Public Infrastructure Investment Management: Reforms and Challenges

MOSF-KDI-IMF-WB International Conference on Strengthening the Management of Public Investment

Presenter: Ulrike Rwida | Public Finance, National Treasury | 30 October 2014
Outline

• Context
  – Infrastructure demand
  – Infrastructure assets
    • Water and Sanitation
    • Roads
    • Rail
    • Electricity
    • Telecommunications
• Institutional framework
• Budget reform successes
• Lessons learnt
• Current infrastructure investment reforms
  – The case of provincial roads
Context

- Gini co-efficient: 65 (World Bank, 2011)
- Real GDP growth: 1% (Q2 2014)
- Inflation rate: 5.9% (September 2014)

- 1.2 million km$^2$
- 2,798 km coastline
- 9 provinces
- 278 municipalities
- 51 million people (2011)
- 14.5 million households (2011)

- Unemployment rate (Q2 2014):
  - Narrow: 25.5%
  - Broad: 42.7%
- Repo rate: 5.75%
Infrastructure demands

Households with and without access to RDP-level services in 2011

<table>
<thead>
<tr>
<th>Metro Type</th>
<th>Access/Formal</th>
<th>NoAccess/Informal</th>
<th>Traditional Dwelling</th>
</tr>
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<tbody>
<tr>
<td>Metros</td>
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<tr>
<td>Secondary cities</td>
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<td>Large towns</td>
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<td>Small towns</td>
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<tr>
<td>Mostly rural</td>
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### Key Figures

- **Infrastructure Demands**
  - Housing
  - Electricity
  - Water
  - Sanitation
  - Refuse

- **Access/Informal**
  - A
  - B1
  - B2
  - B3
  - B4

- **Traditional Dwelling**
  - Mostly rural

- **Households with and without access to RDP-level services in 2011**
  - 7 000 000
  - 6 000 000
  - 5 000 000
  - 4 000 000
  - 3 000 000
  - 2 000 000
  - 1 000 000

NATIONAL TREASURY
Department National Treasury
REPUBLIC OF SOUTH AFRICA
Water Resource Availability

Available water 13 227 mil m³ p.a
Requirements 12 872 mil m³ p.a
Water Supply Backlog

RSA achieved MDG goal (50% backlog eradication)

Main challenges include:
- eradicate backlog
- manage service level upgrades
- illegal connections
Sanitation backlog

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<tr>
<td>Population</td>
<td>38.9</td>
<td>44.8</td>
<td>51.77</td>
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<tr>
<td>People below RDP</td>
<td>20.4</td>
<td>19.5</td>
<td>16.1 (4.5 mil HH)</td>
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<tr>
<td>% People below RDP</td>
<td>52%</td>
<td>43%</td>
<td>31%</td>
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<tr>
<td>People equal to or above RDP</td>
<td>18.5</td>
<td>25.3</td>
<td>35.6 (10.0 mil HH)</td>
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<tr>
<td>% People equal to or above RDP</td>
<td>48%</td>
<td>57%</td>
<td>69%</td>
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Main challenges:
- eradicate backlog
- manage service level upgrades
- water supply impacts of waterborne sanitation

RSA currently not achieved MDG (50% backlog eradication)
Road network
Roads

- SA has the 18th largest paved road network in the world
- Maintenance backlog of R197 billion
- National road network is 21 403km
  - 14.58% of national road network is tolled
  - 22% of national network has a useful life of less than 5 years
- Budget allocation insufficient for future national road expansions
  - Planned expansions by SANRAL of R118 billion over the next 10 years
  - If absorbed by budget, road conditions expected to deteriorate from 11% in poor/very poor conditions to 40% in poor/very poor condition by 2026
Condition of Provincial Road Network

[Diagram showing the condition of various provincial road networks with different colors representing Very Poor, Poor, Fair, Good, and Very Good conditions.]
Rail

