

Bakwena

N1N4 toll



Bakwena Overview

Keeping you **informed...**

Keeping you safe**e...**

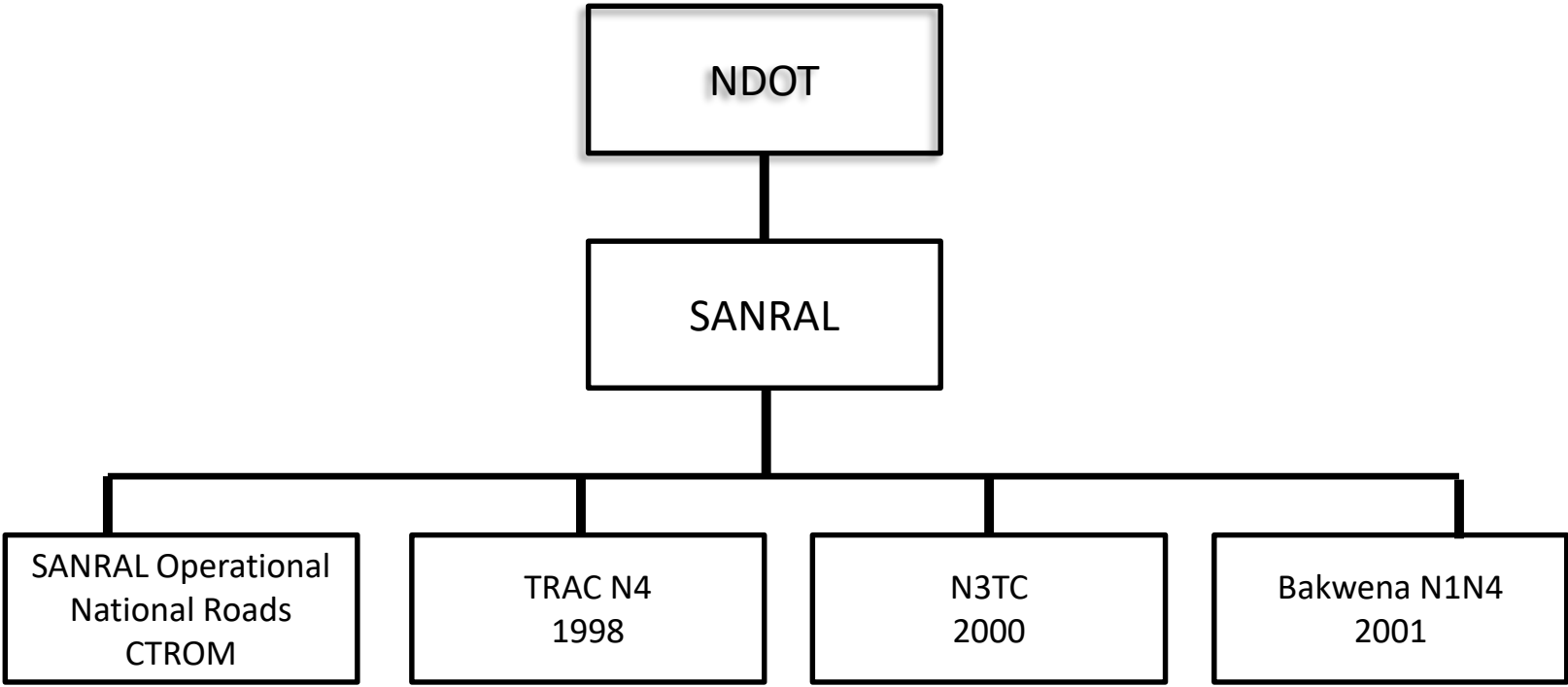
Keeping you **moving...**

DEFINITION

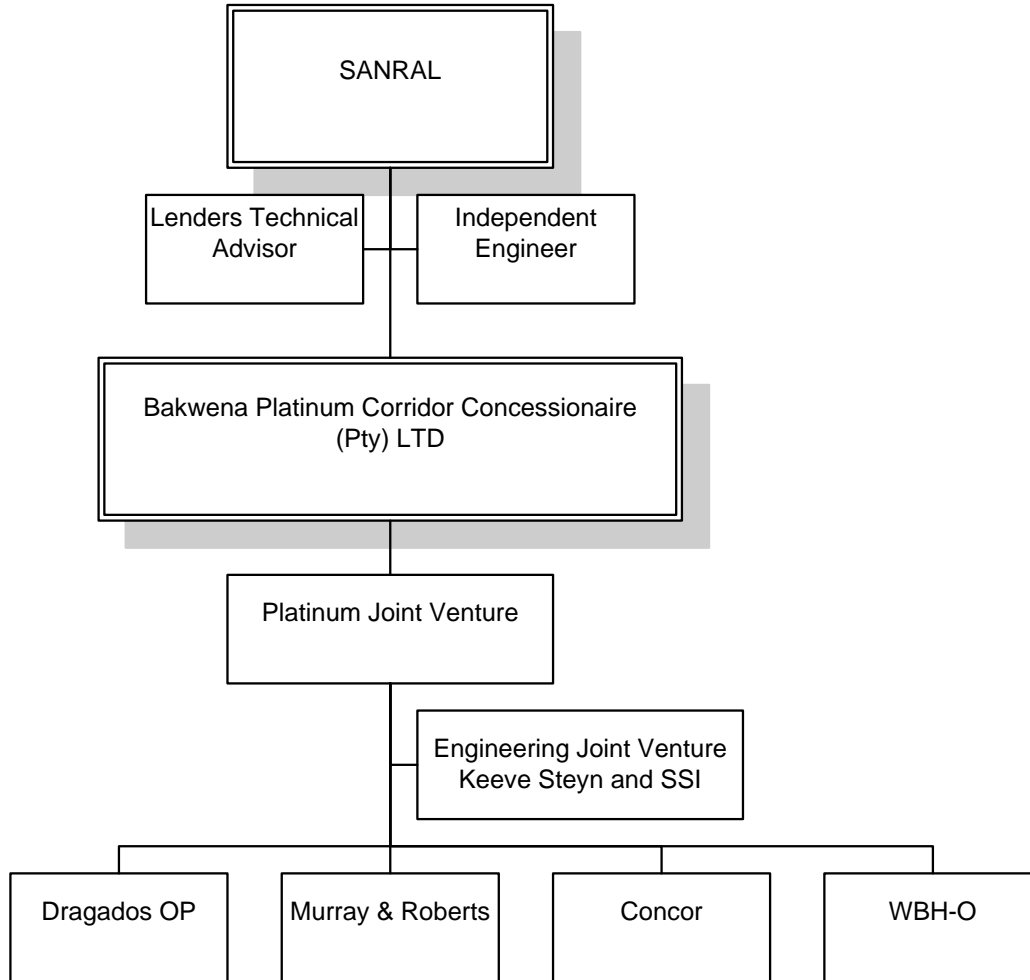
