

STANDARD OPERATING PROCEDURES

FOR

OPERATIONS & MAINTENANCE PROCESSES,
PROJECT MANAGEMENT PROCESSES
AND
INFRASTRUCTURE PROCUREMENT GATES
(2024 VERSION 1.0)

lat	ole of Contents
1	BACKGROUND4
2	SECTION 1: OPERATIONS AND MAINTENANCE PROCESSES6
2.1	INTRODUCTION6
2.2	REQUISITION / WORKS INSTRUCTION FOR REPAIR SERVICE
2.2.1	
2.2.2	
2.2.3	
2.2.4	
2.2.5	
2.2.6	
2.2.7	INSPECTORATE (COMPLETION)
3	SECTION 2: PROJECT PROCESSES14
3.1	INTRODUCTION14
3.2	PROJECT PLANNING (STAGE 0)17
3.3	INITIATION (STAGE 1)20
3.4	CONCEPT (STAGE 2)23
3.5	DESIGN DEVELOPMENT (STAGE 3)28
3.6	DESIGN DOCUMENTATION (STAGE 4)30
3.7	WORKS (STAGE 5)33
3.8	HANDOVER (STAGE 6)36
3.9	CLOSE-OUT (STAGE 7)39
4	SECTION 3: INFRASTRUCTURE PROCUREMENT41
4.1	PROCUREMENT PHASE 1 - GENERAL
4.1.1	
4.1.2	
NFRA	ASTRUCTURE PROGRAMME / PROJECT MANAGEMENT IMPLEMENTATION PLANS 45
1.1.3	
1.1.4	PG 2: OBTAIN APPROVAL FOR PROCUREMENT STRATEGIES THAT ARE TO BE
	TED 46
1.1.5	PG 3: OBTAIN APPROVAL FOR PROCUREMENT DOCUMENTS 46
	PG 4: CONFIRM SUFFICIENT CASH FLOW TO MEET PROJECTED CONTRACTUAL
	GATIONS 46
.2	PROCUREMENT PHASE 1 - PROCESSES

4.3	PROCUREMENT PHASE 2 - GENERAL	49
	PG 5: SOLICIT TENDER OFFERS	
4.4	PROCUREMENT PHASE 2 - PROCESSES	
4.5	PROCUREMENT PHASE 3 - GENERAL	51
4.5.1	PG 8: ADMINISTER THE CONTRACT AND CONFIRM COMPLIANCE WITH	ALL
CON.	TRACTUAL REQUIREMENTS	51
4.6	PROCUREMENT PHASE 3 - PROCESSES	52
5	RECORDS	52

1 BACKGROUND

The National Treasury Framework for Infrastructure Delivery and Procurement Management (FIDPM) applies to all departments, in so far as it establishes the governance for Infrastructure Delivery and Infrastructure Procurement, within the ambit of Clause 217 of the Constitution of the Republic of South Africa, 1996.

The FIDPM prescribes the minimum requirements for the implementation of the Infrastructure Delivery Management System (IDMS) through:

- Infrastructure Delivery Management processes for portfolio, programme, project, operations, and maintenance of infrastructure; and
- Infrastructure Procurement Gate.

The FIDPM also promotes value for money throughout all phases of infrastructure delivery and management as well to promote optimal use of resources to achieve the intended outcomes. It facilitates the allocation of clear responsibilities for performing activities and making decisions at control points, stages, and procurement gates.

The core mandate of KwaZulu-Natal Department of Public Works and Infrastructure is asset management. As custodian the Department can act as implementer on behalf of various Sector Departments to deliver the required infrastructure projects. The Department enters into a Service Delivery Agreement (SDA) with the Sector Department that formalises their relationship to render services on their behalf.

The SDA clearly defines the roles and responsibilities of the Implementer and the Sector Department. SDAs are signed for an MTEF period (3-years) and reviewed / updated (mainly the annexures) as and when required but at least annually.

The development of all deliverables should be carried out in a cooperative and consultative manner between both parties (i.e. between Sector and Implementer). All deliverables must be developed and signed off as per their service delivery agreement.

The Infrastructure Delivery Management System (IDMS) is a system that has been adopted by the Department for the management of:

- · Infrastructure Planning and Budgeting
- Infrastructure Procurement / Supply Chain Management
- Infrastructure Delivery
- Infrastructure Operations and Maintenance
- Monitoring and Evaluation of Infrastructure Projects and Programmes

The IDMS is a systematic approach to the management of infrastructure delivery, which incorporates several elements as indicated in Figure 1 below.

The three core legislative requirements of the IDMS are:

- Asset Management (Know what you are managing, including quantity, quality, and condition of your assets as a start)
- Planning and Budgeting (Plans that are based on a scientific assessment of needs as well as
 the condition of existing assets. This type of planning assists with more accurate budgeting as
 these budgets would flow from plans that are credible and based on technical assessments)

Supply Chain Management which is key to ensure service delivery is achieved through a fair
and transparent manner while meeting the socio-economic goals of the country. A seamless
Supply Chain Management system is key to ensuring infrastructure delivery in the public sector
and the opposite can cause serious challenges and delays with undesired consequences for
the community and the public sector.



Figure 1: The IDMS Diagram

KZN Provincial Treasury produces an annual circular, outlining the schedule of activities that the Department needs to prepare and submit throughout the year for the delivery of all infrastructure.

These activities include the:

- Infrastructure Asset Management Plan (I-AMP), currently sub-divided into the User Asset Management Plan (U-AMP) and the Custodian Asset Management Plan (C-AMP); and
- Infrastructure Procurement Strategy (IPS); and
- Infrastructure Programme Management Plan (IPMP); and
- · Infrastructure Programme Implementation Plan (IPIP); and
- · End of Year (EoY) Report.

The Infrastructure Delivery Management Processes shown below as Figure 2 further illustrates the various processes and plans that are required to ensure public sector best practice-based planning and delivery methodologies to improve infrastructure delivery.

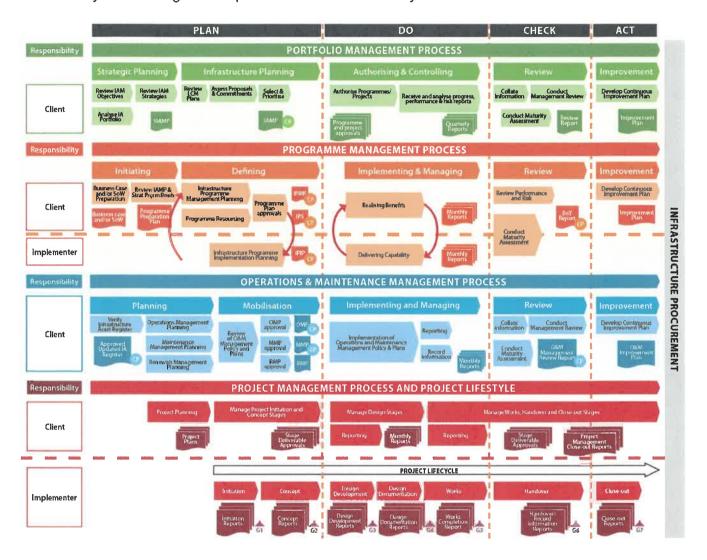


Figure 2: FIDPM Infrastructure Delivery Management Processes

It is important to note that this version of the Standard Operating Procedures for Project Processes & Infrastructure Procurement Gates does not discuss Portfolio, Programme, Operations and Maintenance Processes.

2 SECTION 1: OPERATIONS AND MAINTENANCE PROCESSES

2.1 INTRODUCTION

The National Immovable Asset Maintenance Management (NIAMM) Standard (May 2017, page 2) defines Maintenance as "All actions intended to ensure that an asset performs a required function to a specific performance standard(s) over its expected useful life by keeping it in as near as practicable to its original condition, including regular recurring activities to keep the asset operating, but specifically excluding renewal".

The maintenance action implies that the asset is restored to its original condition and there is no significant enhancement to its capacity or the value of the asset. Such transactions are classified as current payments. The Maintenance Programme is subdivided into -Preventative Maintenance and Corrective Maintenance

The department of public works and infrastructure districts currently perform corrective maintenance. Corrective maintenance refers to actions that are undertaken to respond to breakdowns or failures. The actions consist of two categories, planned repair and emergency repair.