- Rail network consists of more than 30,000 km of track, actual route distance approx. 20,100 km
- Expansion of capacity on heavy haul lines
- Improving efficiencies and reducing costs to industry
  - Aligning economic development with network infrastructure
  - Maximising value for money on existing corridors
- Policy proposal to shift general freight from road to rail
Electricity generation

Tx Network 2022
New Generation

- Existing site
- Confirmed site
- Potential site

9 x 100MW of Solar @ Upington & Paulputs

New Coal - IPP 1, 2 & 3
1200MW (2014 – 2016)
1 x 1000 (2019 – 2021)

4400MW of Wind @Various sites in 100 to 200 MW blocks – Western and Southern Cape

Ankerlig
Koeberg (Nuclear)

Medupi
Matimba
Co-Gen 2 x 200MW

Grootvlei
Central Pool
P/Storage

Kusile
Hydro Import – Maputo 1140MW

North-East Power Pool

OCGT IPP (2 x 237MW)
CCGT (3 x 269MW)
Dedisa and Avon

765kV
400kV
Current Distribution of Fibre Network

School distance from fibre node
- < 10km
- < 25km
- < 50km
- > 50km
Institutional framework

- Pre-democracy public finance management framework
  - Department of Finance approval for expenditures
  - Line item budgeting
  - Only incremental one year budgeting
  - No pre-budget policy statement
  - Provincial budgets were made by national departments
  - Little political oversight over the budget process
  - The budget tools and system were inadequate to stabilise fiscal balances and manage required policy shifts

  - Introduction of a new Constitution
    - Changes to structure, distribution of power and allocation of public finances
    - Commitment to improving the quality and coverage of public finances
Budget reform successes

1997
- Medium term expenditure framework
- Medium term budget policy statement
- Intergovernmental Fiscal Relations Act

1999
- Public Finance Management Act
- National Expenditure Survey
- Intergovernmental Fiscal Review
- Minister’s Committee on the budget

2000 - 2001
- Departments table annual reports in Parliament
- Division of Revenue Act
- Tabling of strategic plans in Parliament
- Estimates of National Expenditure and Provincial Budget Statements

2003 - 2005
- Medium Term Strategic Framework
- Introduction of the Standard Chart of Accounts
- Municipal Finance Management Act
- Capital budgetting guidelines

2006 - 2011
- Government-wide monitoring and evaluation framework
- Framework for managing programme performance information
- Guidelines on programme budget structures
- Performance information handbook and tool
- National Evaluation Policy Framework
Lessons learnt

• Clear principles and objectives of designing reforms
• Be realistic about the reform process and the speed with which it is implemented
• Political buy-in is essential
• Simple frameworks, easy to communicate and implement
• MTEF and the PFMA were implemented across government - driving policy and budgeting decisions, and financial management
Status Quo

- No uniform decision framework across government
- Quantification of costs and benefits weak
- Life cycle costs not considered
- Weak project management and monitoring
- No ex-post project evaluation
- In terms of Public Finance Management Act, systems for evaluating capital projects are the responsibility of accounting officers
- Supported by capital planning guidelines issued by the National Treasury
  - Sets out capital appraisal process for all new capital projects and the expansion of existing projects
Current reforms for infrastructure investment

• Focus on protecting existing infrastructure assets at national, provincial and local government level
  – Significant infrastructure needs require improved allocative efficiency and spending effectiveness
  – Linking conditional grant funding to asset management systems
    • Grants subject to publishing of systems specifications
    • Use grant funding to collect data
    • Use grant funding as part of capacity support for limited period
    • Building in performance incentives into grant funding systems
Case study: Provincial Roads

- Focused on adopting sound road asset management systems and collect condition and other data to inform proper planning and monitoring, on a regular basis.
- Rewarding provinces that performed well and made sensible network investments that contributed to economic growth and could therefore be sustained.
- National departments use the conditions of the grant to ensure that provinces put in place proper planning and road asset management systems.
### Case study: Provincial Roads

- **Planning requirements**
  - Road asset management plan that is compliant with the Government Immovable Asset Management Act
  - Level of service
  - Network condition and traffic volumes
  - Project lists with summary of targets as per the key performance indicators
  - Financial summary
  - Organisational and support plan

