National Treasury Workshop

Application workshop (Day 1)

Standard for Infrastructure Procurement and Delivery Management (SIPDM)

Office of the Chief Procurement Officer

Provincial and Local Government Infrastructure, Intergovernmental Relations

Validation number
CESA-961-01/2020

Credits
2 ECSA CPD credit
### SIPDM Application Workshop (Day 1) outline

<table>
<thead>
<tr>
<th>Session 1</th>
<th><strong>Procurement basic processes and systems</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Group discussion on what are the perceived current shortcomings in the procurement and delivery of infrastructure</td>
</tr>
<tr>
<td></td>
<td>• The scope, coverage and location of the SIPDM within the legislative framework</td>
</tr>
<tr>
<td></td>
<td>• Generic procurement systems</td>
</tr>
<tr>
<td></td>
<td>• Differences between procurement of infrastructure and other categories</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 2</th>
<th><strong>Governance / quality management oversight arrangements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Governance and quality management concepts</td>
</tr>
<tr>
<td></td>
<td>• Control framework for the delivery of infrastructure</td>
</tr>
<tr>
<td></td>
<td>• Control framework for infrastructure procurement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 3</th>
<th><strong>Procurement and delivery management</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Delivery management</td>
</tr>
<tr>
<td></td>
<td>• Delivery management strategy</td>
</tr>
<tr>
<td></td>
<td>• Framework agreements</td>
</tr>
<tr>
<td></td>
<td>• Procurement routes</td>
</tr>
<tr>
<td></td>
<td>• Procurement strategy</td>
</tr>
<tr>
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<td>• Linkages with value for money</td>
</tr>
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Change in thinking re procurement

Under the new procurement framework, there are four key innovations to help businesses and country clients:

1. Needs and risks of a project are analysed through a Project Procurement Strategy for Development (PPSD). This analysis enables the borrower to have a strategy on how best to engage with bidder. The analysis will ensure that procurement processes are fit for purpose, allow choice, and are appropriate to the size, value, and risk of the project.

2. Value for Money has been introduced as a core procurement principle in all procurements financed by the World Bank. This means a shift in focus from the lowest evaluated compliant bid to bids that provide the best overall value for money, taking into account quality, cost, and other factors as needed.

3. The approach to resolving procurement-related complaints has been significantly improved with capacity to promptly respond to any concerns during the procurement process. A standstill period has been introduced - a pause between identifying who should win the contract and actually awarding them the contract so that other bidders can voice any concerns before a contract is actually legally formed and awarded.

4. The World Bank will be more involved in contract management of procurements with high value and high risk to ensure the best possible outcomes and that problems are resolved quickly.

New Procurement Framework and Regulations for Projects After July 1, 2016

Core procurement principles:
1. Value for money
2. Economy
3. Integrity
4. Fit for purpose
5. Efficiency
6. Transparency
7. Fairness

Governance:
1. Accountability
2. Conflict of interest
3. Eligibility
4. Complaints and contract related communications
5. Non-compliance
The National Planning Commission’s National Development Plan 2030: *Our future – make it work* suggests that the design of a procurement system that is better able to **deliver value for money, while minimising the scope for corruption** needs:

- differentiate between the different types of procurement which pose different challenges and require different skills sets
- adopt a strategic approach to procurement above the project level to balance competing objectives and priorities rather than viewing each project in isolation
- build relationships of trust and understanding with the private sector
- develop professional supply chain management capacity through training and accreditation
- incorporate oversight functions to assess value for money

NPC identified a number of shortcomings in the SCM system, namely:

- the “emphasis on compliance by box-ticking makes the system costly, burdensome, ineffective and prone to fraud”, and
- “procurement systems tend to focus on procedural compliance rather than value for money, and place an excessive burden on weak support functions.”

*When the winds of change blow, some people build walls and others build windmills.*

*Chinese proverb*
Group discussion on what are the perceived current shortcomings in the procurement and delivery of infrastructure?

Sometimes, in the winds of change, we find our true direction.
**infrastructure delivery:** the combination of all planning, technical, administrative and managerial actions associated with the construction, supply, refurbishment, rehabilitation, alteration, maintenance, operation or disposal of infrastructure

**infrastructure procurement:** the procurement of goods or services including any combination thereof associated with the acquisition, refurbishment, rehabilitation, alteration, maintenance, operation or disposal of infrastructure

**Procurement:** the process which creates, manages and fulfils contracts

**infrastructure:**

- immoveable assets which are acquired, constructed or which results from construction operations; or
- moveable assets which cannot function independently from purpose built immoveable assets

**alteration:** changing, extending or modifying the character or condition of infrastructure

**construction:** everything that is constructed or results from construction operations

**maintenance:** the combination of all technical and associated administrative actions during an item’s service life to retain it in a state in which it can satisfactorily perform its required function

**operation:** combination of all technical, administrative and managerial actions, other than maintenance actions, that results in the item being in use

**refurbishment:** modification and improvements to existing infrastructure in order to bring it up to an acceptable condition

**rehabilitation:** extensive work to bring infrastructure back to acceptable functional conditions, often involving improvements

**What is the SIPDM’s coverage?**
The planning, design and construction, supply, refurbishment, rehabilitation, alteration, maintenance, operation or demolition of infrastructure, including the procurement of goods and services necessary for a new facility, as delivered, to be occupied and used as a functional entity. This cover the SCM for Infrastructure.
Government’s Infrastructure Delivery Management System (IDMS)

IDMS comprises three core systems:
- a planning and budgeting system
- a supply chain management system
- an asset management system

These core systems:
- have forward and backward linkages
- are located within portfolio, programme and project management and operation and maintenance processes

Collectively these processes and systems, together with a performance management system, establish the institutional system for infrastructure delivery.
Standard for Infrastructure Procurement and Delivery Management (SIPDM) – scope

The scope, coverage and location of the SIPDM within the legislative framework

This standard prescribes:
• a control framework for the planning, design and execution of infrastructure projects, the tracking of such projects and the monitoring of performance
• a control framework for infrastructure procurement
• requirements for the following matters as applied to infrastructure procurement and delivery management:
  o institutional arrangements;
  o demand management;
  o acquisition management;
  o contract management;
  o logistics management;
  o disposal management;
  o reporting of supply chain management information;
  o regular assessment of supply chain management performance; and
  o risk management and internal control
• minimum requirements for infrastructure procurement

Standard does not apply to
• the storage of goods and equipment following their delivery to an organ of state which are stored and issued to contractors or to employees of that organ of state
• the disposal or letting of land
• the conclusion of any form of land availability agreement;
• the leasing or rental of moveable assets
• public private partnerships; and
• the provision of municipal services by means of external mechanisms referred to in Chapter 8 of the Municipal Systems Act.

Standard includes the procurement of goods and services necessary for a new facility as delivered to be occupied and used as a functional entity

Infrastructure procurement is defined in the SIPDM as the procurement of goods or services including any combination thereof associated with the acquisition, refurbishment, rehabilitation, alteration, maintenance, operation or disposal of infrastructure
What precisely does the Standard for Infrastructure Procurement and Delivery Management regulate?

The SIPDM regulates the following:

- The decision making process associated with procurement and the planning, design and execution of infrastructure projects through control frameworks and policies associated with the assigning of responsibilities for approving or accepting deliverable associated with a gate (control point) or the authorising of a procurement process or procedure;
- Aspects of delivery management
- Procurement processes, methods and procedures; and
- Procurement documents.

<table>
<thead>
<tr>
<th>Aspect regulated</th>
<th>Instrument used to regulate delivery management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control framework</td>
<td>Gateway reviews</td>
</tr>
<tr>
<td>Institutional arrangements</td>
<td>A suitable infrastructure procurement and delivery supply chain management policy to implement the standard</td>
</tr>
<tr>
<td></td>
<td>An agency agreement between organs of state which includes a service level agreement</td>
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<tr>
<td>Demand management</td>
<td>Service life plans and infrastructure plans, link to a Control budgets</td>
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<tr>
<td>Acquisition management</td>
<td>Implementation plans for new infrastructure or the rehabilitation, refurbishment or alteration of existing infrastructure</td>
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<tr>
<td></td>
<td>Annual procurement plans for work other than for new infrastructure or the rehabilitation, refurbishment or alteration of existing infrastructure</td>
</tr>
<tr>
<td>Contract management</td>
<td>Reporting on information obtained from exercising a contract in accordance with the provisions of the contract</td>
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<td>Logistics management</td>
<td>Suitable arrangements for the free issue of material</td>
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<td>Disposal management</td>
<td>Establishment of disposal committees to decide on how best to demolish, dismantle or dispose of unwanted, redundant or surplus materials, plant and equipment.</td>
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<td>Reporting of supply chain management information</td>
<td>Reporting to the relevant treasury on high value procurements, awards of contracts other than those recommended by a committee and annual reports</td>
</tr>
<tr>
<td>Regular assessment of the SCM performance</td>
<td>Annual performance report</td>
</tr>
<tr>
<td>Risk management and internal controls</td>
<td>Risk registers</td>
</tr>
<tr>
<td></td>
<td>Use of gates to authorise activities or commencing with next process, confirm compliance with requirements and, if necessary, to take corrective action</td>
</tr>
</tbody>
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Standard for Infrastructure Procurement and Delivery Management (SIPDM)

Constitution of the Republic of South Africa
217. Procurement.

(1) When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective.

Issued as an instruction in terms of Section 76(4)(c) of the Public Finance Management Act and is applicable to:

• a national or provincial department as defined in the PFMA
• a constitutional institution entity as listed in schedule 1 of the PFMA
• a public entity as listed in schedules 2 and 3 of the PFMA
• any organ of state which implements infrastructure delivery projects on behalf of another organ of state

Implementation date – 1 July 2016 or before

SIPDM does not require any change in Regulations to be implemented

Municipal Finance Management Act
112. (1) The supply chain management policy of a municipality or municipal entity must be fair, equitable, transparent, competitive and cost-effective and comply with a prescribed regulatory framework for municipal supply chain management, which must cover at least the following . . .