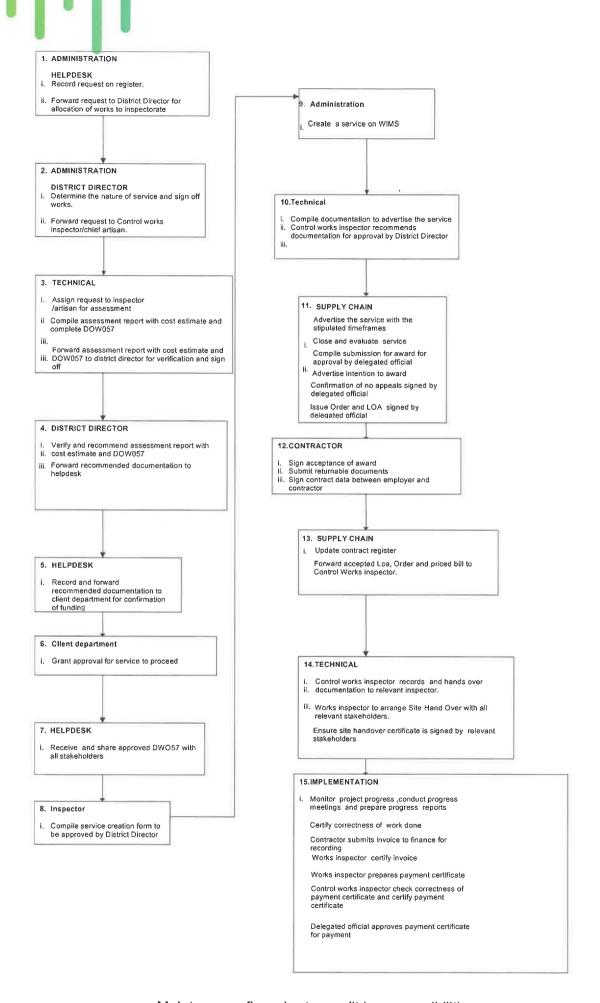
- Planned repair maintenance is carried out after fault recognition or reporting and is intended
 to put an item back into an operational state to enable performance or continuation of a
 service. The actions are carried out in accordance to planned response logging and planned
 repair procedures.
- Emergency repair maintenance response is immediate to urgent situation and critical assets to restore services as quickly as possible. The actions are initiated in accordance to planned response logging and emergency repair procedures.

2.2 REQUISITION / WORKS INSTRUCTION FOR REPAIR SERVICE

A works instruction from the Client department in a form a letter/a completed, and appropriately authorised form titled, "Requisition / Works Instruction for Repair Service (DOW055)/ must be emailed or faxed to respective helpdesk. Requests must be recorded on a register. Requests are to be printed and placed on file. The Helpdesk official will forward request to District Director for allocation of works to inspectorate. Process to be followed is as per figure 1 (maintenance flow chart on split in responsibilities).

Forms DOW055A ,DOW057 and assessment report must be sent to the Client Department to solicit its financial approval for the service to proceed , based on the estimate of cost. Form DOW057 is then returned to the District Office of the Department of Public Works.

NB: Each request will be attended as and when received.



Maintenance flow chart on split in responsibilities

2.2.1 RECORDING OF REQUESTS BY THE HELPDESK

The Helpdesk must acknowledge receipt of the requisition, from the Client Department. The Helpdesk must enter the details of the request onto a Register under, at least, the following headings.

- · Date Request Received
- Client Department
- Facility Name
- Service Description
- Client Contact Person
- · Client telephone number
- Project to be Outsourced / Done Inhouse
- Name of Works inspector Allocated
- Works inspectors Signature
- Estimate
- Date Funds approval submitted to Client
- · Date Funds Approval received from Client
- Comment

2.2.2 GROUPING OF SERVICES ON WIMS UNDER (R 50 000)

Under the Works Information Management System (WIMS) it is possible to group up to 50 services, per institution, when registering and creating individual services and it is therefore important to clearly describe the different type of work that has been / is being arranged.

2.2.3 DESCRIPTION OF WORK

Under the "Description" column of the order, the actual type of work being arranged must be clearly described.

2.2.4 INSPECTORATE (PLANNING)

Assessments are conducted by inspectors upon receipt of request DOW55 or letter of requests indicating the scope of work. The inspector produces a bill of quantities outlining the rates per item measured on site which subsequently arise to the final cost estimation inclusive or exclusive of 15% VAT. A services creation form is compiled by Inspector. When the service is created a requisition for letter is the issued to SCM for advertisement.

2.2.4.1 MAINTENANCE CONTRACTS - UP TO R 1 000 000

All building Maintenance Services are managed applying the JBCC Minor Works Agreement. And any other maintenance services are managed by applying the GCC.

2.2.4.2 OPENING OF FILE BY REGISTRY

SCM provides registry personnel with a DOW055A, "Requisition / Works Instruction for Repair Service" form, DOW057 and confirmation of wims creation.

- Where a file exists for a facility, Registry services must draw the Day To Day Maintenance File from Registry, for the particular institution, eg. 10/11......, which will be colour coded, depending on the type of service involved (structural green), electrical and mechanical red and grounds blue) and enter details of the complaint in the first four columns (Complaint No., Date, Name of Inspector / Foreman and Description of Service) of the form, titled, "Day To Day Repairs And Maintenance: File 10 / 11 / /...." and which is affixed to the inside cover of the main file. See Form DOW056, which is contained under Letters and Forms
- Registry will create a new file for services with an estimated value above R50 000, this file will have the form DOW055A, "Requisition / Works Instruction for Repair Service" form, DOW057, confirmation of wims creation

2.2.4.3 APPLICATION OF SCM DELEGATIONS OF AUTHORITY TO ARRANGE FOR WORK

It is necessary to evaluate personnel resources and decide how to attend to each request, involving the choice of one of the following options and observing the cautioning note regarding the 'practice' of executing work by way of quotations.

- making use of artisan personnel employed by the Department. OR
- inviting appropriate registered CIDB contractors to submit quotations.

2.2.4.3.1 BASIC REQUIREMENTS

- Contractors must be registered with the CIDB and have the appropriate work category Grading Designation.
- Contractors must be registered on the Central Suppliers Database

2.2.4.3.2 LEVEL 1: MORE THAN R 1 - R 2 000 (INCLUDING VAT)

- Verbal quotation(s) must be obtained, or procurement must be made via petty cash without
 inviting competitive quotations. This will be subject to the Department's petty cash policy.
 Where an approved Suppliers database per commodity and type of service is in place,
 quotations may be invited from suppliers on this database on a rotation basis.
- An appropriate limit must be placed on the total no. and/or total monetary valve of petty cash purchases per month, per individual responsibility manager.
- Authority to procure by means of petty cash may not be delegated to an official lower than a responsibility manager.
- Submission of monthly reconciliation reports from each Responsibility Manager, containing:
 - The total number and total value of petty cash purchases for that month.
 Records and appropriate documents for each purchase.

NOTE: Approval must be granted for the use of petty cash prior to the purchase of goods and services

2.2.4.3.3 LEVEL 2: R 2 001 - R 10 000 (INCLUDING VAT)

- At least three (3) verbal or written quotations must be obtained.
- If verbal quotations were obtained, a written quotation must be obtained from the selected supplier.
- Placing of an order must then be based on the written quotation.

- Where an approved Departmental Supplier database per commodity and type of service is in place, 3 quotations must be invited from suppliers on this database on a rotation basis.
- No Preference points will apply to Level 2
- Reports must be submitted to SAC on a monthly basis for all awards.
- all suppliers must be registered on the Central Suppliers database (CSD).

2.2.4.3.4 LEVEL 3: R 10 001 - R 1 000 000 (INCLUDING VAT)

- In cases where the estimated value is up to R1 000 000 bids must be invited by way of display
 of invitations on the appropriate Head, Regional, District Notice board or Departmental Website
 for a period of 5 working days or alternatively where an approved Departmental Suppliers
 Database per commodity and type of service is in place, quotations must be invited from
 suppliers on this database on a rotation basis. Copies of invitation to be placed on the relevant
 files
- No Preference Points will be applicable from R 10 001 to R 30 000

2.2.4.3.5 URGENT AND EMERGENCY CASES - SCM DELEGATIONS

Urgent and Emergency Cases to be done inline with current approved delegations.

2.2.4.3.6 DEVIATION FROM BID PROCESSES

Deviation from bid processes to be done in line with current approved delegations.