The Project is basically the

- Financing
- Construction
- Maintenance
- Upgrade and
- Operations of

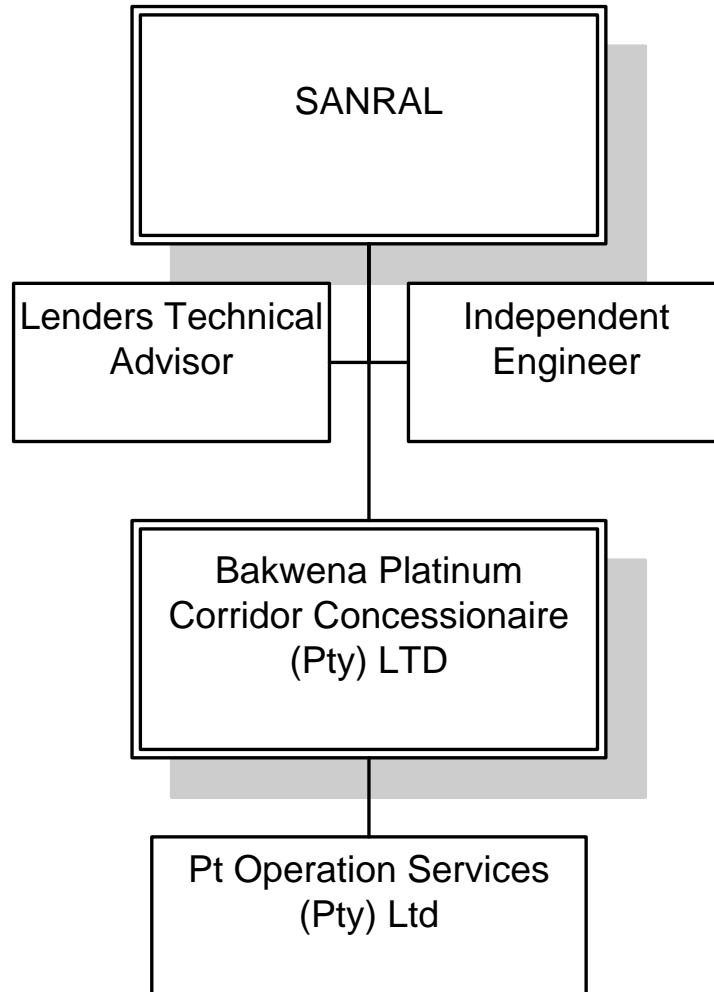
a portion of the 1 and N4 on behalf of SANRAL for 30 years.



