Introduction

The aim of the infrastructure delivery improvement programme (IDIP) is to build the capacity to support improvement in the planning, procurement and management of infrastructure delivery at the provincial level. The National Treasury designed the programme in collaboration with the departments of Basic Education, Health and Public Works, the Development Bank of Southern Africa (DBSA) and the Construction Industry Development Board (CIDB).

Government invests in infrastructure, such as healthcare facilities, schools, housing and roads, in order to provide citizens with access to services and to promote social wellbeing. South Africa’s infrastructure challenges are not primarily the result of a lack of funding but are caused by institutional failures and a lack of appropriate capacity within departments. The main provincial infrastructure departments include health, education, public works, roads and transport.

The IDIP was introduced in 2004 to address these problems of lack of capacity and institutional failures which stem from four factors:

- Inadequate infrastructure planning and a lack of integration in planning, budgeting and execution
- Deficiencies in the institutional environment supporting delivery processes
- Lack within departments of the skills and capacity needed to plan and manage infrastructure delivery
- Poor information management and reporting.

This chapter reviews the three phases that the IDIP has been through and presents the medium-term outlook.
**IDIP phases**

**Phase 1: Pilot**

The first phase, initiated in July 2004, was a pilot programme to develop the methodologies and tools needed to build and support infrastructure management capacity in three selected provincial departments: Education, Health, and Roads and Transport. The pilot phase lasted for 10 months and informed the design of phase 2.

**Phase 2: Developing tools and practices**

The second phase, which began in June 2006, built on the lessons learned and practices developed in the pilot phase. A programmatic approach and management system were developed for the full rollout of the programme, which was implemented in the provincial departments of Health, Education and Public Works.

As part of phase 2, the Infrastructure Delivery Management Toolkit was developed to map out best practice delivery processes. This became the backbone on which improvement initiatives were developed in participating departments.

The Toolkit was in turn supported by a range of methodologies, including the IDIP Risk System, a Change Enablement Methodology, and a Knowledge Management Framework. Twenty-seven technical assistants were placed in provinces to ensure knowledge and skills transfer with regard to the methodologies, tools and process. An effectiveness reporting system was developed to monitor progress made by the programme.

In 2009, an independent review concluded that phase 2 of the IDIP had improved provincial capacity to plan and manage infrastructure but that provinces still needed support to institutionalise infrastructure delivery practices and build sustainable capacity.

The key challenge facing departments was the ability to ensure knowledge and skills transfer. To create sustainability, there needs to be a shift from dependence on technical assistants to a position where departmental staff assumes responsibility for the IDIP systems and tools.

A particular impediment had been the lack of adequate organisational arrangements and of people to whom to transfer the skills. It became clear that a special organisational development approach was needed to address this problem. As a result, a process was initiated to design a Human Resource Capacitation Framework.

This phase of the development of the IDIP also established provincial infrastructure management coordinating structures, led by provincial treasuries in collaboration with the provincial departments of Education, Health and Public Works within which this phase was being implemented. These structures coordinated and monitored infrastructure delivery activities in the provinces and supported the implementation of best practice approaches. Phase 2 of the IDIP development process was formally closed in March 2010.
Phase 3: Developing the infrastructure delivery management system

Based on the recommendations of the independent review of phase 2, the third phase of the development of the IDIP began in April 2010. The objective of this phase was to embed the methodologies of phase 2 and to design the appropriate human resource capacitation strategy to implement them.

In the latter part of phase 2, through the CIDB review work began on the Toolkit. The aim was to bring it into line with best practices while making it more accessible to departments.

The revised Toolkit was released on a web-based platform in October 2010 and became the basis for the development of a structured Infrastructure Delivery Management System (IDMS), which is a standardised approach to infrastructure planning, procurement and management for the public sector. The IDMS in turn allowed the Human Resource Capacitation Framework to define the appropriate capacity requirements for provincial departments of Education, Health and Public Works in line with the relevant delivery processes.

The framework focussed on the ability of infrastructure units within departments to perform tasks, produce outputs, define and solve problems and make informed decisions. It addressed four dimensions: institutions, people, and organisational behaviour and human resources systems.

To assist with institutionalising the ‘people’ dimension of the framework, through the Division of Revenue Act (DORA) funding was provided to provincial Health and Education departments so that they could employ the necessary managerial, financial and technical personnel. Key focus areas are:

- Development of appropriate organisational structures aligned to legal mandates
- Identification of IDMS functions to be performed within organisations based on approved provincial IDMS frameworks
- Identification of occupations required
- Development of IDMS job descriptions
- Competence standards
- Qualification/professional registration and skills audits.

Achievements

An independent review of phase 3 of the development of the IDIP was conducted during October and November 2013. It concluded that the following IDIP outputs supported the institutionalisation of the IDMS within provinces:

- Provincial IDMS agreements were developed to support institutional arrangements. These agreements address the key challenges as outlined in the Auditor General’s Report of August 2011.
- The Human Resource Capacitation Framework, supported by the DORA, was utilised to set out the conditions for the employment of skilled infrastructure officials within the health and education sectors.
• A pilot course (the Infrastructure Delivery Management Programme) was developed in collaboration with the University of Pretoria to formalise the IDMS methodology. This allowed *ad hoc* training activities to be structured in a formalised manner.

• A maturity model was conceptualised to measure the capability and delivery performance of departments implementing the IDMS.

• A quality assurance framework was developed, in conjunction with the Technical Assistance Unit, to support the management of consultants within the IDIP.