2.2.5 INSPECTORATE (PRE-SITE HANDOVER)

The date for the handing over of the site to the Contractor must be arranged by the works inspector, in consultation with all stakeholders involved. The date and time decided upon must be communicated, in writing, to all involved in the process and a record of this arrangement to be placed on the Project File

The works inspector is to notify the Contractor of the date on which the site is to be handed over. The site handover date must be captured on WIMS, using screen WG03PU.

The site handover shall commence with a site handover meeting. The site handover meeting must be chaired by the works inspector.

2.2.6 INSPECTORATE (IMPLEMENTATION)

Where the complexity of the project warrants the holding of regular site meetings, these meetings are to be held at least once monthly. The works inspector shall inspect the project and provide progress reports

When payments are due, the contractor and the works inspector will evaluate work done and agree on the value of work done. The contractor will submit an invoice to the DPW finance section, to stamp and record invoice on register. Upon registering the invoice finance will send invoice to the Works Inspector who is responsible for the project. The works will receive the Contractor's invoice and if correct, he/she will certify the service rendered satisfactory as per the specifications. The Works inspector to compile payment certificate with supporting documents, sign as the complier thereafter

the payment certificate is sent to control works inspector to check correctness of the payment and certify. When the control works inspector is not available to perform such, the function will be performed by the district manager.

Control works inspector will the payment file to helpdesk, for further approval by the delegated official.

2.2.6.1 FINANCIAL ADMINISTRATION SERVICES DIVISION (CAPTURING OF PAYMENTS)

Once the payment has been approved/Authorised by a delegated official, the officials responsible for capturing payments in the Division must enter the payment on WIMS using function (WIM19PU/WM28PU). "Payment Entered" on the Payment certificate must be signed by the person who captured the payment. The details of the payment must be entered into the Payment Register (date, WIMS number, WIMS contract number, contractor's name, and amount). The payment must be verified on WIMS by a delegated official using function (WM22PU/WM38PU) The Payment certificate must be signed by the delegated official in the field "Payment Verified".

Note:

All copies of documentation must be stamped "PAID" to prevent duplication.

All documentation including a copy of the WIMS Payment and the BAS Order Payment form (Z492), must be filed on the file.

The original payment documentation must be forwarded to the Regional Office, to forward to the Expenditure Control Division of the Head Office with the details of the payment (cheque number / date, batch and run number) after having entered this information into the Payment Register.

2.2.6.2 VARIATION ORDERS

A variation order can be defined as an instruction authorised by the Head: Public Works/Delegated official to vary a contract by addition or omission of work which is necessary to safeguard the interests of the Province.

All site instructions must be endorsed to state whether the instruction constitutes a Variation Order, or no. Before Variation Orders are issued, costs and availability of funds are to be established by the works inspector, in collaboration with the control works inspector. All Variation Orders recorded in site meeting minutes are to be followed up by an official Variation Order. Variation Orders are to be issued as promptly as possible

Note:

The approval of variation orders must be done in line with the approved delegation of Authority. The contract must not be extended in such a way that it may be considered to be a new project.

Where the approved Contract Sum is to be exceeded for unforeseen or additional new Work. It is suggested that Form DOW037B titled "Financial request For Variation Order And, If Necessary, Additional Funds" is completed and submitted to the Regional director for authorisation accompanied by a submission of explanation.

Requests for the issue of Variation Orders must be forwarded to the BAC for authorisation where the approved contingency sums have been exceeded (i.e.

- Building Works 5% of contract amount
- Structural, Electrical or Mechanical 10% of contract amount
- Civil Works 15% of contract amount

The Works Inspector , in collaboration with Control Works inspector will prepare the draft variation order required for approval, using an approved VO form accompanied by a submission of explanation.

"Financial Request for Variation Order And Additional Funds", must be completed and the form submitted to the Regional Office for onward submission to the BAC.

On approval the Procurement and Post Bid Division must record the request for funds on the Variation Order register. And distribute copies to

- the Contractor
- the Works Inspector
- the Control Works inspector

The Works Information Management System must be updated with the approved variation order. All correspondence relating to the matter must be placed on the Project File.

2.2.6.3 RETENTION

The maximum retention that may be deducted for a contract may not exceed 10% of the contract sum. The retention period will be as per the contract data.

2.2.7 INSPECTORATE (COMPLETION)

2.2.7.1 COMPLETION CERTIFICATE / "PRACTICAL COMPLETION"

This is the stage reached in the contract, as described in the Agreement, dealing with the Completion Certificate

2.2.7.2 FINAL ACCOUNT

The Works Inspector shall within forty-five (45) calendar days of the date of practical completion submit to the contractor a detailed final account reflecting the total contract value due in terms of the agreement for acceptance or rejection within 10 working days. The control works inspector must review and verify correctness of the final account and forward to the District director for Where the final account :

- Is accepted the works inspector shall concurrently with the issue of the certificate of final completion, issue a final payment certificate in terms of the agreed contract value.
- Is rejected the contractor shall inform the works inspector of the reasons for rejecting such final account. Where considered necessary the control works shall revise the final account within 10 working days and resubmit such final account to the contractor
- Is not accepted by the contractor within forty-five (45) working days of the resubmission the control works inspector shall issue the certificate of final completion and final payment certificate in terms of the determined contract value.

If the forty-five (45) calendar days period is exceeded then monthly reports on progress, with reasons for the delay, are to be submitted by the works inspector to the District Director

3 SECTION 2: PROJECT PROCESSES

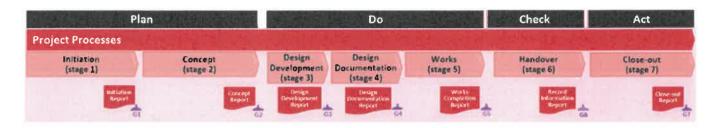


Figure 3: Project Processes

3.1 INTRODUCTION

The IDM Project Processes comprises of seven (7) project stages viz:

- Initiation
- Concept
- · Design Development
- Design Documentation
- Works
- Handover
- Close-out

The IDM Project Processes should be implemented in accordance with the following principles:

- Procurement of Consultants and Contractors can occur at different points in the project stages. The points will be determined by the type of contracting strategy being implemented.
- When reporting a specific project's progress using the project stages, it is important to emphasise that when the project is shown as being in a specific stage, it is the deliverable of the previous stage that has been achieved and which must be reported on. For example, if a project is shown as being at Stage No. 3 (Design Development), it implies that the deliverable for Stage No. 2 (i.e. the Concept Report) has been achieved, and that the deliverable for Stage 3 (i.e. the Design Development Report) is in the process of being prepared.

The Project Stages contain gates at the end of each stage at which the associated stage deliverable needs to be approved by the Sector Department. The project may only continue beyond the stage gate, in accordance with the approved contracting arrangements. Once the stage deliverable has been approved by the person(s) or body designated by the Department.

Prior to commencement of Project Stages and Procurement Gates the following must be approved:

- Infrastructure Procurement Strategy (IPS)
- Infrastructure Programme Management Plan (IPMP)
- Infrastructure Programme Implementation Plan (IPIP)

For Department of Public Works & Infrastructure projects, the requests for infrastructure provisions will come from the Regions and Districts to the Programme Management Unit at Head Office for input and engagement. The request should be supported by the Chief Directorate: Immovable Asset

Management (IAM), recommended by the Deputy Director General: Infrastructure Maintenance & Technical Support before being approved by the Head of Department.

For Sector Departments, the requests for infrastructure provisions will come through either an IPS, IPMP or a letter from the Sector Departments' Head of Department to the Programme Management Unit at Head Office.

Department of Public Works (Programme Management Unit) will receive requests for Infrastructure provision from various sources both internally and externally and will review and confirm both its applicability and priority and thereafter develop the IPIP.

In addition, to the projects outlined in approved IPMP and IPIP documents, instructions (in the form of a signed letter) from the HODs of the Sector Department shall be provided to implement certain projects that are not covered by the IPMP and IPIP.