SCM Regulations 3(2)
The accounting officer may for purposes of subregulation (l)(a) make use of any Treasury guidelines determining standards for municipal supply chain management policies. . . . . . . . The accounting officer must report any deviation from the guideline standard to the National Treasury and the relevant provincial treasury.

SCM Regulations (Chapter 16A)

Issued as an instruction in terms of Section 76(4)(c) of the PFMA and is applicable to:

• a national or provincial department as defined in the PFMA
• a constitutional institution entity as listed in schedule 1 of the PFMA
• a public entity as listed in schedules 2 and 3 of the PFMA
• any organ of state which implements infrastructure delivery projects on behalf of another organ of state

Implementation by 1 July 2017
Coverage of SIPDM

Asset management and planning and budgeting are covered by other pieces of legislation.
A system is an established way of doing things and provides order and a platform for the methodical planning of a way of proceeding. Systems are underpinned by:

- **processes** - a succession of logically related actions occurring or performed in a definite manner which culminates in the completion of a major deliverable or the attainment of a milestone;
- **procedures** - the formal steps to be taken in the performance of a specific task, which may be evoked in the course of a process; and
- **methods** - a documented, systematically-ordered collection of rules or approaches

### Constitution of the Republic of South Africa
217. **Procurement** -(1) When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective.

**Procurement** is the process which creates, manages and fulfils contracts. Procurement commences once a need for goods and services of any combination thereof has been identified and it ends when the goods are received and the services are completed. There are three phases to the procurement process, namely:

- a **planning phase** during which decisions are made as to what, where and when goods and services are required, which procurement route is to be pursued and what is the number, type, nature and timing of the required contracts;
- an **acquisition phase** during which contracts are entered into following the execution of a selection procedure; and
- a **contract management** phase during which compliance with requirements, changes in requirements and risk events which manifest during the execution of contracts are managed.
Six basic procurement activities

1. Establish what is to be procured
2. Decide on procurement strategies
3. Solicit tender offers
4. Evaluate tender offers
5. Award contracts
6. Administer contracts and confirm compliance with requirements

These 6 basic activities are generic to all types and categories of procurement.

Procedures and methods used in conjunction with policies guiding the selection of options and the application thereof are required to implement these procurement processes.

Procurement documents are needed to:
- communicate to tenderers a procuring entity’s procedures and requirements up to the award of a contract
- establish the basis for the contract that is entered into with the successful tenderer.

Governance or quality oversight arrangements linked to the milestones need to be put in place to manage and control procurement processes.

SIPDM requires that procurement be undertaken in accordance with all applicable legislation and the relevant requirements of SANS 10845 parts 1 to 4.
Six basic procurement activities

1. Establish what is to be procured
2. Decide on procurement strategies
3. Solicit tender offers
4. Evaluate tender offers
5. Award contracts
6. Administer contracts and confirm compliance with requirements

Planning phase

Identify and document the packaging, contracting, pricing and targeting strategy, and selection method

Acquisition phase

Develop procurement documents in accordance with a uniform framework which:
- establish what needs to be done to submit a compliant submission and make known what the evaluation criteria and the manner in which the employer will conduct the process; and
- provide the draft contract

Contract management phase

Finalise contract i.e. the agreed terms and conditions, the prices, and the nature and quality of the goods and / or services that are required

Designated person makes a decision to proceed/not to proceed

Designated person confirms selection of strategies

Designated person(s) - Accepts procurement document (s)
- Confirms short list / prequalification list / interim evaluations

Designated person ratifies recommendations

Designated person accepts tender offer

Designated persons make decisions in terms of the contract
The objective of the **SANS / ISO 10845 series** of construction procurement standards (Parts 1 to 4) is to provide a **generic and standard set of processes, procedures and methods** for a procurement system that is **fair, equitable, transparent, competitive and cost effective** and which may, promote objectives additional to those associated with the immediate objective of the procurement itself.

**SANS 10845-1** describes generic procurement processes around which an organisation can develop a procurement system and establishes generic methods and procedures that are used in **soliciting tender offers and awarding contracts**.

Procurement documents communicate a procuring entity’s procedures and requirements relating to procurement processes up to the award of a contract and establish the **basis for the contract that is entered into with the successful tenderer**.

**SANS 10845-2** establishes a uniform format for the compilation of calls for expressions of interest, tender and contract documents, and the general principles for compiling procurement documents for supply, services and engineering and construction works contracts, at both main and subcontract levels.

**SANS 10845-4** establishes what is required for a respondent to submit a compliant submission, makes the evaluation criteria known to respondents, and establishes the manner in which the procuring entity conducts the process of calling for expressions of interest.

**SANS 10845-3** establishes what a tenderer is required to do to submit a compliant tender, makes the evaluation criteria known to tenderers, establishes the manner in which the employer conducts the process of offer and acceptance, and provides the necessary feedback to tenderers on the outcomes of the process.

**SANS 10845-2 enables** SANS 10845-3 and SANS 10845-4 and standard forms of contract to be readily referenced in procurement documents.
Elements of a generic procurement system

A procurement system comprises:
• rules and guidelines governing procedures and methods
• procurement documents which include terms and conditions
• governance / quality oversight arrangements to manage and control procurement
• organisational policies e.g.
  - the usage and application of particular procurement procedures
  - procedures for dealing with specific procurement related issues
  - secondary procurement goals and procedures
  - the assignment of responsibilities for the performance of activities

SANS 10845 parts 1 to 4 are applicable to all types of contracts i.e. supply, services and engineering and construction works contracts. Although the title of the SANS 10845 series of standards suggest that these standards apply only to procurement within the construction industry, these standard are sufficiently generic to be applied to the procurement of goods and services in other categories of procurement and sectors of an economy. Methods and procedures best suited to particular categories of procurement need to be identified from the generic procurement system.

Although the methods and procedures are generic to different categories of procurement there are very different characteristics between different categories of procurement.
### Differentiating between procurement categories

#### Differences between procurement of infrastructure and other categories

<table>
<thead>
<tr>
<th>Characteristic / consideration</th>
<th>General goods and services for consumption</th>
<th>Infrastructure</th>
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<tbody>
<tr>
<td>Satisfying the business need</td>
<td>The business need is commonly achieved through the production of a specification, which then forms a requisition for the procurement of goods or services</td>
<td>The business need is frequently satisfied though multiple contracts which need to be procured and managed in such a way that the anticipated benefits are progressively realised</td>
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| Demand management             | The demand is determined and managed through inventory / bin levels or the frequency of the required service | Demand is determined and managed during the planning phase through:  
- service life plans which are based on an assessment of current performance against desired levels of service or functionality, which reflect cost estimates of life cycle activities, and  
- infrastructure plans which provide a credible forecast of current demand and net demand for services or requirements for functionality over a period of time.  
Demand is proactively managed through the **planning, acquisition and contract management** phases through the setting and monitoring of control budgets  
Projects are delivered against established norms and standards which are designed to yield value for money |
## Differentiating between procurement categories

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<td>Risks</td>
<td>Risks are relatively low as they are typically linked to the ability of the supplier / contractor to timeously supply the required goods or to provide the required service to the standard demanded by the purchaser or employer within the tendered amount.</td>
<td>Risks are high due to uncertainties at the start of a contract which include economic circumstances, human behaviour, natural events, weather, inherent site conditions, political circumstances, community unrest, technology and technical issues, management activities and controls and individual activity. Risks can also manifest in commercial and legal relationships and weak clients as well as in the difference between estimated quantities at tender stage and final quantities at the completion of the works and the manner in which contractors are compensated for risk events for which they are not responsible for.</td>
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Risk (ISO Guide 73) is the “effect of uncertainty on objectives.”

A more expansive definition of risk is the deviation, positive or negative, from the expected on an organisation’s objectives arising from the deficiency of information relating to the understanding of an event, its consequence or likelihood.

Contractors need to assess two types of impacts of changes in production information, namely:
- direct impacts (material, labour, equipment etc);
- secondary impacts (disruption, cumulative impact, productivity loss, knock-on impact or ripple affect)
Risk taking is necessary in infrastructure projects. Risk management is all about identifying the salient risks, assessing their likelihood and deciding on how best to manage the project in the light of this information. Good practice is to assign risk to the party best able to manage it or enter into collaborative arrangements which enable risk to be proactively managed by both parties. The parties to a contract face choices on how to deal with the inherent project risks. Risks can be transferred or accepted. In some instances, insurances can be taken out to cover risks.

Option 1: risks transferred to the contractor

Option 2: risks shared between the client and the contractor

The focus in the distribution of risk is on the payment and responsibility for the cost of the event, should it materialise. The contractor tries to limit liability in contracts to a foreseeable figure. The client needs to bear in mind that increasing the risk borne by the contractor inevitably increases the price of the contract.
### Differentiating between procurement categories

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<td><strong>Final contract price of contract</strong></td>
<td>Final contract price typically equates to the quantum of goods or services which are consumed multiplied by the agreed rate</td>
<td>The final contract price in works contracts equates to the sum of the initial contract price for work which is known, the cost of changes in scope of contract (variations) to enhance quality performance or to address shortcomings which can impair performance, the amount of contract price adjustment for inflation provided for in the contract and the cost of risk events that materialise in the execution of a contract for which the contractor is not responsible.</td>
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<tr>
<td><strong>Budget, contract price and purchase order value</strong></td>
<td>Contract price is commonly adjusted to fit budget or the budget reduced to the contract amount when it is known. The purchase order amount typically equals the contract price which in turn equals the budget.</td>
<td>The budget needs to include contingences to fund changes in the scope of contract (variations) to enhance quality performance, or to address shortcomings which can impair performance, and risk events for which the contractor is not responsible. The purchase order amount may need to be adjusted to enable contingencies to be accessed. The budget, the amount due in terms of the contract and the purchase order amount are rarely the same.</td>
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**Final contract price of infrastructure contract**

\[
\text{Final contract price of infrastructure contract} = \text{initial contract price for work which is known} + \text{changes in scope of contract (variations) to enhance quality, performance or to or address shortcomings which can impair performance} + \text{contract price adjustment for inflation in terms of the contract} + \text{the cost of risk events that materialise in the execution of a contract}
\]
### Differentiating between procurement categories