INITIAL CONSTRUCTION WORKS



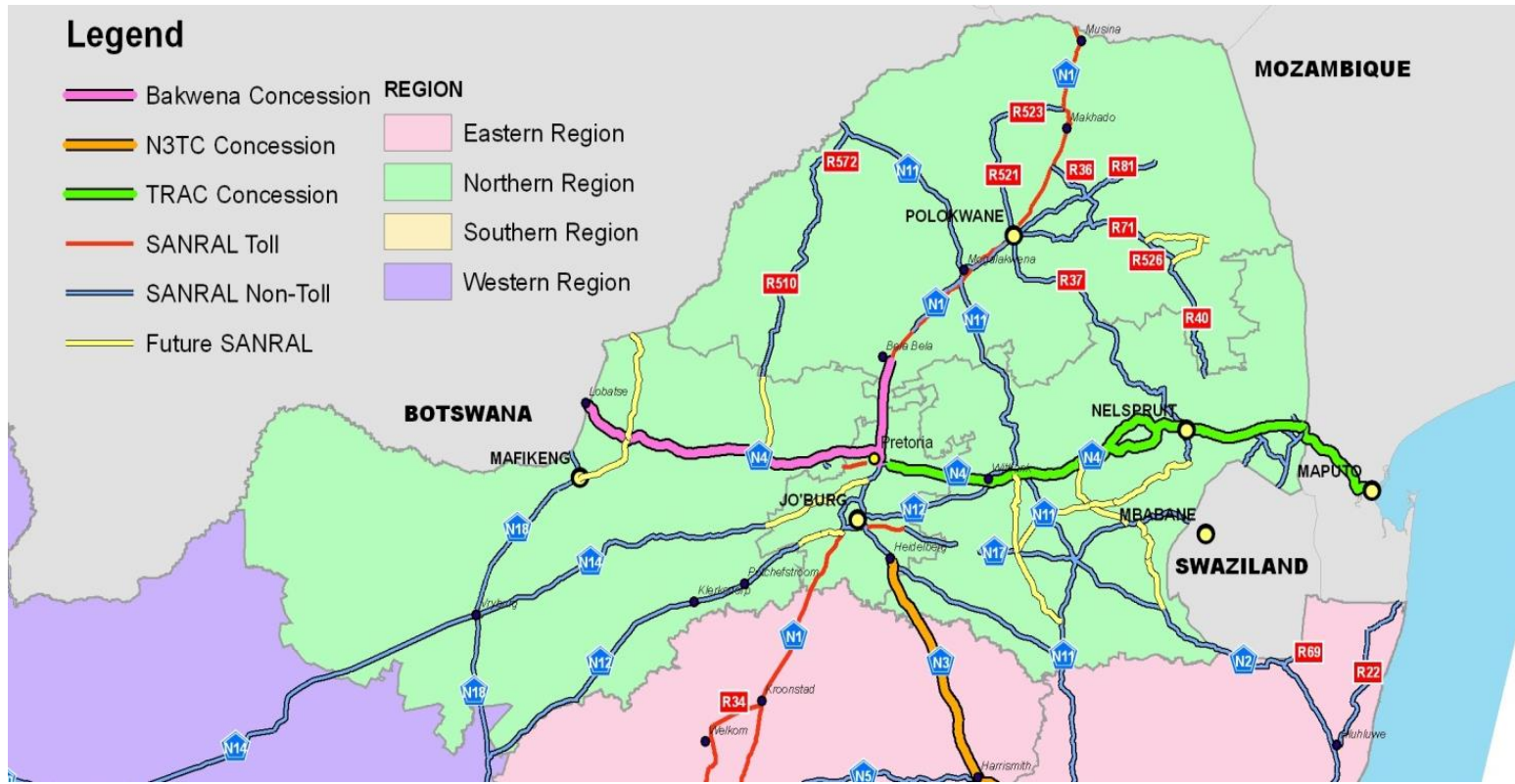
MAINTENANCE & UPGRADES



PROJECT DESCRIPTION

- The Bakwena Platinum Highway extends from Bela Bela (N1) in Limpopo Province through Pretoria, and west along the N4 to Skilpadhek in the North West Province to Botswana.
- Coupled with the N4 toll route to Maputo in the east and the Trans-Kalahari through Botswana in the west, the project forms a transport route between the East and West coast of Africa that has been dubbed 'the Trans-Africa Highway.'

ROUTE MAP



CONCESSION CONTRACT

- Bakwena is a special purpose vehicle for the project
- Consists of:
 - Concession Contract
 - 41 Agreements
 - 27 Annexures
 - Various other supporting documents
- Requirements
 - Operational
 - Technical
 - Corridor Management
 - Environmental Requirements
 - Socio-economic Obligations

REQUIREMENTS

- Operational
 - Level of service requirements to ensure reasonable free flow across full spectrum of vehicles (LOS D)
 - Queue lengths at Plazas
- Technical
 - Minimum measured criteria during Maintenance cycle
 - Minimum specifications for remaining pavement life and condition at end of contract when road is returned to the state.
 - Measurements
 - Roughness Index (IRI) Indication of the Riding Quality
 - Rutting indication of structural integrity of pavement
 - Texture indication of the skid resistance
 - Deflection Measurements with the FWD use to determine the remaining life of the pavement.

REQUIREMENTS CONT.

- Corridor Management
 - Coordination of Incident Management System
 - Load control services
 - TCC: Mantsole (N1), Bapong (N4)
 - Weigh Bridges: Zeerust, Koster, Brits, Wallmansthal, Tshwane
- Environmental Requirements