Note:

This section aligns to the Chapter 3 of the Standard Operating

Procedures

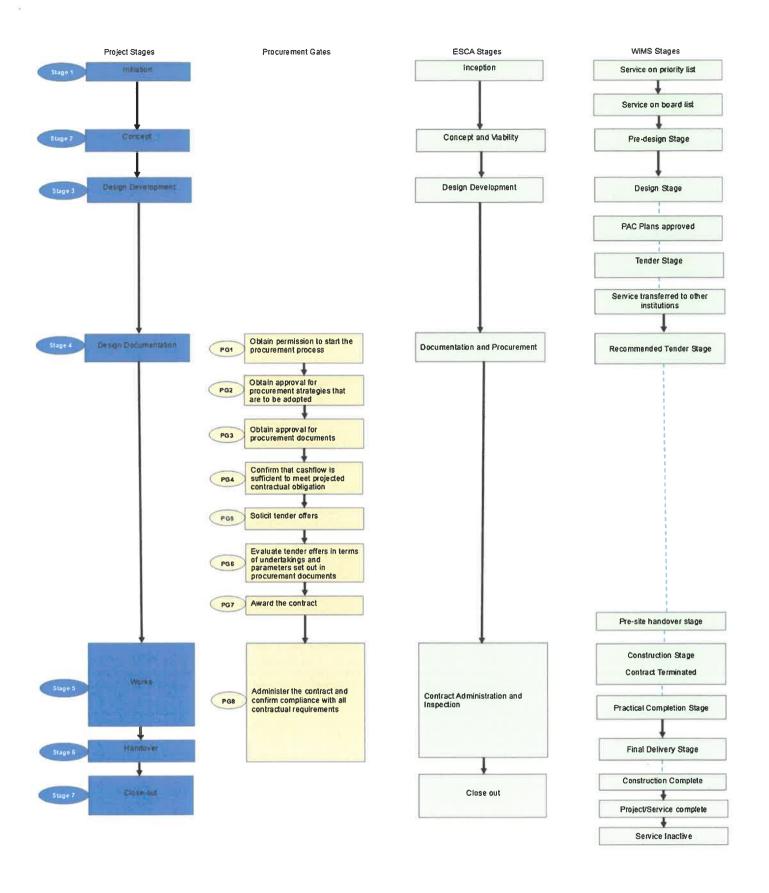


Figure 4: Workflow diagram aligns the Project Stages to the Procurement Gates (Only for the procurement of a Contractor), Consultant Work Activity Stages as per their Councils and WIMS Stages for a Design by Employer Contracting Strategy

3.2 PROJECT PLANNING (STAGE 0)

This Stage is required to establish the need, desirability, and viability of the project together with securing the appropriate land and rights to undertake such a project.

Head Office: Programme Management will assign new projects to either Regions or Districts. Regional and District Managers will then assign the project to a Project Manager / Works Inspector. Districts undertake maintenance projects while Regions undertakes capital projects.

Upon receipt of a project, the Project Manager is required to compile a project charter and/or a project brief / project plan (Only if the Sector Department did not provide one) and submit it to IPSC.

IPSC will review and comment on the project charter and project brief / project plan and compare it to the requirements set out in the IAMP (U-AMP & C-AMP), IPS, IPMP & IPIP to establish and confirm the project need and desirability. IPSC will also determine if the project is a major capital project.

Note:

The IPMP and IPIP sets out the various programmes of projects to be implemented, the IPS sets out the delivery plan, contracting arrangements and procurement arrangements for each package within each programme.

Based on the above, IPSC will determine if the proposed procurement strategy is best suited to the scope of work to be implemented in the project.

Upon approval, the Project Manager will proceed with a request to Supply Chain Management (SCM) to procure and appoint an appropriate project team (Private consultants). If the project will be designed and managed internally, the Project Manager will request the Chief Professional to assign the project in writing to an in-house team.

The Project Manager is required to create a project file that contains copies of the approved: -

- IPS, IPMP & IPIP
- Project charter
- Project brief / project plan
- Pre-tender and tender / contract documentation i.e. project team
- Signed letter(s) of appointment.

For a major capital project, the Project Manager needs to determine the project need and desirability. Procure market research investigations to evaluate the appropriate product, vision, and feasibility parameters. Appoint appropriate other consultants. Prepare a first business case, a budget and end user requirements. Identity and secure appropriate land. Obtain land development rights including necessary zoning, environmental, traffic and infrastructure services in accordance with all statutory and regulatory requirements. Facilitate and manage the development master plan. Identify project funding sources and requirements. Process payments to all project creditors.

The project charter should include a procurement strategy best suited for the proposed scope of work.

The table below is a guide to assist the Project Manager in determining the best suited procurement strategy for his project:

PROCUREMENT STRATEGIES		Standard Procurement Procedure	Standard Forms of Contract								
						NEC 3 ECC		FIDIC			
			JBCC PBA	JBCC MWA	229		NEC 3 ECS	Red Book	Yellow Book	Silver Book	Green Book
	Design by Employer	Open		b.							
rategy	Design & Build	2-Stage / 2- Envelope System / Qualified / Restricted Competitive Negotiations									
Contracting Strategy	Develop & Construct										
Co	Construction Management	Open Competitive Negotiations									
	Management Contract										
egy	Activity Schedule / Lump Sum										
Pricing Strategy	Bills of Quantities	tities									
cing	Cost Reimbursable										
Pri	Target Cost										

Note:

The tender evaluation method would be either Method 3: Financial offer and preference or Method 4: Financial offer, quality, and preference. Quality can be expressed either as a functionality criterion with a minimum score or as a mandatory criterion.

End-of-stage Deliverables:

- Project Charter / Business Case
- Project Brief / Plan

Approval process for this end-of-stage deliverable:

 IPSC shall review and comment on the project charter and project brief / project plan and compare it to the requirements set out in the IAMP (U-AMP & C-AMP), IPS, IPMP & IPIP to establish and confirm the project need and desirability. Proforma letters and forms available for this stage are:

- · Project Charter
- · Project Brief / Plan
- · Business Case
- IPSC Certification

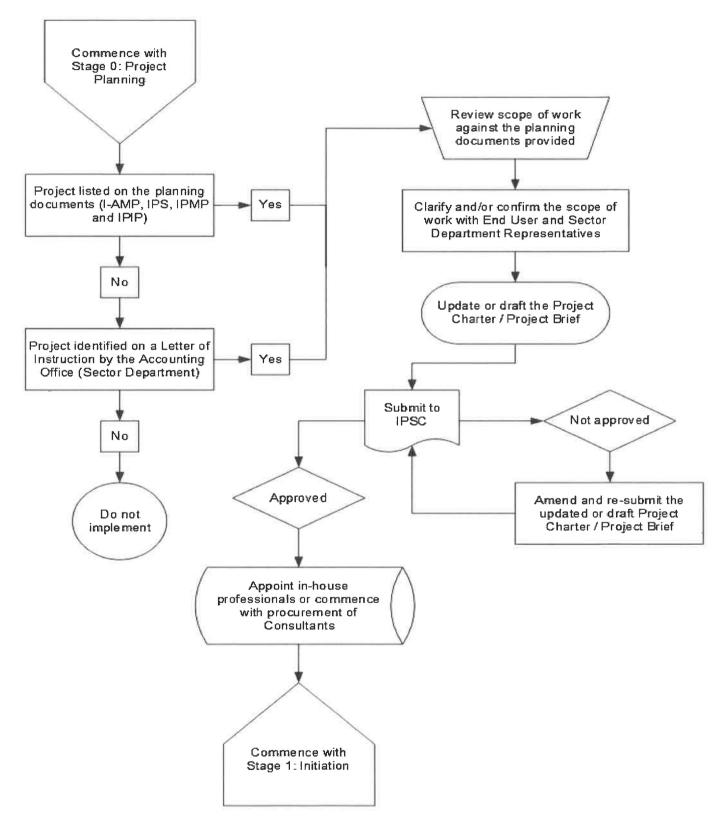


Figure 5: Workflow diagram of processes to follow under Stage 0: Project Planning

3.3 INITIATION (STAGE 1)

The primary focus of this stage is to establish the Sector Department's requirements and preferences, assess End User's needs and options, appointment of necessary Consultants, establish the project brief including project objectives, priorities, constraints, assumptions, aspirations, and strategies with the Sector Department.

The Initiation Report, which defines project objectives, needs, acceptance criteria, organisation's priorities and aspirations, procurement strategies, and which sets out the basis for the development of the Concept Report.

Whereas a Prefeasibility Report is required on mega capital projects to determine whether to proceed to the Feasibility Stage, where sufficient information is presented to enable a final decision to be made regarding the implementation of the project.