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| **Conditions of contract**   | Conditions of contract describe the rights and obligations of the parties and commonly lack agreed procedures for the administration or management of the contract. Frequently a contract or a service level agreement is negotiated after the evaluation of tenders, based on the tender submission. Variations to in or modification of the terms of the contract can only be made except by written amendment signed by the parties concerned. | Conditions of contract provide terms that collectively describe the rights and obligations of contracting parties and the agreed procedures for the administration of their contract. A standard form of contract or standard contract is used. Such contracts provide fixed terms and conditions which are not varied. This is necessary to allocate risks to the parties and to provide the methodology by which adjustment to both the prices and the time for completion can be made for changes in the scope of work and for risk events for which the contractor is not at risk. This enables:  
• tenderers to take into account the allocation of risks and how the contract will be administered in their tender submissions,  
• enables tenders to be evaluated on a comparative basis,  
• reduces risk pricing and  
• compensates contractors for the occurrence of risk events for which they are not at risk without amending the contract. |
### Differentiating between procurement categories

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<tr>
<td>Interdependencies and interfaces between contracts</td>
<td>Interdependencies and interfaces between contracts are rare as the procurement commonly involves off the shelf products or readily available commodities or standard, well defined and scoped services</td>
<td>There are several interfaces and interdependencies between contracts as works (products) are developed or maintained on a site. A supply chain frequently needs to be contracted and mobilized to provide the necessary professional services, manufacture and / or supply materials, products, components and assemblies, provide the necessary equipment and labour to provide the works and to manage the implementation of the project.</td>
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#### Summary of contracts:
- 23 professional service framework contracts
- 5 construction framework contracts
- 5 supply framework contracts
- Plus several non-framework agreements

#### Example

Sol Plaatje University (Kimberley (SIPS 14))– 2014,2015 and 2016 intakes
# Differentiating between procurement categories

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<th>Characteristic /consideration</th>
<th>General goods and services for consumption</th>
<th>Infrastructure</th>
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</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>The acquisition of goods or services</td>
<td>The process which creates manages and fulfils contracts</td>
</tr>
<tr>
<td>Value for money (cost effectiveness)</td>
<td>Reducing the cost of resources used for an activity or increasing output for a given input or minimising input for a given output while maintaining quality and achieving the intended outcomes from the output</td>
<td>The optimal use of resources to achieve intended outcomes</td>
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**Focus**
- on optimising resources within an activity to improve outcomes
- choice of goods and productivity of service for a particular transaction

Focus:
- on optimising resources across the entire supply chain from inception to completion to improve outcomes
- Integration of timing and outputs of the delivery team
- management of risk throughout the whole supply chain
- trade offs between options to achieve project outcomes
Focus needs to be on the realisation of client objectives. For a project to progress meaningfully, its objectives and their achievements must be closely allied to its decision structure.

The purpose of a control system is to regulate work in relation to its changing context. The control system involves the comparing of progress against objectives and taking some corrective action where necessary:

- taking steps to change the performance of the activity to bring it closer to what was planned; or
- changing the plan so that it more closely reflects the changed situation brought about by the departure from the plan.

Hierarchy of decisions

Policy decisions are the major constraints on any project and determine the framework within which the project takes place. They set the objectives for the projects.

Strategic decisions deal with matters impinging on the project and are concerned with implementing the client’s policy within the regulated framework for projects.

Tactical decisions are concerned with the deployment of resources and the management of the project on a day to day basis.

Operational decisions relate to decisions made within a components of an activity.
A gate is a point in the infrastructure life cycle where a **decision** is required before proceeding from one **stage** to another. **Decisions** need to be based on information that is provided. A gate provides assurance that an infrastructure project:
- Remains within agreed mandates
- Aligns with the purpose for which it was conceived
- Can progress successfully from one phase to the next

A gate is a decision point but also a risk/quality oversight control and audit point.

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**Control frameworks - concepts**

**Stage n**

- **Activity**
- **Major deliverable**

**Stage n+1**

- **GATE**

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**Concepts relating to conformity based on ISO 9000**

- **Preventative action** – action to eliminate the cause of potential nonconformity or other undesirable potential situation
- **Corrective action** – action to eliminate the cause of a detected or other undesirable potential situation

**Requirement** – need or expectation that is stated, generally implied or obligatory

**Nonconformity** – non-fulfilment of a requirement

**Conformity** – fulfilment of a requirement

**Correction** – action to eliminate a detected nonconformity

**Deviation permit** – permission to depart from the originally specified requirements

**Release** – permission to proceed to the next stage of a process

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**Infrastructure Procurement and Delivery Management**

**Quality management**

**Auditing**
## Work flow (planning)

<table>
<thead>
<tr>
<th>Stage 0</th>
<th>Project initiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develop an initiation report which outlines the high level business case together with the estimated project cost and proposed schedule</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Gate 0</th>
<th>Accepted project initiation report</th>
</tr>
</thead>
</table>

### Portfolio planning processes

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Infrastructure planning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develop an infrastructure plan which identifies and prioritises projects and packages against a forecasted budget over a period of at least 5 years</td>
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<table>
<thead>
<tr>
<th>Gate 1</th>
<th>Approved infrastructure plan</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Stage 2</th>
<th>Strategic resourcing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develop a delivery and / or a procurement strategy which, for a portfolio of projects, identifies the delivery strategy in respect of each project or package and, where needs are met through own procurement system, a procurement strategy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gate 2</th>
<th>Approved delivery and / or procurement strategy</th>
</tr>
</thead>
</table>

Is the work for the provision of new infrastructure or the rehabilitation, refurbishment or alteration of existing infrastructure?

- **Yes**: Proceed to project planning processes
- **No**: Proceed with procurement

**Control framework for the delivery of infrastructure**

**Information flow**
### Project planning processes

#### Stage 3 | Preparation and briefing
---
Develop a strategic brief which defines project objectives, needs, acceptance criteria and client priorities and aspirations and which sets out the basis for the development of the concept report for one or more packages

**Gate 3 | Accepted strategic brief**

#### Stage 4 | Concept and viability
---
Develop a concept report which establishes the detailed brief, scope, scale, form and control budget and sets out the integrated concept

**Gate 4 | Accepted concept report**

#### Stage 3 | Pre-feasibility
---
Develop a pre-feasibility report which determines whether or not it is worthwhile to proceed to the feasibility stage

**Gate 3 | Accepted pre-feasibility report**

#### Stage 4 | Feasibility
---
Develop a feasibility report which presents sufficient information to determine whether or not the project should be implemented

**Gate 4 | Accepted feasibility report**
### Work flow (implementation)

#### Detailed design processes

**Stage 5**  |  **Design development**
-----|-----
Develop a design development report which develops in detail the approved concept to finalise the design and definition criteria, sets out the integrated developed design and contains the cost plan and schedule for one or more packages.

**Gate 5**  |  **Accepted design development report**

#### Stage 6: Design document-ation

**Stage 6A**  |  **Production information**
-----|-----
Produce the production information which provides, the detailing, performance definition, specification, sizing and positioning of all systems and components enabling either construction (where the constructor is able to build directly from the information prepared) or the production of manufacturing and installation information for construction.

**Gate 6A**  |  **Accepted production information**

**Stage 6B**  |  **Manufacture, fabrication and construction information**
-----|-----
Produce the manufacture, fabrication and construction information produced by or on behalf of the constructor, based on the production information provided for a package which enables manufacture, fabrication or construction to take place.

**Gate 6B**  |  **Accepted manufacture, fabrication and construction information**

#### Close out processes

**Stage 9**  |  **Package completion**
-----|-----
Correct notified defects and settle outstanding monies.

**Gate 9**  |  **Defects certificate (works only), final payment certificate and close out report**

#### Site processes

**Stage 8**  |  **Hand over**
-----|-----
User / owner takes over works complete with record information.

**Gate 8**  |  **Record information and hand over certificate**

**Stage 7**  |  **Works**
-----|-----
Complete the works so that it is capable of being occupied or used.

**Gate 7**  |  **Issued completion / delivery certificate**
Gates 3 and 4

**major capital project:** an infrastructure project or a series of interrelated infrastructure projects on a single site having an estimated cost, including those required for new facilities or systems to become fully operational, above a prescribed threshold

<table>
<thead>
<tr>
<th>Portfolio planning processes</th>
<th>Stage 0: Project initiation</th>
<th>Gate 0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 1: Infrastructure planning</td>
<td>Gate 1</td>
</tr>
<tr>
<td></td>
<td>Stage 2: Strategic resourcing</td>
<td>Gate 2</td>
</tr>
</tbody>
</table>

Is the project a major capital project where the expenditure exceeds R1,5 billion (Schedule 2) or R1,0 billion (other organs of state) or R250 million per annum for a minimum of three years (other organs of state)?

Is the project **not** a building project with or without related site works or a process-based, somewhat repetitive or relatively standardised project where the risk of failing to achieve time, cost and quality objectives is relatively low?

Output-based specifications define the client’s functional requirements for the proposed project. Such specification usually do not attempt to address how those outputs might be achieved or address all the issues covered by a strategic brief for a package

- **Stage 3:** Preparation and briefing
- **Stage 4:** Concept and viability
- **Stage 5:** Design development
- **Stage 6:** Design documentation
# Stages of delivery linked to contracting strategy

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Project inception</td>
</tr>
<tr>
<td>1</td>
<td>Infrastructure planning</td>
</tr>
<tr>
<td>2</td>
<td>Strategic resourcing</td>
</tr>
<tr>
<td>3</td>
<td>Preparation and briefing or Pre-feasibility</td>
</tr>
<tr>
<td>4</td>
<td>Concept and viability or Feasibility</td>
</tr>
<tr>
<td>5</td>
<td>Design development</td>
</tr>
<tr>
<td>6</td>
<td>Design documentation</td>
</tr>
<tr>
<td>7</td>
<td>Works</td>
</tr>
<tr>
<td>8</td>
<td>Handover</td>
</tr>
<tr>
<td>9</td>
<td>Closeout</td>
</tr>
</tbody>
</table>

The level of detail contained in a deliverable associated with the end of each stage needs to be:

- sufficient to enable informed decisions to be made to proceed to the next stage; and
- such that it can be used to form the basis of the scope of work for taking the package forward in terms of the selected contracting strategy

**Management contractor**

Contract under which a contractor is responsible for planning and managing all post-contract activities, including, if required, any design of the works or portion thereof, and for the performance of the whole of the contract.