<table>
<thead>
<tr>
<th>Provincial Roads Maintenance Grant</th>
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<tbody>
<tr>
<td><strong>Transferring department</strong></td>
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<td><strong>Strategic goal</strong></td>
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<td><strong>Current purpose</strong></td>
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<td><strong>Outcome statements</strong></td>
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<td><strong>Level of service</strong></td>
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<tr>
<td><strong>Priority outcomes of government that this grant primarily contributes to</strong></td>
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<td><strong>Details contained in the business plan</strong></td>
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<tr>
<td><strong>Conditions</strong></td>
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Case study: Provincial Roads

**Conditions**

- Completion of road classification
- VCI assessments and RAMS are up to date
- Visual condition inspection data submitted to the national data repository
- First transfer conditional upon:
  - Receipt of outstanding RAMS data
  - 4th quarter report
  - Planning IRM, final RAMP and signed off project list over MTEF period
- Project selection based on RAMS

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<tr>
<th>Provincial Roads Maintenance Grant</th>
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<tr>
<td>• The third installment is dependent on receipt by DoT of the second quarter performance report for 2014/15, updated IRM and signed-off budget sheet for 2014/15 by 15 October 2014</td>
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<tr>
<td>• The fourth installment is dependent on receipt of the third quarter performance report for 2014/15, updated monthly IRM and signed-off budget sheet reporting for 2014/15 by 15 January 2015</td>
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<td>• Should the cost of repairing the disaster affected infrastructure exceed the amounts summarised below, provinces must fund that shortfall from their provincial equitable share</td>
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<tr>
<td>• The following amounts per province must be used in 2014/15 for the repair of infrastructure damaged by the natural disaster declared in Government Gazette 33949 and as amended by the National Disaster Management Centre (NDMC):</td>
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<tr>
<td>o Eastern Cape: R371.6 million</td>
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<td>o Free State: R31.3 million</td>
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<td>o Gauteng: R0.4 million</td>
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<td>o KwaZulu-Natal: R62.2 million</td>
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<td>o Limpopo: R79.6 million</td>
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<td>o Mpumalanga: R76.3 million</td>
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<td>o North West: R39.2 million</td>
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<td>o Northern Cape: R3.1 million</td>
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<tr>
<td>o Western Cape: R4.9 million</td>
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<tr>
<td>• Project selection based on RAMS assessment and must be submitted to the NDMC</td>
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<td>• Disaster reconstruction and rehabilitation funds may only be utilised for approved projects as listed in the post disaster reconstruction assessment reports and approved business plans</td>
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<tr>
<td>• Quarterly performance reports on disaster allocations must be submitted to the NDMC</td>
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<tr>
<td>• All 5 year project grants must be signed in the contract sign board with the logo Skhumbani Sosiala</td>
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<tr>
<th>Allocation criteria</th>
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<tbody>
<tr>
<td>• All grants are based on the FIME formula, which takes into account the extent of the provincial road network (gross/paved), the traffic volume, the visual condition indices on the network and geoeconomic and topographic factors</td>
</tr>
<tr>
<td>• The funding for road maintenance supporting emergency infrastructure are subject to separate allocation criteria based on the programme schedule</td>
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<tr>
<td>o Moundela must allocate at least R740 million in 2014/15 to road resurfacing projects</td>
</tr>
<tr>
<td>o Evusha Nxezi must allocate R65 million in 2014/15 for roads supporting the A2 and N2 Motorways</td>
</tr>
<tr>
<td>• The funding for rehabilitation and repair of roads must be assessed by the NDMC in subject to separate allocation criteria</td>
</tr>
<tr>
<td>• From 2014/15 the grant will become performance based</td>
</tr>
<tr>
<td>• Allocation criteria from 2014/15 award shall consider compliance by provinces to submit quarterly updated road condition data report</td>
</tr>
</tbody>
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**Reasons not incorporated in equitable share**

- This grant is intended to ensure that provinces give priority to road infrastructure maintenance and promotes efficiency in road investment