The following processes to be undertaken by the Project Team for this stage:

- Verify if the project appears on the approved IPMP and IPIP.
- Define the scope of services and scope of work required from the Project Team.
- Involve EPWP/Green Projects Unit to determine if the project can incorporate their objectives.
- Interrogating and establishing the detailed brief and cost plan.
- Negotiate and confirm detail project brief with the Sector Department.
- Ensure that the Project Team conduct site investigations and assess the condition of the
 facilities included in the scope of work. The Project Team to advise on the necessary surveys,
 analyses, tests and site or any other investigations where such information will be required for
 Stage 2 including the availability and location of infrastructure and services.
- Ensure that the Project Team shall compiling of a condition assessment report, if required as per the scope of service agreed with the Consultants at tender documents.
- Identify the need to revise scope of works should the investigation reveal any shortfalls and/or gaps in information.
- If there is any change required (i.e. Scope of works), a submission shall be sent to the Sector notifying and requesting the change to align with the needs.
- Conduct project planning meetings and stakeholder meetings; and
- Identify the rights, constraints, statutory permissions, and utility approvals.
- The Project Manager shall receive an estimate of the cost of works from the relevant disciplines that identifies and confirms the economic factors affecting the project and the appropriate financial design criteria.
- Confirm that the project cost estimated on the IPIP, based on the broad scope of works and the
 project scope can be completed within the budget.
- The Project Manager shall confirm the indicative high-level business case with the Sector Departments Project Manager.
- Develop an Initiation Report which outlines the high-level business case together with the estimated project cost and proposed schedule.
- Set up regular engagements with the Sector Department to collaborate and update on the progress and seek their approval on major decisions where applicable.
- Development of a Risk Register and a Quality Control Plan.
- · Identification of Stakeholders and proposed methods of engagement.
- Consult with the Department of Public Works internal Health and Safety Team for input.

• The Project Team will compile the Initiation / Pre-feasibility Report for submission to IPAC for review and recommendation to the Sector Department Delegated Official for approval.

Refer to workflow diagrams depicted in Figure 5 (Design by Employer) and Figure 6 (Design and Build) below which provides summary of the processes under FIDPM Stage 1 - Initiation.

End-of-stage Deliverables:

- · Initiation Report; or
- · Prefeasibility Report; and
- IPAC Certificate.

Approval process for this end-of-stage deliverable:

 IPAC shall review and approve the Initiation / Pre-feasibility Report. IPAC shall only review and recommend the Initiation / Pre-feasibility Report on behalf of the Sector Departments if the Sector Departments Delegated Representative is not present in the IPAC meeting. Initiation / Pre-feasibility Report to be forwarded to Sector Department for approval and authority to proceed to Stage 2: Concept.

Proforma letters and forms available for this stage are:

- Initiation Report
- Pre-feasibility Report
- IPAC submission letters and forms

On receipt of the IPAC Certificate approving the end-of-stage deliverable, the Project Team can commence work on Stage 2 and submit their fee claim for Stage 1.

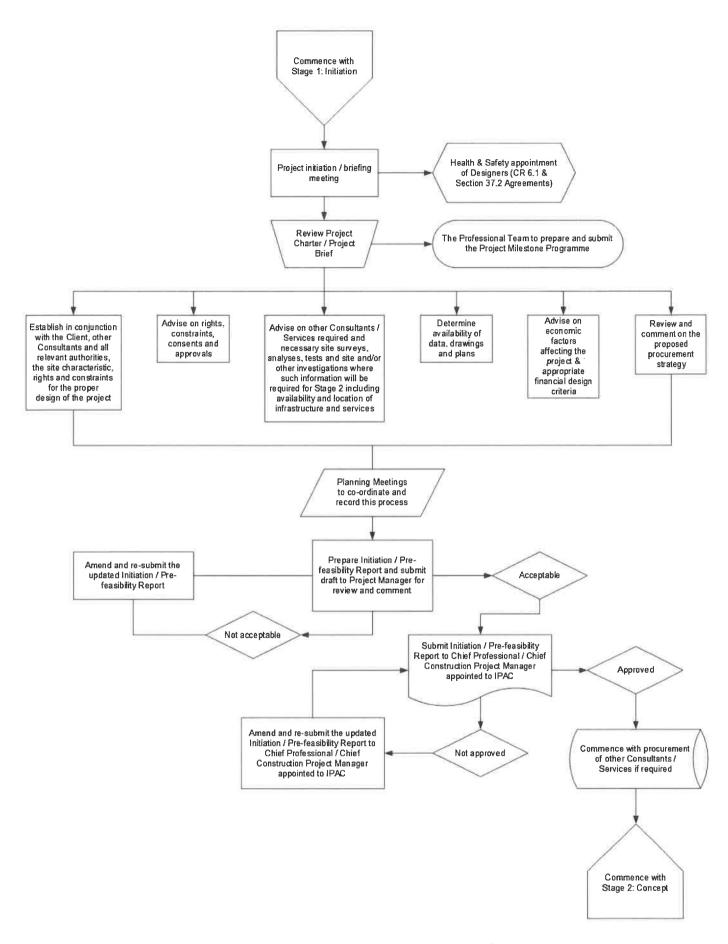


Figure 6: Workflow diagram of processes to follow under Stage 1: Initiation

3.4 CONCEPT (STAGE 2)

The primary focus of this stage is to prepare and finalise the project concept in accordance with the brief including the scope, scale, character, form, function and preliminary development programme and viability of the project.

The Concept Stage represents an opportunity for the development of different design concepts to satisfy the project requirements, as developed during Stage 1. It also presents, through the testing of alternative approaches, an opportunity to select a particular conceptual approach. The ultimate objective of this stage is to determine whether the project is viable to proceed, with respect to available budget, technical solutions, timeframe, and other information that may be required.

The Concept Report should as a minimum, provide the following information:

- Document the initial design criteria, cost plan, design options and the selection of the preferred design option, or the methods and procedures required to maintain the condition of infrastructure for the project.
- Establish the detailed brief, scope, scale, form, and cost plan for the project, including, where necessary, the obtaining of site studies and construction and specialist advice.
- Provide an indicative schedule for documentation and construction or maintenance services, associated with the project.
- Include a site development plan, or other suitable schematic layouts of the works.
- Describe the statutory permissions, funding approvals and utility approvals required to proceed with the works associated with the project.
- Include a baseline risk assessment for the project, and a health and safety plan, which is a requirement of the Construction Regulations, issued in terms of the Occupational Health and Safety Act.
- Contains a risk report linked to the need for further surveys, tests, other investigations and consents and approvals, if any, during subsequent stages and identified health, safety, and environmental risk.

A Feasibility Report shall, as a minimum, provide the following information:

- Details regarding the preparatory work covering:
 - A needs and demand analysis with output specifications.
 - An options analysis.
- A viability evaluation covering:
 - A financial analysis.
 - An economic analysis, if necessary.
- A risk assessment and sensitivity analysis.
- A professional analysis covering:
 - A technology options assessment.
 - An environmental impact assessment.
 - A regulatory due diligence.
- An implementation readiness assessment covering:
 - Institutional capacity.
 - A procurement plan.

The following processes to be undertaken by the Project Team for this stage:

- Document the initial design criteria, cost plan, design options and the select the preferred
 design option or the methods and procedures required to maintain the condition of
 infrastructure for the project. Where feasible, a minimum of three (3) design alternatives or
 options with pros and cons including costs comparison (capital and lifecycle costs) must be
 developed with a recommendation for the most preferred option for approval.
- The designers shall sign form CR 6.1 section 37.2 agreement in terms of the Construction Regulations act and submit with the Concept Report which include three (3) different options in terms of the project to be implemented. Include a baseline risk assessment for the project and a health and safety plan, which is a requirement of the Construction Regulations, issued in terms of the Occupational Health and Safety Act.
- Prepare process designs (where required), preliminary designs, and related documentation for approval by Authorities and Sector and suitable for costing.
- Identify surveys, tests, investigations, and approvals if any, during subsequent stages i.e.
 Initiation, Concept, Design Development, Design Documentation, Works, Handover and Close-out.
- Prepare a risk report linked to the need for further surveys, tests, other investigations and consents and approvals, if any, during subsequent stages and identified health, safety, and environmental risk.
- Review procurement strategy to be implemented.
- Identify the need to revise the Scope of Works should the investigation reveal any shortfalls or gaps in information.
- Agree on the documentation programme with the Principal Agent or Consultant and other consultants involved.
- Attend design and consultants' meetings.
- Prepare initial concept design and related documentation.
- Advise the Sector regarding further surveys, analyses, tests, and investigations that may be required.
- Establish regulatory Authorities' requirements and incorporate into the design.
- Refine and assess the concept design to ensure conformance with all regulatory requirements and consents.
- Establish access, utilities, services, and connections required for the design.
- Participate in coordinated design interfaces with Architect or other consultants involved.
- Set up regular engagements with the Sector Department, End User and Stakeholders to collaborate and update on the progress and obtain their approval on major decisions where applicable.
- Update Risk Register and Quality Control Plan.
- Update draft Health & Safety Specification and Baseline Risk Assessment.
- The Project Manager shall decide on the contracting and pricing strategy for internal projects.
- The procurement strategy recommendation comes from Sector Department(s)
- Prepare a Concept / Feasibility Report and submit it to the Project Manager to check and submit to IPAC for approval.