**Design and construct**

Contract in which a contractor designs the works based on a brief provided by the client and constructs it. (Design is integrated with construction and is managed by the contractor)

**Develop and construct**

Contract based on a scheme design prepared by the client under which a contractor finalises the production information and constructs it. (The final design details are integrated with construction and are managed by the contractor)

**Design by employer**

Contract under which a contractor undertakes only construction on the basis of full designs issued by the employer. (Design is a separate function to construction and is managed by the client or his implementer)
## Comparisons of stages of delivery

<table>
<thead>
<tr>
<th>National Treasury</th>
<th>ECSA</th>
<th>SACQSP, SACAP, SACLAP</th>
<th>SACPMP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage</strong></td>
<td><strong>Description</strong></td>
<td><strong>Stage</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>0</td>
<td>Project inception</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Infrastructure planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Strategic resourcing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Preparation and briefing or Pre-feasibility</td>
<td>1</td>
<td>Inception</td>
</tr>
<tr>
<td>4</td>
<td>Concept and viability or Feasibility</td>
<td>2</td>
<td>Concept and viability (preliminary design)</td>
</tr>
<tr>
<td>5</td>
<td>Design development</td>
<td>3</td>
<td>Design development (detailed design)</td>
</tr>
<tr>
<td>6</td>
<td>Design documentation</td>
<td>4</td>
<td>Documentation and procurement</td>
</tr>
<tr>
<td>7</td>
<td>Works</td>
<td>5</td>
<td>Contract administration and inspection</td>
</tr>
<tr>
<td>8</td>
<td>Handover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Closeout</td>
<td>6</td>
<td>Close out</td>
</tr>
<tr>
<td>National Treasury</td>
<td>ESKOM (PLCM)</td>
<td>PetroSA</td>
<td>Transnet</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Stage</strong></td>
<td><strong>Description</strong></td>
<td><strong>Description</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>0</td>
<td>Project inception</td>
<td>Opportunity pipeline</td>
<td>Framing / opportunity identification</td>
</tr>
<tr>
<td>1</td>
<td>Infrastructure planning</td>
<td>Pre-project planning*</td>
<td>FEL-1 Pre-feasibility / identify and select</td>
</tr>
<tr>
<td>2</td>
<td>Strategic resourcing</td>
<td>FEL-2 Pre-feasibility / definition</td>
<td>FEL-3 Feasibility</td>
</tr>
<tr>
<td>3</td>
<td>Preparation and briefing or Pre-feasibility</td>
<td>FEL-3 Design and plan / develop</td>
<td>FEL-4 Implementation and execution</td>
</tr>
<tr>
<td>4</td>
<td>Concept and viability or Feasibility</td>
<td>FEL-5 Finalise solution</td>
<td>-. Implementation and execution</td>
</tr>
<tr>
<td>5</td>
<td>Design development</td>
<td>-. Implement</td>
<td>-. Operations and handover</td>
</tr>
<tr>
<td>6</td>
<td>Design documentation</td>
<td>-. Commissioning and handover</td>
<td>-. Operations and handover</td>
</tr>
<tr>
<td>7</td>
<td>Works</td>
<td>-. Handover</td>
<td>-. Handover</td>
</tr>
<tr>
<td>8</td>
<td>Handover</td>
<td>-. Close project</td>
<td>-. Finalise (close out)</td>
</tr>
<tr>
<td>9</td>
<td>Closeout</td>
<td>-. Close project</td>
<td>-. Finalise (close out)</td>
</tr>
</tbody>
</table>

*Linear process – not updated annually and only for a particular project*
Gateway reviews

Control framework
- requires decisions to be made on information developed during a stage before proceeding from one stage to the next
- enables independent reviews to be undertaken on the information upon which decisions are to be taken

This enables reviews to be undertaken –
- review of Stage 4 (Concept and viability)
- review of Stage 5 (Design Development)
- review of Stage 8 (Handover)

All major capital projects having an estimated capital expenditure greater than or equal to a prescribed values shall have a gateway review of the stage 4 deliverable (concept report or feasibility report) prior to acceptance of the deliverable.

Review team (not less than three people who are not involved in the project associated with the works) is led by a professional engineer, professional quantity surveyor or professional architect. Relevant treasury may nominate additional persons to serve on the team.

Code red – poses significant risks
Code amber – minor risk
Code green – aspects given adequate consideration

End of planning stage – go / no go decision required

Design development report – what is intended to be delivered
Record information – what was delivered

<table>
<thead>
<tr>
<th>Organ of state</th>
<th>Estimated cost inclusive of VAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>National department</td>
<td>R 100 million</td>
</tr>
<tr>
<td>Provincial department or metropolitan municipality</td>
<td>R 100 million</td>
</tr>
<tr>
<td>Municipality other than a metropolitan municipality</td>
<td>R 50 million</td>
</tr>
<tr>
<td>Major public entity</td>
<td>R 500 million</td>
</tr>
<tr>
<td>National government business enterprise</td>
<td>R250 million</td>
</tr>
<tr>
<td>Provincial government business enterprise</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>R 100 million</td>
</tr>
</tbody>
</table>

Relevant treasury may initiate a review of any of the end of stage deliverables.

Focus:
- Deliverability
- Affordability
- Value for money
Approval of high value major capital projects

Applies where value of projects exceeds:

- national and provincial departments and constitutional institutions > 7.5 billion
- Major public enterprises, national government enterprises, provincial government business enterprise and other public entities
  - > R 10 billion or
  - > 4% of organ of state’s total assets or
  - > 2% of organ of state’s revenue in latest audited financials

Stage 0: Project

Stage 1: Infrastructure planning

Stage 2: Strategic resourcing

Stage 3: Prefeasibility

Stage 4: Feasibility

Prepare inception report and submit to relevant treasury for their comment and recommendations

Cabinet approves if national department, constitutional institution and schedule 2, 3A and 3B public entities

Executive council if provincial department and schedule 3C and 3D public entities

Prepare prefeasibility report and submit to relevant treasury for their comment and recommendations

Relevant member of cabinet if national department, constitutional institution and schedule 2, 3A and 3B public entities

Relevant member of the executive council if provincial department and schedule 3C and 3D public entities

Prepare feasibility report and submit to relevant treasury for their comment and recommendations

Cabinet approves if national department, constitutional institution and schedule 2, 3A and 3B public entities

Executive council if provincial department and schedule 3C and 3D public entities
Control frameworks - outcomes

SIPDM 13.2 Internal control measures

The gates in the control frameworks provided in section 4 shall be used, as appropriate, to:

a) authorise the proceeding with an activity within a process, or commencing with the next process;
b) confirm conformity with requirements; or
c) provide information which creates an opportunity for corrective action to be taken

Suitable templates shall be used to record the approval or acceptance of documents at the gates provided in the control framework established in section 4.

Standard for Infrastructure Procurement and Delivery Management requires that organisational policy needs as a minimum to:

- assign responsibilities for approving or accepting deliverables associated with a gate in the control framework or authorising a tender process;
- establish committees which are required by law or equivalent quality management and governance arrangements;
- establish delegations for the awarding of a contract or the issuing of an order . . . . .

Principles

- Align with organisation’s SCM policy which allocate responsibilities to those who are best placed to make a decision
- Minimise signatures
- Include SIPDM requirements so that precise requirements are understood

NOTE: Can combine projects, contracts and orders into a single form where it makes sense.

Recommended by:

Accepted by:

Recommendation not always necessary
## Approvals and acceptances at gates

<table>
<thead>
<tr>
<th>Form no</th>
<th>Title</th>
<th>Person assigned the responsibility for approving or accepting deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0</td>
<td>Acceptance of the project initiation report</td>
<td>. . . accepts the initiation report</td>
</tr>
<tr>
<td>G1</td>
<td>Approval of the infrastructure plan</td>
<td>. . . approves the infrastructure plan</td>
</tr>
<tr>
<td>G2</td>
<td>Approval of the delivery and / or procurement strategy</td>
<td>. . . approves the delivery and / or procurement strategy</td>
</tr>
<tr>
<td>G3(PR)</td>
<td>Acceptance of the prefeasibility report</td>
<td>. . . accepts the pre-feasibility report</td>
</tr>
<tr>
<td>G3(SB)</td>
<td>Acceptance of the strategic brief</td>
<td>. . . accepts the strategic brief</td>
</tr>
<tr>
<td>G4(FR)</td>
<td>Acceptance of the feasibility report</td>
<td>. . . accepts the feasibility report</td>
</tr>
<tr>
<td>G4(CR)</td>
<td>Acceptance of the concept report</td>
<td>. . . accepts the concept report</td>
</tr>
<tr>
<td>G5</td>
<td>Acceptance of the design development report</td>
<td>. . . accepts the design development report</td>
</tr>
<tr>
<td>G6A</td>
<td>Acceptance of the production information</td>
<td>. . . accepts the parts of the production information requiring acceptance which are identified when the design development report is accepted</td>
</tr>
<tr>
<td>G6B</td>
<td>Acceptance of the manufacture, fabrication and construction information</td>
<td>. . . accepts the manufacture, fabrication and construction information</td>
</tr>
<tr>
<td>G7</td>
<td>Certification of completion / delivery</td>
<td>The contract manager certifies completion of the works or the delivery of goods and associated services</td>
</tr>
<tr>
<td>G8</td>
<td>Acceptance of handover</td>
<td>. . . accepts the hand over</td>
</tr>
<tr>
<td>G9</td>
<td>Acceptance of the close out report</td>
<td>The contract manager or supervising agent certifies the defects certificate in accordance with the provisions of the contract</td>
</tr>
</tbody>
</table>