 - EIA for ICW including extensive specialist studies and public participation
 - Water use licences and permits for borrow pits
 - EMP for the ICW and maintenance period
 - Basic environmental assessment with all major upgrades

REQUIREMENTS CONT.

- Socio-economic obligations (R 36 m)
 - Creation of PDI employment opportunities
 - Allocation of opportunities to local SMMEs throughout the concession contract. Subcontracting opportunities relating to construction and operations.
 - Training obligations back-to-back on contractors. Obligations include induction, safety training and basic on site environmental training of all staff.
Encourage mentoring and development of PDI staff and SMMEs.
- Implementation of a broad range of socio-economic development projects in communities



FINANCIAL INFORMATION

- R 2.3 billion ICW project
- R 2.0 billion funded from external loans
- Private Sector Risk Funding R 600 million
- Loan period 20 Years
- R 1.6 billion for rehabilitation work during maintenance period
- R 1.5 billion for upgrade work before end of concession.
- Profit Limited by State – Highway Usage Fee
- ReFinance in 2009 – R3,6 billion

TOLL TARIFFS

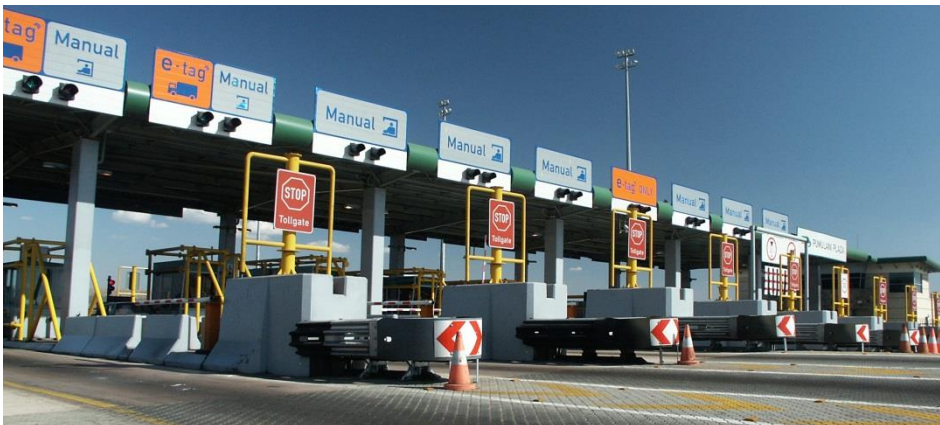
- Must cover ICW and all future costs.
- Fee exclusive for this road
- Annual fee increase linked to CPI
- Fees must be approved by SANRAL
- Determined with the following in mind
 - Value of fuel savings
 - Value of time savings
 - Capital expenditure on sector
 - Maintenance on sector
 - Project viability over 30 years = affordable tariffs
- Social Discounts
 - Separation of work/home created by old Group Areas Act.
 - Public Transport rebates in Metro Areas
 - Disproportionate use of the Toll Road