IPAC shall review and approve the Concept / Feasibility Report. IPAC shall only review and recommend the Concept / Feasibility Report on behalf of the Sector Departments if the Sector Departments Delegated Representative is not present in the IPAC meeting. Concept / Feasibility Report to be forwarded to Sector Department for approval and authority to proceed to Stage 3: Design Development.

Note:

For Design and Build contracting strategy, the Project Manager is required to submit the approved IPAC submission to BSC & BAC for approval before requesting SCM to advertise the tender. The Project Manager is required to comply with all Infrastructure Procurement Gates as listed below.

All projects identified as a major capital project requires their Feasibility Reports to be submitted for a Gateway Review. For this process, review IPAC Terms & Conditions as well as SCM Delegations.

When project is deemed not feasible, it's crucial to follow a structured process to ensure proper documentation, analysis, and decision-making.

The following outline identifies typical steps to be followed by organisations to effectively manage projects to ensure that decisions are informed, transparent and aligned with the strategic objectives of the Department or Sector Department:

- · Assessment of Feasibility Issues:
 - Identify the specific reasons why the project is deemed not feasible. This could include technical constraints, financial limitations, regulatory hurdles, market conditions, or any other relevant factors.
 - Conduct a thorough review of the project's requirements, objectives, constraints, and assumptions to pinpoint where the feasibility issues lie.
- · Analysis of Alternatives:
 - Explore alternative solutions or approaches that might address the feasibility concerns. This could involve brainstorming sessions, consultations with experts, or conducting additional research.
 - Evaluate the pros and cons of each alternative, considering factors such as cost, time, resources, risk, and potential impact on project goals.
- Stakeholder Communication:
 - Communicate the feasibility issues and potential alternatives to key stakeholders, including project sponsors, team members, Sectors, and any other relevant parties.
 - Facilitate open discussions to gather input, insights, and perspectives from stakeholders regarding the feasibility challenges and alternative options.
- Decision Making:
 - Based on the analysis of feasibility issues and alternative solutions, make an informed decision about the future of the project. This decision could involve one of the following options:
 - Proceed with modifications: If feasible adjustments can be made to overcome the identified obstacles, consider revising the project plan accordingly.
 - Postpone or suspend: If the feasibility issues are temporary or can be addressed later, consider postponing the project until conditions are more favourable.
 - Cancel: If the feasibility issues are insurmountable or the project no longer aligns with organizational objectives, make the decision to cancel the project.

Documentation:

 Document all findings, analyses, decisions, and communications related to the feasibility assessment process. This documentation should be comprehensive and organized for future reference and audit purposes.

- Ensure that lessons learned from the feasibility assessment are captured and shared with relevant stakeholders to inform future project planning and decision-making.
- Transition or Closure:
 - If the decision is made to cancel the project, initiate the necessary steps to transition or close out any existing project activities, contracts, agreements, or resources.
 - Communicate the decision to all stakeholders involved and provide guidance on next steps, such as reassigning team members, reallocating resources, or addressing any outstanding obligations.
- Post-Implementation Review:
 - After the project's closure or transition, conduct a post-implementation review to reflect on the feasibility assessment process, lessons learned, and areas for improvement.
 - Use insights from the review to enhance future project initiation, planning, and feasibility assessment processes within the organization.

Refer to Workflow diagram depicted in Figure 7 below which provides a summary of the processes under FIDPM Stage 2 - Concept

End-of-stage Deliverables:

- · Concept Report; or
- Feasibility Report
- IPAC Certificate

Approval process for this end-of-stage deliverable:

IPAC shall review and approve the Concept / Feasibility Report. IPAC shall only review and
recommend the Concept / Feasibility Report on behalf of the Sector Departments if the Sector
Departments Delegated Representative is not present in the IPAC meeting. Concept /
Feasibility Report to be forwarded to Sector Department for approval and authority to proceed
to Stage 3: Design Development.

Proforma letters and forms available for this stage are:

- Concept Report
- Feasibility Report
- · IPAC submission letters and forms

On receipt of the IPAC Certificate approving the end-of-stage deliverable, the Project Team can commence work on Stage 3 and submit their fee claim for Stage 2.

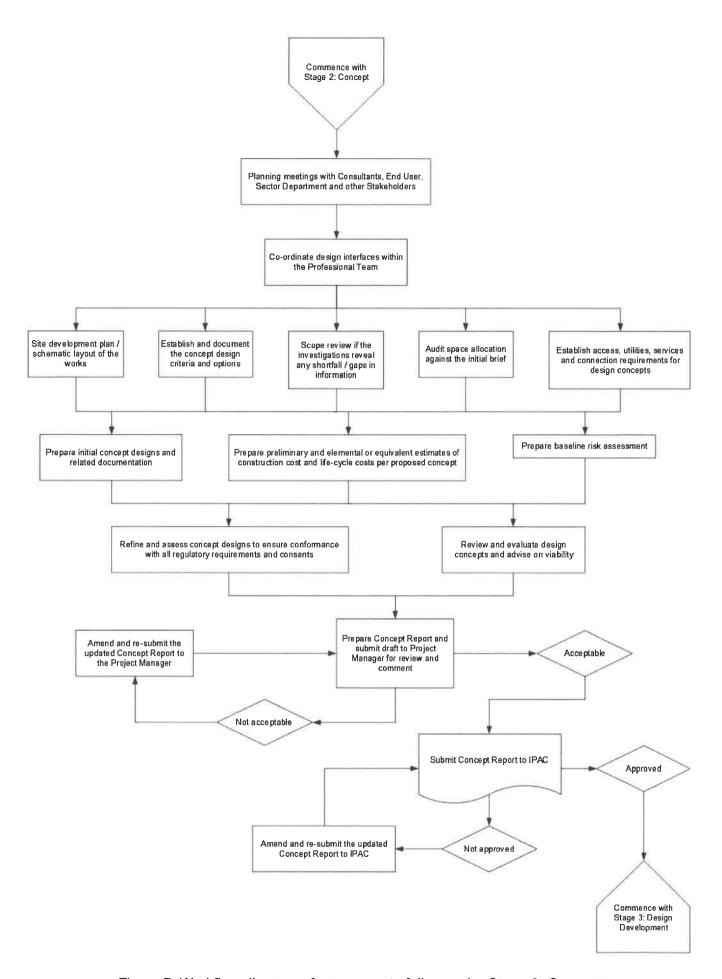


Figure 7: Workflow diagram of processes to follow under Stage 2: Concept

3.5 DESIGN DEVELOPMENT (STAGE 3)

The primary focus of this stage is to develop the approved concept to finalise the design, outline specifications, cost plan, financial viability, and documentation programme for the project.

The design should reflect the constraints of the budget for the overall project. At this stage there will frequently be a reiterative process of proposing a component, checking its predicted performance against the brief, and amending selections if required.

The Design Development Report shall as necessary:

- Develop in detail the approved concept to finalise the design and definition criteria.
- Establish the detailed form, character, function, and costings.
- Define all components in terms of overall size, typical detail, performance, and outline specification.
- Describe how infrastructure or elements or components thereof are to function, how they are to be safely constructed, how they are to be maintained and how they are to be commissioned.
- Confirm that the project scope can be completed within the budget or propose a revision to the budget.