"approve" = “officially agree to”
"accept" = “receive as adequate, valid, or suitable”
**Implementation templates**

<table>
<thead>
<tr>
<th>Form no</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0</td>
<td>Acceptance of the project initiation report</td>
</tr>
<tr>
<td>G1</td>
<td>Approval of the infrastructure plan</td>
</tr>
<tr>
<td>G2</td>
<td>Approval of the delivery management and / or procurement strategy</td>
</tr>
<tr>
<td>G3(PR)</td>
<td>Acceptance of the prefeasibility report</td>
</tr>
<tr>
<td>G3(SB)</td>
<td>Acceptance of the strategic brief</td>
</tr>
<tr>
<td>G4(FR)</td>
<td>Acceptance of the feasibility report</td>
</tr>
<tr>
<td>G4(CR)</td>
<td>Acceptance of the concept report</td>
</tr>
<tr>
<td>G5</td>
<td>Acceptance of the design development report</td>
</tr>
<tr>
<td>G6A</td>
<td>Acceptance of the production information</td>
</tr>
<tr>
<td>G6B</td>
<td>Acceptance of the manufacture, fabrication and construction information</td>
</tr>
<tr>
<td>G7</td>
<td>Certification of completion / delivery</td>
</tr>
<tr>
<td>G8</td>
<td>Acceptance of handover</td>
</tr>
<tr>
<td>G9</td>
<td>Acceptance of the close out report</td>
</tr>
</tbody>
</table>

**G1: Approval of the infrastructure plan**

[Version 1: July 2016]

*Insert logo*

*Insert data*

Read SIPDM requirements for stage in shaded area

Attach end of stage deliverable

Person making recommendation to accept / approve signs

Person designated in SCM policy signs acceptance / approval
End of stage deliverable:
An infrastructure plan which identifies and prioritises projects and packages against a forecasted budget over a period of at least five years.
A **strategic brief** which defines project objectives, needs, acceptance criteria and client priorities and aspirations, and which sets out the basis for the development of the concept report for one or more packages.

**L008: Hospitality and tourism centre with academic and support facilities**
- Project objective / site and locality / site context
- Site photographs
- Design response / design assumptions / design strategy
- Early concept: mass model development
- Early concept: section segment analysis
- Early concept: 3D sketches
- Constraints / risk assessment / organisational structure
- Acceptance criteria / output criteria
- Materiality
- Client accommodation schedule per briefing
- Space use categories and area schedule
- Space use summary and efficiency
- Design development: layout plans
- Design development: sections
- Design development: elevations

**Plate 1:**
- Service yard with storage and office
- Main circulation spine
- Teaching kitchens with restaurant kitchens, lounge and bar

**Eastern aspect**
- April 10:00am shadow

**Current concept**
- Illustration of relationship between Building L008 and L0011

**Also have a control budget**

**Sustainable timber shade devices**
End of stage deliverable:
A concept report which establishes the detailed brief, scope, scale, form and control budget, and sets out the integrated concept for one or more packages.

L008: Hospitality and tourism centre with academic and support facilities

- Project objective / site and locality / site context
- Site photographs
- Design response / design assumptions / design strategy
- Early concept: mass model development
- Early concept: section segment analysis
- Early concept: 3D sketches
- Constraints / risk assessment / organisational structure
- Acceptance criteria / output criteria
- Materiality
- Client accommodation schedule per briefing
- Space use categories and area schedule
- Space use summary and efficiency
- Design development: layout plans
- Design development: sections
- Design development :elevations

Also have a control budget
End of stage deliverables:

Stage 5: Design development
A design development report which develops in detail the approved concept to finalise the design and definition criteria, sets out the integrated developed design, and contains the cost plan and schedule for one or more packages

Stage 6A Production information:
Production information which provides the detailing, performance definition, specification, sizing and positioning of all systems and components enabling either construction (where the constructor is able to build directly from the information prepared) or the production of manufacturing and installation information for construction

Stage 6B Manufacture, fabrication and construction information:
Manufacture, fabrication and construction information produced by or on behalf of the constructor, based on the production information provided for a package which enables manufacture, fabrication or construction to take place

Note: Outline specifications need to be in sufficient detail to enable a view to be taken on the operation and maintenance implications of the design and the compatibility with existing plant and equipment

Design development report – what is intended to be delivered

Record information – what was delivered

Stage 5: Design development

Stage 8: Handover

[name of organ of state]
G5: Acceptance of the design development report

Acceptance of the design development report recommended by:
We the undersigned recommend the acceptance of the abovementioned design development report subject to the attached:
- conditions, if any; and
- portions of the production information or manufacture, fabrication and construction information that is developed during Stage 6 (Design documentation) being submitted for acceptance prior to their issue to the contractor or acceptance by the contract manager, respectively.
## Procurement gates

<table>
<thead>
<tr>
<th>Activity</th>
<th>Sub-Activity (see Table 3 of the standard)</th>
<th>Person assigned responsibility to do take key action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1* Establish what is to be procured</td>
<td>1.3 Obtain permission to start with the procurement process</td>
<td>[designated person e.g. project director or programme manager]</td>
</tr>
<tr>
<td>2* Decide on procurement strategy</td>
<td>2.5 Obtain approval for procurement strategies that are to be adopted including specific approvals to approach a confined market or the use of the negotiation procedure</td>
<td>[designated person e.g. project director]</td>
</tr>
<tr>
<td>3 Solicit tender offers</td>
<td>3.2 Obtain approval for procurement documents</td>
<td>Procurement documentation committee</td>
</tr>
<tr>
<td></td>
<td>3.3 Confirm that budgets are in place</td>
<td>[designated person e.g. programme or financial manager]</td>
</tr>
<tr>
<td>4 Evaluate tender offers</td>
<td>4.2 Obtain authorisation to proceed with next phase of tender process in the qualified, proposal or competitive negotiations procedure</td>
<td>[designated person]</td>
</tr>
<tr>
<td></td>
<td>4.7 Confirm recommendations contained in the tender evaluation report</td>
<td>Tender committee [or bid adjudication committee]</td>
</tr>
<tr>
<td>5 Award contract</td>
<td>5.3 Award contract</td>
<td>Authorised person</td>
</tr>
<tr>
<td></td>
<td>5.5 Upload data in financial management and payment system</td>
<td>[designated person]</td>
</tr>
</tbody>
</table>

* Applies only to goods and services not addressed in a procurement strategy developed during stage 2 (strategic resourcing) of the control framework for the management of infrastructure delivery
## Procurement gates (continued)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Sub-Activity</th>
<th>Person assigned responsibility to do take key action</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Administer contracts and confirm compliance with requirements</td>
<td></td>
</tr>
<tr>
<td>6.4 PG8A</td>
<td>Obtain approval to waive penalties or low performance damages.</td>
<td>[designated person]</td>
</tr>
<tr>
<td>6.5 PG8B</td>
<td>Obtain approval to notify and refer a dispute to an adjudicator</td>
<td>[designated person]</td>
</tr>
<tr>
<td>6.6 PG8C</td>
<td>Obtain approval to increase the total of prices, excluding contingencies and price adjustment for inflation, or the time for completion at the award of a contract or the issuing of an order up to a specified percentage</td>
<td>[designated person or designated persons]</td>
</tr>
<tr>
<td>6.7 PG8D</td>
<td>Obtain approval to exceed the total of prices, excluding contingencies and price adjustment for inflation, or the time for completion at award of a contract or the issuing of an order by more than 20% and 30%, respectively</td>
<td>[accounting officer or accounting authority or, depending upon the value, a appropriately delegated authority]</td>
</tr>
<tr>
<td>6.8 PG8E</td>
<td>Obtain approval to cancel or terminate a contract</td>
<td>Authorised person</td>
</tr>
<tr>
<td>6.9 PG8F</td>
<td>Obtain approval to amend a contract</td>
<td>Authorised person</td>
</tr>
</tbody>
</table>

Contract manager must apply the provisions of the contract – higher authority required to waive amounts.

Those actively involved in the project should not be empowered to initiate disputes.

<table>
<thead>
<tr>
<th>Designation</th>
<th>Specified percentage increase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prices</strong></td>
<td><strong>Time</strong></td>
</tr>
<tr>
<td>Contract manager</td>
<td>2%</td>
</tr>
<tr>
<td>Project director</td>
<td>10%</td>
</tr>
<tr>
<td>Accounting officer’s / authority’s delegate</td>
<td>20%</td>
</tr>
</tbody>
</table>

Example

Those responsible for a portfolio of projects need to be alerted to these overruns.

