the contracts having been renegotiated and others having been placed in the market for bidding.

Organizational structure. One of the transformation imperatives was to create within SANRAL an organizational structure that abandons the bureaucracy and hierarchy typical of traditional government departments. It is well-known that “logical” groupings of activities within an organization lead to the establishment of departments, which in turn can lead to the so-called “silo mentality” of “us versus them.” In contrast, SANRAL’s activities consist of a series of interrelated, sequential steps to accomplish a task. This relates to competencies and activities normally placed under the purview of different departments within an organization. Such competencies and activities need to be coordinated and managed together to attain an organization’s goals.
For its organizational structure, SANRAL adopted what it terms the “cluster concept,” which groups together a combination of talents and skills wherein expertise, vision, and experience are harnessed into a holistic and multidisciplined approach to the task at hand. This coordinated power of knowledge, skills, and expertise among participating specialists in a cluster reduces vagueness and complexities and the apportionment of blame associated with formal organizational relationships. The illustration in Figure 3 captures the ethos and distinctive spirit of SANRAL’s multidisciplined approach and the links between the organizational structure’s various components.

The clusters are established based on core functions, such as design and construction, tolls, routine road maintenance, finance matters, statutory control, incident management, environmental concerns, legal matters, and traffic engineering. Clusters are headed by experts in their respective fields and are represented regionally. Throughout all clusters, one sees leadership being defined by experience and know-how rather than by seniority and status.

Organizational reform in the public sector also introduced decentralization, a new phenomenon that elicited excitement from some and fear from others, as promotions, transfers, relocations, the setting up of new offices, appointments of new staff, a new work ethos, and, above all, a new organizational structure created enthusiasm among those embracing change and confusion among the uninitiated.

Changing the work culture from a bureaucratic to a commercial one was both interesting and challenging and was most effectively achieved by involving individuals who could lead the change. To achieve change, it was critical that the “change leaders” had what it took in terms of both behaviors and technical expertise. In short, they needed to possess business and technical knowledge, a will to adopt change, commitment, understanding, integrity, and honesty.

One of the biggest organizational challenges the new agency faced was achieving consistency following decentralization, as initially every region believed it had the right answers. Introducing the cluster concept resolved this matter. The new structure promotes freedom of thought, inspires initiative and participation by all, and eliminates hierarchy and bureaucracy. In addition, it contributes to a change in the approach of individuals now becoming accustomed to a participative environment, rather than a hierarchical one, that allows them the freedom to express themselves no matter their level in the organization. Moreover, the new setup encourages teamwork, communication, integrated decision-making, commitment, and accountability.

At the core of the cluster concept are Corporate Services (CS), Engineering Services (ES), and Financial Services (FS), all of which are coordinated from SANRAL’s head office. This core acts as a support system for the regional offices and deals with external bodies, including the Ministry of Transport, on policy matters. Orbiting the head office are the four decentralized regions (western, northern, eastern, and southern), whose core functions include design and construction (DC), operations and maintenance (OM), and finance and administration (FA).

Stable funding. At the time SANRAL was created, recognizing the criticalness of a stable flow of funds for the agency to carry out its mandate, the Ministry of Transport argued a strong case to the National Treasury that the latter should guarantee a sum of money to be allocated each year. The treasury, however, denied the request.
A Radical Departure

The transformation process described above requires a radical departure from conventional transportation policy as well as competent leadership to drive and manage that departure. The key elements in the process include the ability to solve problems with an effective use of limited resources in a way that removes the problems altogether. The need, therefore, is to deal with core problems rather than symptoms. The transformation process involved in creating SANRAL recognized that problem-solving tools must be robust in all agency environments, including finance, engineering, accounting, and human resources, and that those tools must be used to answer three main questions: What needs changing? To what do we change it? and, How do we effect that change?

Transformation by its nature involves a multitude of change-management issues, all of which must be addressed if success is to be the outcome. One of these is the question of how the individual employee faces the challenge of change for him- or herself as well as for the organization. Another is the ability of the organization to learn from what it is doing, to challenge the basic assumptions that govern the way it is managed, and to be ready to institute change where appropriate. SANRAL’s experience exemplifies the type of leadership and learning that a successful roads authority conveys.

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Further discussions led to the development of the “principle of assignment.” Here, it was suggested that a percentage of funds, based on the volume of fuel sold, be allocated for nontoll roads managed by SANRAL, capped at the amount reached in year five from the inception of SANRAL. This idea, also, was rejected.

Instead, the treasury chose to refine its funds-allocation process by establishing the Medium-Term Expenditure Framework (MTEF), a process by which SANRAL is informed of the funds it can expect on a rolling, three-year cycle. This provides SANRAL a degree of certainty to enable it to produce a business plan. In addition to treasury allocations, SANRAL’s current funding sources include toll income and loans:

- **Toll income.** The user pay principle is now well-established in South Africa, as toll roads were introduced to the country in 1984. Fifty percent of the 2,400-kilometer toll-road portfolio is operated by SANRAL and 50 percent is concessioned to the private sector. Concessioned projects run for 30 years, with the first having been awarded in 1998. The current toll income on SANRAL-operated toll roads is $100 million a year. SANRAL doesn’t receive any funds from the concessionaires but is entitled to a highway usage fee once a certain return on equity is reached, which usually occurs 15 to 20 years into the concession period.

- **Loans.** SANRAL is empowered, with the approval of the minister of transport and in consultation with the minister of finance, to raise funds by means of loans from any source, including the money and capital markets. SANRAL utilizes bond markets for this purpose.

Regarding its nontoll road network of 8,400 kilometers, SANRAL currently experiences a backlog of $500 million required to bring the network up to good condition (free of surface failures and providing a good ride quality). This backlog is three times SANRAL’s annual National Treasury allocation.

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