**Past performance**

- 2012/13 audited financial outcomes
  - Allocated and transferred R5.66 billion to provinces, of R7.219 billion (90 per cent) was spent by provinces

<table>
<thead>
<tr>
<th>2013/14 service delivery performance</th>
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<tbody>
<tr>
<td>• 4.5 million m² of re-surfacing of graded roads</td>
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<td>• 1 366 km of re-gravelling</td>
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<tr>
<td>• 2.7 million m² of track top patching of graded roads</td>
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<tr>
<td>• 303 252 km of graded roads (bridges)</td>
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<tr>
<td>• 42 983 (P50) scheduled</td>
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**Proposed life**

- The grant is scalable, but will be subject to periodic review

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<tr>
<th>MTEF allocations</th>
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<tr>
<td>2013/14: R5.66 billion</td>
</tr>
<tr>
<td>2014/15: R7.219 billion</td>
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<tr>
<td>2015/16: R7.682 billion</td>
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**Payment schedule**

- Payment will be made in accordance with a payment schedule agreed to with provinces and approved by National Treasury

**Responsibilities of the national department**

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<tr>
<th>Requirements</th>
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<tr>
<td>• Assess and evaluate all provinces’ Road Asset Management Plans (RAMP) and give feedback to provincial departments</td>
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<tr>
<td>• The DoT in partnership with the national Department of Public Works will assess business plans in terms of compliance to Skhumbani Sosiala and Expanded Public Works Programme (EPWP) guidelines. In addition, the two departments will monitor and assess the performance on the Skhumbani Sosiala and EPWP by provincial departments</td>
</tr>
<tr>
<td>• Assess and approve the submissions from provinces regarding the use of the maximum of R150 million for RAMS and capacity building of their infrastructure units</td>
</tr>
<tr>
<td>• Submit quarterly performance reports to National Treasury and the National Council of Provinces within 45 days after the end of each quarter</td>
</tr>
<tr>
<td>• Submit a grant evaluation report to National Treasury within 30 days after the end of the financial year</td>
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Current reforms for infrastructure investment

- Intention to expand approach to municipal roads, water and electrification
  - Will consolidated infrastructure grants be managed better?
  - How do we ensure greater involvement of sectors in the management of assets
    - Greater alignment between transferring departments and sector?
  - Where do capabilities for systems specification lie?
  - What does this mean for transferring officers if grants become subject to these systems
  - Alignment of infrastructure management policy proposals in roads and electrification
Current reforms for infrastructure investment

- Powers to regulate the PFMA
  - New Treasury Regulations are being developed
- New draft regulation on infrastructure delivery
  - Introduces the Infrastructure Delivery Management System
    - Planning, budgeting, procurement, delivery, maintenance, operation, monitoring and evaluation of infrastructure
    - Comprises of the following subsystems
      - Infrastructure planning
      - Infrastructure gateway
      - Construction procurement
      - Programme and project management
      - Operations and maintenance
  - Will apply to all departments, constitutional institutions, all public entities listed in Schedules 2, 3 of PFMA
Current reforms for infrastructure investment

Stage 1: Infrastructure planning
Infrastructure plan: a plan which identifies long-term needs and links prioritised needs to a forecasted budget for the next few years

Stage 2: Procurement planning
Construction procurement strategy: the documented delivery management strategy and contracting and procurement arrangements for the delivery or maintenance of infrastructure

Stage 3: Package preparation
Strategic brief: the document which contains the package information, risk report, the schedule of statutory permissions, funding requirements, and utility approvals, as relevant, that are to be obtained as the work proceeds and the procurement strategy for the package

Stage 4: Package definition
Concept report: the document containing the package information which sets out the integrated concept for the works, any statutory permissions and funding or utility approvals granted, a risk report and, where new infrastructure is created, a logistic support plan

Legend
SDA = service delivery agreement
IPIP = Infrastructure Programme / Project Implementation Plan
IPMP = Infrastructure Programme / Project Management Plan
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