Accounting officer / authority or their delegate
### Control templates for infrastructure procurement

#### Templates for procurement gates and approvals

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Approval to apply the negotiated procedure</td>
</tr>
<tr>
<td>A2</td>
<td>Approval to apply the confined market procedure</td>
</tr>
<tr>
<td>PG1</td>
<td>Permission to start the procurement process</td>
</tr>
<tr>
<td>PG2</td>
<td>Approval of the procurement strategy</td>
</tr>
<tr>
<td>PG3</td>
<td>Approval of the procurement document</td>
</tr>
<tr>
<td>PG4</td>
<td>Confirmation of the budget</td>
</tr>
<tr>
<td>PG5</td>
<td>Authorisation to proceed to the next phase of the procurement process</td>
</tr>
<tr>
<td>PG6</td>
<td>Approval of tender evaluation committee recommendations</td>
</tr>
<tr>
<td>PG7</td>
<td>Acceptance of offer</td>
</tr>
<tr>
<td>PG8A</td>
<td>Approval for waiving of penalties / damages</td>
</tr>
<tr>
<td>PG8B</td>
<td>Approval for referral of disputes for resolution</td>
</tr>
<tr>
<td>PG8C</td>
<td>Approval for increases in the total of the prices or time for completion up to a specified percentage</td>
</tr>
<tr>
<td>PG8D</td>
<td>Approval for increases in the total of the prices or time for completion above a specified percentage</td>
</tr>
<tr>
<td>PG8E</td>
<td>Approval to cancel or terminate a contract</td>
</tr>
<tr>
<td>PG8F</td>
<td>Approval for an amendment to the contract</td>
</tr>
<tr>
<td>Annexure A</td>
<td>Procurement documentation review report</td>
</tr>
</tbody>
</table>

#### Templates for framework agreement gates

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG1</td>
<td>Confirmation of reasons for not inviting quotations from amongst contractors having the same scope of work</td>
</tr>
<tr>
<td>FG2</td>
<td>Approval of the procurement document</td>
</tr>
<tr>
<td>FG3</td>
<td>Confirmation of budget</td>
</tr>
<tr>
<td>FG4</td>
<td>Authorisation for the issuing of an order</td>
</tr>
<tr>
<td>Annexure A</td>
<td>Procurement documentation review report</td>
</tr>
</tbody>
</table>

#### Template for financial system gate

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS1</td>
<td>Financial data associated with a contract or an order issued in terms of a framework contract</td>
</tr>
</tbody>
</table>
Managing contingencies

ISO 6707-2, Buildings and civil engineering works – vocabulary – Part 2: Contract terms

Contingency sum – sum of money budgeted for or included in a contract to cover construction work that can be required but cannot be foreseen or predicted with certainty

Provisional sum – sum of money that is included in a contract for work that is foreseen but cannot be accurately specified at the time that the tender documents are issued

Cost control – technique of financial management that involves monitoring cost in relation to the project budget

14.5.9 Budgetary items

14.5.9.1 Provision for budgetary items in procurement documents shall as far as possible be avoided. Assumptions should rather be stated in the pricing data so that they can be priced and adjusted in terms of the contract, should these assumptions be incorrect. Where unavoidable, estimates of the likely costs may be included in the contract to cover identified work or services to be performed by a subcontractor appointed in terms of the contract.

14.5.9.2 No provision for contingencies or price adjustment for inflation shall be made in the pricing data or included in the contract price at the time that the contract is awarded or an order is issued.

Contingencies are not owned by the contract but are spread across the programme!

The stepped approach to approvals encourages the development of alternative ways of dealing with cost overruns
SIPDM requirements at Gate 8C and 8D

**Control budget**
(managed by project manager or programme manager)

**Value added taxes**

<table>
<thead>
<tr>
<th>Contingencies</th>
<th>Other</th>
<th>Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works (priced as per production information at start of contract or when order is issued)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budget for works</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount due in terms of the contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price adjustment for inflation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service and planning charges</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Value added taxes**

| Contingencies (risk plus changes in production information) |
| Works (as per original production information but paid for in terms of the contract based on a bill or quantities, price list / schedule, cost reimbursable or target cost contract) |
| Price adjustment for inflation |

**Amount due in terms of the engineering and construction contract**
(Managed by the contract manager)

- > 20% approved as per procurement gate 8D and included in the annual report
- ≤ 20% approved as per procurement gate 8C

**Step wise management of contingencies**

**What is the control budget?**

**What is due in terms of the contract?**

**What are the financial controls?**

**Total of the prices at the start of the contract or order**
Uploading of financial data

FS1: Financial data associated with a contract or an order issued in terms of a framework contract

<table>
<thead>
<tr>
<th>Component</th>
<th>Rand</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total of the prices at the award of the contract or the issuing of the order</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Estimated price adjustment for inflation</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Contingency provision (%)</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Vat</td>
<td></td>
<td>R</td>
</tr>
<tr>
<td><strong>Total of the prices</strong></td>
<td></td>
<td><strong>R</strong></td>
</tr>
</tbody>
</table>

Recommendation for uploading on the financial system made by:

[name of person]

[Designation]  Signature:  Date:

Acceptance for uploading made by:

[name of designated person – see SCM policy]

[Designation]  Signature:  Date:

Approvals at gate 8C and gate 8D required to authorise the increasing of this amount
Demand management through control budgets

**G0**: Project initiation

**G1**: Infrastructure planning

**G2**: Strategic resourcing

**G3**: Preparation and briefing

**G4**: Concept and viability

**G5**: Design development

**G6**: Design documentation

**G7**: Works

**G8**: Handover

**G9**: Package completion

**Budgeting – first estimate**

**Strategic brief** includes:
- establish the **control budget** for the package, ownership costs and schedule for the package or series of packages

**Concept report includes**:
- establish the feasibility of satisfying the strategic brief for the package or series of packages within the control budget established during stage 3 and, if not, motivate a revised control budget

**Design development report** includes:
- confirm that the package or series of packages can be completed within the control budget or propose a revision to the control budget

**Control budget** may need to be adjusted to account for tender price at start of works and during the execution of the works to release contingencies which are not required.

**Changes delivery culture from “pay for what is designed / pay as you go” to “deliver infrastructure within an agreed budget”**

**Demand management: 6.6** Costs shall be proactively managed through the setting and proactive monitoring of **control budgets** for projects through the project planning, detailed design and site processes.

**control budget**: the amount of money which is allocated or made available to deliver or maintain infrastructure associated with a project or package, including site costs, professional fees, all service and planning charges, applicable taxes, risk allowances and provision for price adjustment for inflation.
What differentiates construction works from other categories?

Infrastructure in the form of construction works may be purchased as existing functional entities or as a completed product. In most instances the acquisition of new construction works requires that products be developed on a site necessitating the procurement and delivery management of a network of suppliers, including subcontractors. Similarly, procurement and delivery management is required to alter, refurbish or rehabilitate existing construction works.

**Delivery management** is the organisation, administration, and supervision of processes which when combined into a comprehensive plan, provides the business and technical functions needed to successfully achieve the required project outcomes.

**Procurement and delivery management outcomes** in construction works projects are sensitive to the decisions made during the planning, design and execution of such projects as well as during procurement processes. Procurement yields the necessary resources to delivery projects while delivery management deals with the management of projects which collectively delivery strategic objectives and realise anticipated benefits.

**Rigorous governance and quality management arrangements** are required to create the business value and to minimize the risks associated with the delivery of new construction works and the alteration, refurbishment or rehabilitation of existing construction works so that objectives can be achieved with reasonable assurance and minimal surprises.
Differentiating between supply chains

**General goods and services**
- Demand management
- Sourcing
- Purchasing
- Receipt of goods
- Storage of goods
- Issuing of goods to employees

**Demand**
- Management

**Sourcing**
- Well defined and scoped services
- Off the shelf products / readily available commodities

**Procurement**

**Major differences**
- Different skills set and risks

**Infrastrucure**
- Infrastructure processes
- Works (products) developed or maintained on a site

**Portfolio planning processes**
- Project planning processes
- Detailed design processes
- Site processes
- Close out processes

Goods and services consumed by officials in the discharge of their duties

Infrastructure is required for officials to perform their duties or create or maintain economic infrastructure which provides improvements or efficiencies in services, production or export capabilities
Procurement is the process which creates, manages, and fulfils contracts.

Delivery management is the organisation, administration, and supervision of processes which, when combined into a comprehensive plan, provides the business and technical functions needed to successfully achieve the required project outcomes.
### Role players in the delivery of infrastructure

**Client team**

**Client**
- As *sponsor* initiates, commissions and pays for the project, owns the business case and leads the project
- As *implementer*
  - oversees
    - management of scope;
    - programmes to realise specific benefits;
    - projects which progress implementation;
    - budgets and cash flows;
    - procurement of implementation resources;
    - the payment of contracted persons and the accounting for expenditure;
    - compliance with legislation;
    - etc.
  - provides client direction to and accepts the outputs of the delivery team
  - leads engagements with stakeholders and utilities
  - etc

**Delivery team**

**Project manager** – delivers the development and implementation of the project

**Design team** – integrates client’s requirements into workable solutions

**Supply team (manufacturer and constructor)** – manufacture or provide new infrastructure or rehabilitate, refurbish or alter existing infrastructure

**Support services** – provide professional support services in areas such as health and safety, environmental compliance, cost control, geotechnical investigations, traffic studies etc.

**Stakeholders**

**Treasury** – budgets for and controls financial expenditure

**Custodian** - the caretaker of infrastructure throughout its lifecycle

**End user** – the beneficiary of the business case

**Affected communities** – the communities that are impacted upon by the projects

**Regulators and utilities** – have interfaces with the works
Delivery team (common roles and responsibilities)

**Contract manager**

administers a contract or an order on behalf of the employer

**Designer**

provides design or conditional assessment services

**Lead designer**

establishes and refines the design approach or solution so that it achieves the required standards and is co-ordinated within the project team

**Health and safety agent**

assumes statutory responsibilities imposed by the Construction Regulations and leads health and safety risk management compliance processes

**Cost controller**

provides independent and impartial estimation and control of the cost of constructing, rehabilitating and refurbishing infrastructure

**Procurement leader**

oversees the development of the procurement documents and manages the procurement process

**Manufacturer / Constructor**

manufactures or provides new infrastructure or rehabilitates, refurbishes or alters existing infrastructure

**Supervising agent**

confirms that the works are proceeding in accordance with the provisions of the contract

**Project manager**

delivers the development and implementation of the project and administers professional service contracts on behalf of the client

**Project leader**

leads and directs the design team in a non-technical role including the monitoring and integration of the activities, development and maintenance of a schedule, monitoring of progress and facilitation of the client acceptance of an end of stage deliverable

One person may perform more than one role / function
Delivery management responsibilities are usually assigned to a delivery manager.