### Medium-term outlook

The review conducted at the end of phase 3 concluded that the IDIP had made progress in institutionalising the IDMS in some departments but that its sustainability in others was at risk. The review recommended that the IDIP should be extended for a further three years to ensure that the IDMS methodology was embedded within departments.

The design of phase 4 of the IDIP was shaped by the review recommendations. The IDIP phase 4 logical framework states that the goal of the programme is to “support Government’s strategy to improve socio-economic growth and development through improved infrastructure delivery” and the purpose is “to support the National and Provincial partners to sustainably implement the Infrastructure Delivery Management System (IDMS)”.

In order to achieve this, the IDIP will between 2014/15 and 2016/17 focus on achieving the following outputs:

• Output 1: Ensure that the IDMS is embedded in a supportive and sustainable institutional environment
• Output 2: IDMS’ business systems and processes are operational and are being used by departments to plan and manage infrastructure delivery
• Output 3: Capacity is established within the participating departments to implement, manage and maintain the IDMS
• Output 4: IDMS monitoring and reporting systems are implemented and are functional
• Output 5: IDIP is effectively managed to support the programme partners in implementing the IDMS.

### Supportive and sustainable institutional environment

The IDIP has been developed to assist provinces with infrastructure planning and delivery. However, these will not be embedded without strategic leadership and management commitment. Strategic alignment and support, and the IDMS methodology, are crucial to creating an enabling and supportive environment. Those involved with the IDIP will therefore continue to work with key stakeholders to ensure leadership alignment and thus institutionalisation of the IDMS.
Improved infrastructure planning and procurement

Infrastructure planning needs to be aligned with the strategic planning cycle, the budgeting cycle and the infrastructure delivery cycle. The IDIP’s alignment model should make alignment between planning, procurement and effective delivery more achievable.

The IDIP, through its partnership with the CIDB, supports a more strategic approach to construction procurement. It increases awareness of new procurement models intended to maximise the alignment between procuring infrastructure development and management services, and an organisation’s service delivery objectives. The models will allow departments to choose options which are the most efficient and which provide the best value in procuring and delivering infrastructure, based on organisational capacity.

Developing a performance based approach to infrastructure conditional grants

In the Medium Term Budget Policy Statement of 2012, the Minister of Finance made the following statement: “Over the next three years government aims to achieve better value for money from investment in provincial infrastructure. A new approach to infrastructure conditional grants is intended to institutionalise proper planning. Provinces will be required to bid for these allocations two years in advance and financial incentives will be built into the grant for provinces that implement best practices in delivering infrastructure.”

The performance-based incentive system was conceptualised in an effort to improve and enhance planning processes for infrastructure conditional grants for provinces. Provinces are required to bid for allocations two years in advance in order to ensure that project implementation results in better value for money.

The Division of Revenue Act (DoRA) outlines conditions and requirements that provinces need to take into account in order to comply with the reforms. Guidelines have been developed in support of the DoRA to assist departments with preparing, assessing and evaluating the performance based system.
Sustainable capacity established

Over the 2014/15 MTEF, the Human Resource Capacitation Framework will be used to achieve the following within provincial health, education and treasury departments:

- Clarification of legal mandates, roles and responsibilities for implementing the IDMS
- Development of functional organisational structures
- Development of job descriptions
- Audit of qualifications, professional registration and appropriate years of experience of technical personnel
- Recruitment of technical personnel into various infrastructure units.

With the support of higher education institutions, a structured training course based on the IDM Toolkit will be rolled out to build capacity further.

Communities of practice (CoPS) will also be established. These will enable officials responsible for infrastructure within sectors and in provinces to meet regularly to discuss infrastructure related issues, and to share knowledge and approaches to problem solving relating to the IDMS.

Monitoring and reporting functional

Monitoring and reporting on infrastructure improvement initiatives are complex because they need to deal not only with programme activities but provide evidence of the effects on performance.

During phase 3 of the IDIP, an infrastructure progression model (IPM) was piloted in two provinces to measure the impact of the IDMS within departments. The IPM measures the capability, maturity and performance of a department that is using the IDMS methodology to plan, procure, deliver and manage infrastructure; and highlights areas where further development is needed. These are addressed in the department’s improvement plan.

Effective programme management

Based on the lessons learnt during phase 3, phase 4 of the IDIP will be managed through improved management structures. A programme steering committee (PSC) made up of representatives of the participating departments will be established and will be responsible for strategic guidance of the programme.

A programme management committee (PMC) consisting of representatives of the National Treasury and the DBSA will also be established to provide oversight and governance for the programme and to promote effective cooperation between the participants. A programme support office (PSO) will also be established through the DBSA to support the National Treasury programme management team with administering and managing the programme.

The programme has established functional programme management systems to ensure effective planning, monitoring and reporting:
A results-based management (RBM) approach will be used to plan, monitor, report and manage phase 4 of the programme. Through the logical framework approach, the programme’s outcomes, outputs and performance indicators will be clearly defined. This will provide the basis for agreement between all partners about which indicators will be used to measure progress; the annual work plans for each department will also be shaped in terms of the logical frameworks.

The programme’s effectiveness will be monitored quarterly in each province, and the findings incorporated into the National Treasury’s infrastructure reports.

A quality assurance system will ensure that long-term technical assistants and relevant officials operate and deliver infrastructure projects using the logical framework approach and related work plans.

Regular risk management assessments will ensure that potential risks are proactively managed.

Programme outputs will be reviewed annually.

**Conclusion**

The IDIP and its support systems have set a benchmark in government in relation to capacity building, and the IDMS methodology provides a way of managing and institutionalising a standardised approach to infrastructure delivery.

Political and senior administrative leadership, and strong partnerships between all roleplayers, will be essential for success.