The following processes to be undertaken by the Project Team for this stage:

- Develop in detail the approved concept to finalise the design and definition criteria.
- Review documentation programme with Principal Agent and other Consultants involved.
- Define (Preliminary drawings) all components in terms of overall size, typical detail, performance, and outline specification.
- Establish the detailed form, character, function, and costings presents to IPAC for stage 3 approval.
- · Attend design and consultants' meetings.
- Incorporate Sector's, Consultants', and Authorities' detailed requirements into the design.
- Obtain relevant requirements/approvals from Local Authorities or other statutory bodies where applicable.
- Submit the necessary Design Documentation to Local and other Authorities for a Record of Decision
- Prepare design development drawings including draft technical details and specifications.
- Review and evaluate design.
- Outline specification and exercise cost control.
- Confirmation that the designs submitted are within the control budget or propose a revision to the control budget.
- Liaise, co-operate, and provide necessary information to the Principal Agent and other consultants involved.
- Set up regular engagements with the Sector to collaborate and update on the progress and obtain their approval on major decisions where applicable.
- Establish Stakeholder requirements and communication protocols.
- · Detailed quality control specifications.
- Outline standards to be complied with.
- Update of the risk register.
- Review and update the Health and Safety specifications and baseline assessment.
- Prepare a Design Development Report and submit to IPAC for approval.

Refer to workflow diagram depicted in Figure 8 below which provides a summary of the processes under FIDPM Stage 3 - Design Development.

Note:

For Develop and Construct contracting strategy, the Project Manager is required to submit the approved IPAC submission to BSC & BAC for approval before requesting SCM to advertise the tender. The Project Manager is required to comply with all Infrastructure Procurement Gates as listed below.

End-of-stage Deliverables:

- Design Development Report
- IPAC Certificate

Approval process for this end-of-stage deliverable:

 IPAC shall review and approve the Design Development Report. IPAC shall only review and recommend the Design Development Report on behalf of the Sector Departments if the Sector Departments Delegated Representative is not present in the IPAC meeting. Design Development Report to be forwarded to Sector Department for approval and authority to proceed to Stage 3: Design Development.

Proforma letters and forms available for this stage are:

- Design Development Report
- IPAC submission letters and forms

On receipt of the IPAC Certificate approving the end-of-stage deliverable, the Project Team can commence work on Stage 4 and submit their fee claim for Stage 3.

Note:

This section aligns to the Chapter 4 of the Standard Operating

Procedures

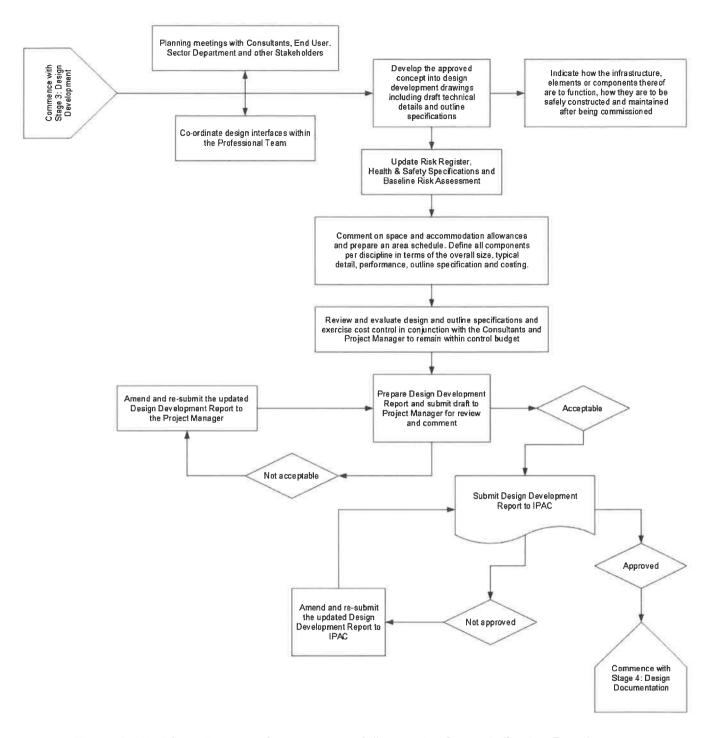


Figure 8: Workflow diagram of processes to follow under Stage 3: Design Development

3.6 DESIGN DOCUMENTATION (STAGE 4)

The primary focus of this stage is to prepare the construction and procurement documentation, confirm and implement the procurement programme, strategies, and procedures for effective and timeous procurement of necessary resources for the execution of the project.

Design documentation provides the:

Production information that details, performance definition, specification, sizing and positioning
of all systems and components that would enable construction.

• Manufacture, fabrication and construction information for specific components of the work informed by the production information.

The following processes to be undertaken by the Project Team for this stage:

- Check cost estimates and adjust designs and documents, if necessary, to remain within budget.
- Review designs, drawings, and schedules for compliance with approved budget.
- Assess samples and products for compliance.
- Set up regular engagements with the Sector to collaborate and update on the progress and seek their approval on major decisions where applicable.
- Update Project Risk Register.
- Review and update Health and Safety Specifications and Baseline Assessment.

Note: For Design by Employer contracting strategy, the Project Manager is

required to submit the approved IPAC submission to BSC & BAC for approval before requesting SCM to advertise the tender. The Project Manager is required to comply with all Infrastructure Procurement Gates

as listed below.

Note: For Design and Build & Develop and Construct contracting strategies,

the appointed service provider can commence with construction on

receipt of the IPAC Certificate.

Refer to workflow diagram depicted in Figure 9 below which provides a summary of the processes under FIDPM Stage 4 - Design Documentation.

End-of-stage Deliverables:

- Design Documentation Report
- IPAC Certificate

Approval process for this end-of-stage deliverable:

 IPAC shall review and approve the Design Documentation Report. IPAC shall only review and recommend the Design Documentation Report on behalf of the Sector Departments if the Sector Departments Delegated Representative is not present in the IPAC meeting. Design Documentation Report to be forwarded to Sector Department for approval and authority to proceed to procurement or Stage 5: Works

Proforma letters and forms available for this stage are:

- Design Development Report
- IPAC submission letters and forms

On receipt of the IPAC Certificate approving the end-of-stage deliverable, the Project Team to submit the tender documentation to BSC & BAC for approval to commence procurement of the Contractor (Design by Employer). Project Team can commence work on Stage 5 (Design and Build / Develop and Construct) and submit their fee claim for Stage 4.

Note: This section aligns to the Chapter 5 of the Standard Operating

Procedures

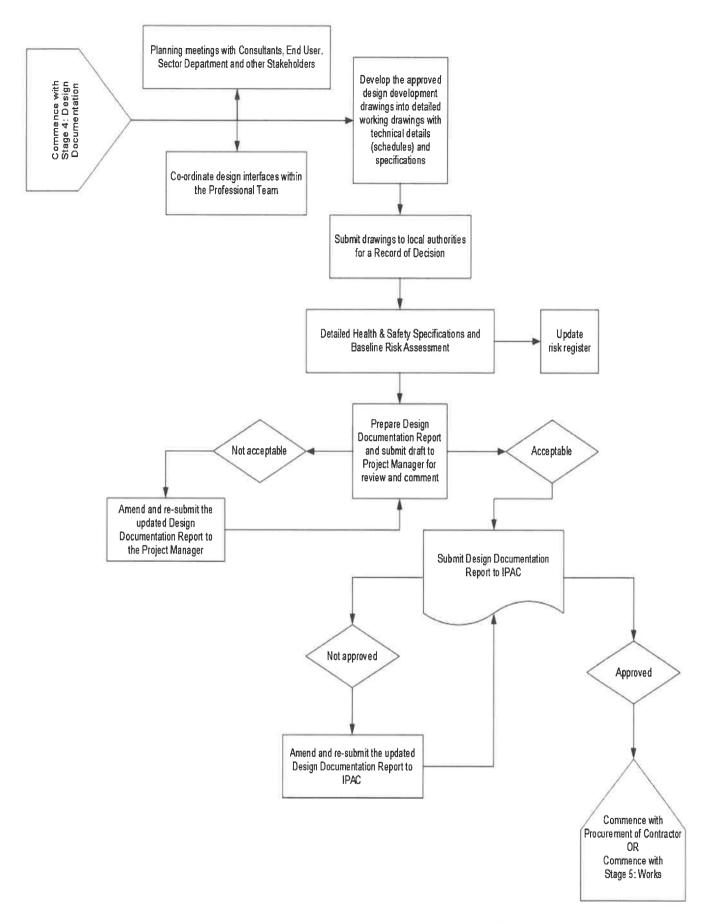


Figure 9: Workflow diagram of processes to follow under Stage 4: Design Documentation

3.7 WORKS (STAGE 5)

The primary focus of this stage is to manage, administer and monitor the contracts and processes, including the preparation and coordination of the procedures and documentation to facilitate practical completion of the works.