MILESTONE ACHIEVEMENTS

- 1997: National Roads Board calls for interest in the N1 / N4 highway project and pre-qualification.
- Oct. 2000: The concession contract signed, subject to conditions being fulfilled.
- Aug. 2001: Effective date (27 August)
All conditions met and Financial closure achieved.
The concession becomes effective and construction of the Bakwena Platinum Highway commences
- Mar. 2002: The first electronic toll collection plaza opens at the Carousel Toll Plaza, on the N1 near Hammanskraal.
- Dec 2004: Final Hand Over Certificate for Construction
- 2009: Refinancing was achieved. At 3,7 billion it was the largest refinancing of an infrastructure project in South African history

FACTS AND FIGURES CONT.

- 17 toll plazas
 - First time tolling Urban Commuters
 - Average of 205 000 transits per day in 2019
 - Max to date was 225 000 on 20 March 2008
 - > 500 000 e-tag transits/month (ave 1,5 m e-tag transactions/month in 2019)
 - Ave 43 500 transits per day at Zambezi in 2019
 - 200 – 300 cars processed per hour in manual lanes
 - E-tag only lanes process 850 – 1000 per hour



FACTS AND FIGURES CONT.

- 11% or 2 400 Heavy vehicles on N1 (15.2% or 3 750 Heavy vehicles per day – avg. of Pumulani & Carousel in 2019)
- 10% or 1000 Heavy vehicles on N4 (11.7% or 2 740 Heavy vehicles per day – avg. of Doornpoort, Brits & Marikana in 2019)
- 2 traffic control centres (Constructing 2nd currently)
 - 2019 – HV screened (100%) pm on N1 Mantsole (85 000) & N4 Bapong (47 000)
 - 2019 – HV weighed (25%) pm with max of 23 000 (N1) & 6 650 (N4)
 - 2019 – Ave overloaded prosecutions pm – 370 (N1) & 190 (N4)
 - Ave 250 road worthy fines pm
 - Dangerous Goods Survey
- Over R 3 billion (2008 Rand value) will be invested in maintenance and upgrading during rest of concession period
- Only toll road in SA to have Electronic Toll Collection

IMPACT OF COVID-19

- Strategic view – ESG, Business Continuity, etc.
- Personnel
 - Employees affected by the virus.
- Traffic
 - Changes in travel patterns, working environment, schooling, etc.
 - Light – Level 5 (16%), Level 4 (42%), Level 3 (72-79%)
 - Heavy – Level 5 (44%), Level 4 (64%), Level 3 (80-88%)
- Operations

REHAB STRATEGY (UNIFORM SECTIONS VS TIMING)

- Special Maintenance
 - N1 – Mill & Replace (5 projects)
- Resurfacing
 - N1 – 40mm Asphalt (2)
 - N4 – 40mm Asphalt (7), Single Seal (2), Double Seal (1), UTFC (2)
- Rehabilitation
 - Rehab + G1 + Double Seal (1)

UPGRADE STRATEGY (UNIFORM SECTIONS VS TIMING)

- Plazas
 - N1 – 1 lane (3 Plazas), 2 lanes (1 Plaza)
 - N4 – 1 lane (2 plazas), 2 lanes (2 Plazas)
- Lanes
 - N1 – 2 lanes (1)
 - N4 – 1 lanes (4), 1 lane (5)
- Interchanges
 - N1 – Lane on ramp (1)
 - N4 – Interchange upgrades (2)

Bakwena



N1N4 toll

Thank you

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Keeping you **safe**...

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