A delivery manager:
- sets the team up for successful delivery and removes obstacles or blockages to progress; and
- directs the project in such a manner that the value that is expected at the end of the project is achieved.
Project, programme and portfolio management

**Portfolio management**
Management of initiatives and changes that collectively will deliver strategic objectives

**Programme management**
Management across a group of projects to realise the anticipated benefits

**Project management**
Management of time, cost and quality to deliver the required capabilities

Do the **right** things

In the **right** way

Do them **well**

**Service delivery**
Results

**Stakeholder value**
Benefits

**Quality deliverables**
Capability

Growing synergy

Project management is the **application of knowledge, skills, tools and techniques to project activities to meet project requirements**

Programme management is the process of managing multiple ongoing projects
A client needs the resources to perform the implementation function

Implementation responsibilities?

- Client transfers some or all implementation responsibilities to an agent
- Client retains full responsibility implementation responsibilities

Client functions as both sponsor and implementer

- Procure private sector agency or advisory services
- Delegate / assign implementation responsibilities to another organ of state
- Assign implementation responsibilities to a division within the client organisation
5.2 An agency agreement shall be entered into between organs of state where responsibilities for implementation are assigned or delegated. Such an agreement shall:

- establish principles and requirements relating to the recovery of costs associated with the rendering of the service, claims for payments made on an agency basis including the release of retention sums, the settling of claims for payment and the documentation required to accompany such claims; and

- include a service delivery agreement which as relevant sets out at least the following:
  - overall aims, objectives and priorities;
  - governance structures;
  - reporting requirements;
  - the scope of the services to be performed by the implementer during each financial year;
  - the projects and packages which are included in the infrastructure plan which are to be delivered and the time frames for doing so;
  - the roles and responsibilities of the parties to the agreement, including requirements for the engagement and management of stakeholders;
  - delegations to the implementer to accept end of stage deliverables on an agency basis;
  - contributing resources including human resources; and
  - dispute resolution procedures.

5.3 The agency agreement shall be reviewed annually and amended or revised as necessary.

5.4 The implementer’s supply chain management system shall be used to procure goods or services or any combination thereof for infrastructure covered by the agency agreement.
**Framework agreements**

**framework agreement**: an agreement between an organ of state and one or more contractors, the purpose of which is to establish the terms governing orders to be awarded during a given period, in particular with regard to price and, where appropriate, the quantity envisaged.

**order**: an instruction to provide goods, services or any combination thereof under a framework agreement.

14.3.4 Orders:

- shall cover only goods or services or any combination thereof, falling within the scope of work associated with the agreement;
- may **not be issued after the expiry of the term of the framework agreement**; and
- may **be completed even if the completion of the order is after the expiry of the term**

---

**Dictionary definition**

- *Sum of money for which something is purchased*
- *The actual cost of acquiring something calculated according to some specific measure or an estimate of what the transaction is worth*

**Allows the employer to procure on an as-instructed basis (call offs) over a set term without committing to any quantum of work**
Shift in thinking regarding works

Current paradigm
Client appoints a professional team to design the works
Open tenders are called once the production information has been finalised by the professional team

(production information which provides the detailing, performance definition, specification, sizing and positioning of all systems and components enabling either construction (where the constructor is able to build directly from the information prepared) or the production of manufacturing and installation information for construction)
Contractor prices the production information
Contractors are contracted on the basis of a bills of quantity for a single project (which may or may not include budgetary items to cover aspects of the works which have not been finalised)

Procuring a particular works

Work packages delivered over a term by a single contractor

Procuring a construction service over a period of time

Package orders

Short-term “hit-and-run” relationships focused on one-sided gain

Long-term relationships focused on maximising efficiency and shared value

Culture change

58
Principles associated with the putting in place of framework agreements

14.3.1a) Framework agreements may be entered into with contractors by inviting tender offers to **enter into a suitable contract** for the required work, using stringent eligibility and evaluation criteria to ensure that **contracts are entered into with only those contractors who have the capability and capacity to provide the required goods, services or works**

14.3.2 The **term of a framework agreement is not to exceed:**
- **three years** in the case of all organs of state other than a major public entity, a national government business enterprise or a provincial government business enterprise; or
- **four years** in the case of a major public entity, a national government business enterprise or provincial government business enterprise

14.3.3 Framework agreements that are entered into are **not to commit an organ of state to any quantum of work beyond the first order**, or bind the employer to make use of such agreements to meet its needs. The employer **may approach the market** for goods or services or any combination thereof, whenever it considers that **better value** in terms of time, cost and quality may be obtained.

---

**Zero value contract**

Framework agreements that are entered need to set out:
- the **terms** which are applicable for the term of the contract;
- the manner in which **orders** are instructed;
- the **scope of work** covered by the agreement; and
- the basis by which contractors will be **remunerated** for work performed in terms of an order, if and when such an order is issued.

**Value created through issuing of orders which are read together with the framework contract**
Framework agreements covering the same scope of work

Clause 14.3.1b) permits a limited number of framework agreements to be entered into based on projected demand and geographic location.

14.3.5 The issuing of orders with a number of framework contractors covering the same scope of work may be made with and without requiring competition amongst framework contractors. Where competition is required amongst framework contractors, it needs to be conducted in a non-discriminatory manner such that competition is not distorted.

14.3.6 Competition amongst framework contractors for orders need to take place where there is no justifiable reason for issuing an order to a particular framework contractor such as:

a) the framework contractor provided the most economical transaction when the financial parameters included in the contract are applied and has the capacity to deliver;
b) the required goods, services or works cannot technically or economically be separated from another contract or order previously performed by a specific contractor;
c) the service or works being instructed are largely identical to work previously executed by that contractor;
d) the value of the order is less than the threshold for the quotation procedure;
e) the schedule for delivery necessitates that each of the framework contractors be issued with orders on a continuous basis; or
f) capacity to execute the order;

Can have one framework agreements for a defined scope
Ideally not more than 3 but certainly not more than 5

The inviting of quotations from amongst framework contractors covering the same scope of work is not the default option.

Used only where there are no justifiable reasons for not doing so

NB only enter into a limited number of framework agreements covering the same scope of work
Use of a framework agreement by another organ of state

Use of an organ of state’s framework agreement by another organ of state

An organ of state may request in writing to make use of one or more framework contracts entered into by another organ of state. Such a request, signed by the accounting officer or accounting authority of that organ of state, shall:

a) outline the scope and anticipated quantum of work associated with the work that is required;
b) provide a motivation for the use of the framework agreement; and
c) detail the benefit for the state to be derived from making use of the framework agreement.

The accounting officer or accounting authority may approve a request made to make use of the organ of state’s framework contract, conditionally or unconditionally, if:

a) the framework agreement was put in place following a competitive tender process;
b) confirmation is obtained that the framework contract is suitable for the intended use and the required goods, services and works fall within the scope of such contract;
c) the framework contractor agrees in writing to accept an order from that organ of state;
d) the organ of state undertakes to pay the contractor in accordance with the terms and conditions of the agreement; and
e) the term of the framework agreement does not expire before the issuing of the required orders.

Can include the following in the contract:

<table>
<thead>
<tr>
<th>10.1</th>
<th>The Employer is:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) XXXX as represented by . . . . . .</td>
</tr>
<tr>
<td></td>
<td>Address . . . . . . . . ; or</td>
</tr>
<tr>
<td></td>
<td>b) YYYYYY as named in and represented by the person as stated in a Package Order.</td>
</tr>
</tbody>
</table>
Control framework for framework agreements

Activity 1: Establish what is to be procured

Activity 2: Decide on procurement strategies

Activity 3: Solicit tender offers

Activity 4: Evaluate tender offers

Activity 5: Award contract

Activity 6: Administer contract and confirm compliance with requirements

Approval for:
A – waiving of penalties / damages
B – referral of disputes
C – changes to price or time above a margin
D – exceeding authorised price or time
E – cancelation or termination
F – contract amendment

Stage 2
Gate 2
Strategic resourcing
Approved delivery and / or procurement strategy

Framework agreement in place?

Is there more than one framework contract covering the same scope of work?

Are there justifiable reasons for not inviting quotations?

Issue order

Confirmation of reasons for not inviting quotations

Inviting quotations from all framework contractors

Approval of procurement documents

Confirmation of budget

Authorisation for issuing of order

PG1

PG2

PG3

PG4

PG5

PG6

PG7

FG1

FG2

FG3

FG4

FG8

FG8 A-F
## Framework gates

<table>
<thead>
<tr>
<th>Activity</th>
<th>Key action</th>
<th>Person assigned responsibility to perform key action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 FG1</strong></td>
<td>Confirm justifiable reasons for selecting a framework contactor where there is more than one framework agreement covering the same scope of work</td>
<td>[designated person]</td>
</tr>
<tr>
<td></td>
<td>Confirm reasons submitted for not requiring competition amongst framework contractors or instruct that quotations be invited</td>
<td></td>
</tr>
<tr>
<td><strong>3 FG2</strong></td>
<td>Obtain approval for procurement documents</td>
<td>[designated person]</td>
</tr>
<tr>
<td></td>
<td>Grant approval for the issuing of the procurement documents</td>
<td></td>
</tr>
<tr>
<td><strong>4 FG3</strong></td>
<td>Confirm that budgets are in place</td>
<td>[designated person e.g. programme manager or financial director]</td>
</tr>
<tr>
<td></td>
<td>Confirm that finance is available so that the order may be issued</td>
<td></td>
</tr>
<tr>
<td><strong>6 FG4</strong></td>
<td>Authorise the issuing of the order</td>
<td>Authorised person</td>
</tr>
<tr>
<td></td>
<td>If applicable, review evaluation report and confirm or reject recommendations. Formally accept the offer in writing and issue the contractor with a signed copy of the order</td>
<td></td>
</tr>
</tbody>
</table>
Common procurement route

- Need identified for the provision of construction works
- Client funds the acquisition
- Client leads the delivery process
- Client retains design responsibilities
- Design by employer strategy
- Interfaces between direct contracts
- Construction management strategy
- Procurement routes
  - Enter into a PPP
  - Design, build and operate strategy
  - Enter into a lease
  - Purchase completed works
  - Client does not require ownership
  - Client does not lead the delivery process
  - Client transfers design responsibilities
  - Develop and construct strategy
  - Design and construct strategy
  - Design and supply strategy
  - Management contractor strategy

Note: Clients appoint their own personnel or contracted professional service providers to perform their responsibilities in the delivery process.
Procurement strategy

There are a number of different approaches to procurement each of which can result in different outcomes. **Procurement strategy** is all about the choices made in determining what is to be delivered through a particular contract, the procurement and contracting arrangements and how secondary procurement objectives are to be promoted.

Package = works which have been grouped together for delivery under a single contract or a package order issued in terms of a framework agreement.

- **Organization of work packages into contracts**
- **Procurement strategy** is the • packaging • contracting • pricing, and • targeting strategy and **procurement procedure** for a particular procurement
- **Nature of the relationship between the parties**
- **Procedures for promoting secondary procurement objectives**

Packaging concept

- Maintenance project
- Construction project

packages (single or multiple projects)

portfolios of projects Over next few years

programme
Allocation of responsibilities (risks) between Employer and Contractor

Work flow

Portfolio planning processes

Project planning processes

Detailed design processes

Site processes

Close out processes

Risk is to expose (someone or something valued) to danger, harm, or loss

Early contractor involvement (design and construct, develop and construct and design by employer)

Contractor appointed in Design by employer stragey

Early contractor involvement deals with fragmentation of design and construction – allows integration

Management contractor

Contract under which a contractor provides consultation during the design stage and is responsible for planning and managing all post-contract activities and for the performance of the whole of the contract

Design and construct

Contract in which a contractor designs a project based on a brief provided by the client and constructs it

Develop and construct

Contract based on a scheme design prepared by the client under which a contractor produces drawings and constructs it

Design by employer

Contract under which a contractor undertakes only construction on the basis of full designs issued by the employer
Framework for developing a procurement strategy

Primary objectives
- tangible (budget, schedule, quality and performance)
- environmental and health and safety
- intangible (buildability, relationships, client involvement, end user satisfaction, maintenance and operation responsibilities etc.)

Secondary (developmental) objectives (what is to be promoted):
- B-BBEE
- alleviation and reduction of poverty,
- local economic development,
- the transfer or development of skills
- contractor / supplier development
- etc

Contracting strategy
- Design by employer
- Develop and construct
- Design and construct
- Construction management
- Management contractor

Pricing strategy:
- Lump sum
- Price list
- Activity schedules
- Bill of quantities
- Cost reimbursable
- Target cost
- Cost plus

Allocate risks for packages
- Contracting strategy
- Pricing strategy

Identify a suitable form of contract

Document procurement strategy

Decide on procurement procedure

Decide on targeted procurement strategy

Package works into contracts and orders linked to a framework agreement

Allocate risks for packages
- Contracting strategy
- Pricing strategy

Identify a suitable form of contract

Allocate risks for professional service contracts

Package professional service contracts
Case study – new universities (SIPS 14)

- Client = DHET (sponsor)
- Implementing agent
  - University of the Witwatersrand (Nov 2011 – 31 March 2016)
  - Sol Plaatje University and University of Mpumalanga

Wits adopted and implemented the draft National Treasury Standards for a Construction Procurement System and an Infrastructure Delivery Management System issued for public comment during November 2012 implemented (i.e. the base documents for the SIPDM)
Case study – budgets and timelines

- Wits appointed to project manage and resource the spatial and physical planning and development for two new universities – November 2011
- Interim university councils appointed – July 2013
- President announces seats for universities – September 2013
- **First intake of students** – January 2014
- Final university council appointed – August 2014
- **Second intake of students** – January 2015
- **Third intake of students** – January 2016
- Wits hands over the management of the project to the new universities’ staff – 31 March 2016

### Financial year

<table>
<thead>
<tr>
<th>Financial year</th>
<th>R m</th>
</tr>
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<tbody>
<tr>
<td>2011/12</td>
<td>R50 m</td>
</tr>
<tr>
<td>2012/13</td>
<td>R81,3 m</td>
</tr>
<tr>
<td>2013/14</td>
<td>R117,1 m</td>
</tr>
<tr>
<td>2014/15</td>
<td>R 383 m</td>
</tr>
<tr>
<td>2015/16</td>
<td>R 1.32b</td>
</tr>
<tr>
<td>2016/17</td>
<td>R1.3b</td>
</tr>
</tbody>
</table>

### Client team

- **DHET** – initiates, commissions and pays for the project

Wits Director Campus Planning and Development / DHET project management core team (full time and part time contracted resources)

- Programme manager
- Spatial development planner
- Procurement specialist
- ICT specialist

*No procurement before seats announced!*

### Delivery team

- **Project manager** – delivers the development and implementation of the project
- **Design team** – integrates client’s requirements into workable solutions
- **Supply team (manufacturer and constructor)** – manufacture or provide new infrastructure or rehabilitate, refurbish or alter existing infrastructure
Building 1: 2016
Approx. Bulk Area: 6400m²
Residences & Facilities Management

Building 2: 2016
Approx. Bulk Area: 8753m²
Student Residences, Canteen, Retail, Academic Offices, Exams Hall

William Pescod (school) 2014

Building 3: 2016
Academic Facilities, offices
Approx. Bulk Area: 3680m²

Building 4: 2016/17
Partial Completion in 2016
Resource Centre & Library
Approx. Bulk Area: 9130m²

Building 5:
Approx. Bulk Area: 3926m²
Lecture Venues, Academic Offices

Building 6: 2017
Approx. Bulk Area: 6350m²
Student Residences

Building 6: 2017
Approx. Bulk Area: 6350m²
Student Residences
Sol Plaatje University – Central Campus

Aerial View of Construction Site
Fast track construction – target contract

At the starting date

Target at start (total of the Prices)

Assumed Price of outstanding Works Information

Price based on percentage of available Works Information

At Completion

Target at Completion (total of the Prices) adjusted for compensation events

Price for compensation events other than changes in Works Information

Price based on final (100% complete) Works Information

Construction commenced during last half of October 2014 when about 30% of the Works Information was complete 5% contingency

Kimberley
Contractor 1: R195m
Contractor 2: R184m
Contractor 3: R142m

Nelspruit
Contractor 1: R172m
Contractor 2: R92m

DHET has established cost norms for academic buildings based on the assignable space i.e. the amount of space that can be used for people or programmes.

Professional fees ~16%
All projects delivered within the control budget very close to the cost norms in time for 2016 academic year save where a structural failure occurred
Buildings completed for the start of the 2016 academic year

On time within budget and to the right quality

This was achieved within the constraints of the public sector SCM constraints!
Value for money concept

Value for money may be regarded as **the optimal use of resources to achieve the intended outcomes**. Value for money is about striking the balance between three “E’s” – economy, efficiency and effectiveness” whilst being mindful of a fourth “E” – equity.

**Planning**
(what inputs are required to achieve a desired outcome?)

**Implementation**
(how well are inputs converted into outputs?)

**close out**
(how well do outputs achieve desired outcomes?)

---

**Economy**
Cost

**Input**

**Activities**

**Outputs**

**Outcome**

**Impact**

---

**Value for money**

**Equity Considerations**
(what can be leveraged through projects)

---

**Standard for Infrastructure Procurement and Delivery Management:**
- Provides a control framework for the planning, design and execution of infrastructure projects
- Provides a control framework for infrastructure procurement
- Establishes minimum requirements for supply chain management and infrastructure procurement

**SIPDM provides tools and techniques for performance improvement in delivering value for money**

---

**Linkages with value for money**

**Gap between what is planned and what is delivered puts value for money for a project at risk**

**System designed to deliver value for money whilst reducing the scope for corruption**

**Organs of state need to establish their SCM policies which assign responsibilities for approving / accepting deliverables and provide delegations for awarding contracts and issuing orders**

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**75**
Value for money concept

Economy
(what inputs are required to achieve a desired outcome?)

Negatively impacted on by:
• **optimism bias** - the human mind’s cognitive bias in presenting the future in a positive light; and
• **strategic misrepresentation** – behaviour that deliberately underestimates costs and overestimates benefits for strategic advantage usually in response to incentives during the budget process.

Efficiency
(how well are inputs converted into outputs?)

Positively impacted upon by procurement strategy and tactics
Negatively impacted on by the inability to:
• manage risk, multiple projects against an annual budget, interference and scope creep
• create an enabling environment within which delivery is to take place

Effectiveness
(how well do outputs achieve desired outcomes?)

Stage 1
Infrastructure planning

Stage 2
Strategic resourcing

Stage 3
Preparation and briefing

Stage 4
Concept and viability

Stage 5
Design development

Stage 6
Design documentation

Stage 7
Works

Stage 8
Handover

Stage 9
Package completion

Planning

Portfolio planning

Package planning

Implementation

Detailed design

Site

Close out

Outturn cost

Gateway review of major capital projects

SIPDM establishes an enabling environment within which to implement procurement strategies and tactics and manage risks
Approval of high-value national and provincial major capital projects

- Cabinet or the executive council approves inception report (stage 0) and feasibility / concept report (stage 4)
- Minister or the MEC approves prefeasibility report
- Relevant treasury makes recommendations / comments which are taken into account during the approval process

Mandatory gateway review of stage 4 deliverable (feasibility report or concept report) on high value projects

Note: Gates at end of every stage capture time, cost and scope as projects are progressively developed. These gates not only form part of a quality management system but also provide an auditable system

Demand managed through:
- service life plans based on an assessment of current performance against desired levels of service or functionality which reflect life cycle costs
- Infrastructure plans which summarise infrastructure plans and provide a credible forecast of current and net demand for services or functionality

A strategic approach to delivery and procurement above the project level

Preliminary control budget set during stage 3

Confirm control budget set at end of stage 4
Questions

Acknowledgement
- many of the slides in this presentation are based on those prepared by the School of Construction Economics and Management, University of the Witwatersrand, Johannesburg
- case study information obtained from the DHET New Universities Project Management Team / Campus Planning and Development Unit, University of the Witwatersrand

Queries - Email: cpo@treasury.gov.za

More information
http://ocpo.treasury.gov.za/About_Us/Strategic_Areas/Pages/Infrastructure-Procurement.aspx

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