The Agreement entered by the Contractor and the Department will guide the Project Manager on how to successfully administer and complete the project. Ensure compliance with the Agreement i.e. standard form of contract (JBCC, GCC, FIDIC or NEC 3), contract data, specifications, etc. to ensure that the Department is not in breach of contract.

The following is required for completion of the Works Stage:

- · Completion of the works is certified in accordance with the provisions of the contract; or
- The goods and associated services are certified as being delivered in accordance with the provisions of the contract.

The following processes to be undertaken by the Project Team for this stage:

- Contract documentation to be issued to the Contractor as per the Contract Data.
- Before site handover, verify with SCM that the contractor has provided the required documents i.e. insurances, guarantees, construction programme, Health and Safety requirements and has notified the Department of Labour of the commencement of construction works.
- Obtain construction work permit from Department of Labour to commence construction.
- Attend site handover meeting and issue site handover certificate to the contractor.
- Carry out contract administration procedures in terms of the contract.
- Establish and maintain a financial control system.
- Prepare schedules of predicted cash flow.
- Prepare pro-active estimates of proposed variations for Sector decision-making.
- · Attend regular site, technical and progress meetings.
- Adjudicate and resolve financial claims by contractors.
- Evaluate and adjudicate actual variation order applications based on unforeseen circumstances that occur during construction.
- Clarify technical details and descriptions during construction as required.
- Prepare valuations for payment certificates to be issued by the Principal Agent.
- · Witness and review of all tests and mock-ups carried out on site.
- Check and approve construction drawings for compliance with contract documents.
- Update and issue drawings register.
- Issue contract instructions as and when required.
- Review the outputs of quality assurance procedures and advise the contractor and Sector on adequacy and need for additional controls, inspections, and testing.
- Conduct Inspections to check the quality of work that has been produced by the contractor.
- Arrange for the delivery of all test certificates, including any Certificates of Compliance, statutory and other approvals, and record drawings and operating manuals.
- Set up regular engagements with the Sector to collaborate and update on the progress and seek their approval on major decisions where applicable.
- Completion of the works is certified in accordance with the provisions of the contract.
- Certify works and prepare payment certificates in accordance with the provisions of the contract.

• Issue of Practical Completion certificate and issue Snag/Defects Lists, conduct inspections and ensure that snags/defects are rectified.

Refer to Workflow diagram depicted in Figure 10 below which provides a summary of the processes under FIDPM Stage 5 - Works.

The Project Team to submit the as-build drawings, maintenance manuals, warranties, certificates of compliance, proof of training, draft Final Account, etc. to the Project Manager for review and distribution to End User and Sector Department.

The Consultants can claim fees for this stage on a quarterly basis until the issuance of the Practical Completion / Completion of the Works / Completion Certificate.

End-of-stage Deliverables:

- Works Completion Report
- IPAC Certificate

Approval process for this end-of-stage deliverable:

 IPAC shall review and approve the Works Completion Report. IPAC shall only review and recommend the Works Completion Report on behalf of the Sector Departments if the Sector Departments Delegated Representative is not present in the IPAC meeting. The Works Completion Report to be forwarded to Sector Department for approval and authority to proceed to Stage 6: Handover

Proforma letters and forms available for this stage are:

- Site Handover Certificate
- Site Handover Minutes of Meeting
- · Progress / Technical Minutes of Meeting
- Revision of Date of Practical Completion / Extension of Time Claim / Compensation Event
 (Time)
- Contract Instruction affecting the Contract Value / Variation Order / Compensation Event (Value)
- Practical Completion / Completion of the Works / Completion Certificate
- · Interim Payment Certificate
- Cash Flow
- Cost Report
- Works Completion Report
- IPAC submission letters and forms

Note:

This section aligns to the Chapter 5 of the Standard Operating Procedures

Stage 5 is triggered once Stage 4: Design Documentation report/IPAC Certificate is approved in accordance with SCM Procurement Gates 1 to 7 and signed off by the delegated official as per IPAC

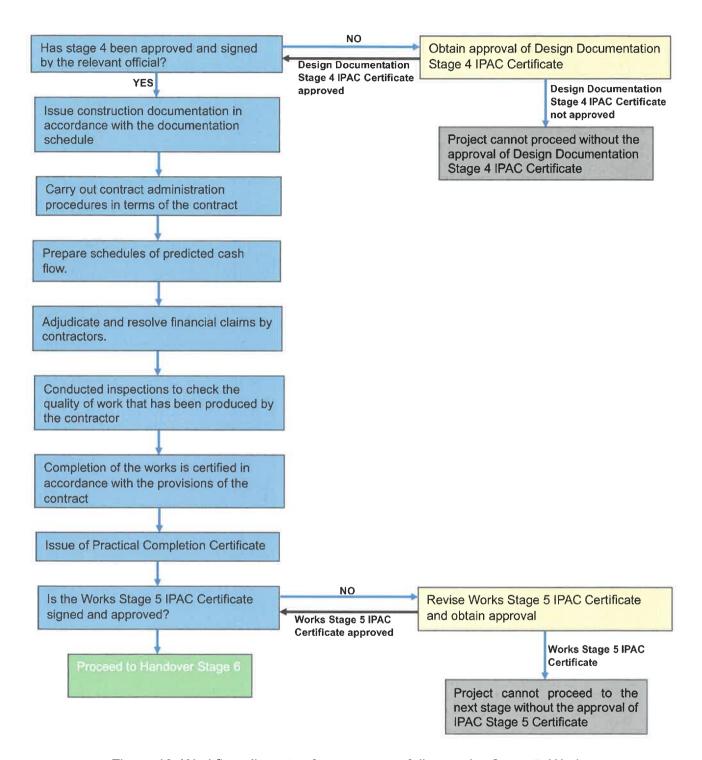


Figure 10: Workflow diagram of processes to follow under Stage 5: Works

3.8 HANDOVER (STAGE 6)

The primary focus of this stage is to ensure that any training required by the End User on how to operate and maintain the works is done, and record information is also handed over to the End User and Sector Department for future reference and maintenance.

Works which have been taken over by user or owner; completed training and compiles a Record of Information Report.

The following activities shall be undertaken during the handover stage:

- Finalise and assemble record information which accurately reflects the infrastructure that is acquired, rehabilitated, refurbished, or maintained.
- Hand over the work and record information to the user organisation and if necessary, train end user staff in the operation of the works.

The Project Manager needs to:

- · Accept completion certificates.
- Receive and distribute as-built drawings and design documentation to appropriate parties.
- Receive and distribute operating and maintenance manuals. Warranties and guarantees to appropriate parties.
- Receive and distribute statutory compliance certificates and documentation to appropriate parties.
- Receive and hand over health and safety records to the departmental Construction Safety & System
- Monitor rectification of defects during defects liability period
- Monitor settlement of final account(s)
- · Procure and distribute End User defects list for inclusion in project defects list.

This stage includes the following actions to be performed by the Project Team:

- Inspect and verify the rectification of defects.
- Issue a Certificate of Completion (SAICE-GCC).
- · Agree with Contractor on final quantities.
- Reduce the performance guarantee as per Contract.
- Submit reports.
- · Submit "as-built" drawings and documentation.
- Submit Final Account.

The following processes to be undertaken by the Project Team for this stage:

- Assist in the resolution of contractual claims by the contractor.
- Engage with the Sector and seek approval on major decisions where applicable.
- Issue contract instructions as and when required.
- Review and comment on operation and maintenance manuals, guarantee certificates and warranties.
- Finalise and assemble record information which accurately reflects the infrastructure that is acquired, rehabilitated, refurbished, or maintained.
- Hand over the works and record information to the end user/Department and if necessary, train
 end-user staff in the maintenance/operation of the works.
- Insurances and Guarantees over the defects period are in place.

- Handover certificate which certifies that the works which have been taken over by the user or owner are complete with record information.
- Release part of the retention, insurance and guarantees depending on the contractor to use it.
 Handover certificate which certifies that the works which have been taken over by the user or owner are complete.
- Prepare a Handover report for stage 6 confirming that all the deliverables for Stage 6 have been received and distributed accordingly.
- Issue Certificate of Completion.

Refer to workflow diagram depicted in Figure 11 below which provides a summary of the processes under FIDPM Stage 6 - Handover.

Stage 6 is complete when the Handover/Record Information Report (Final Completion Certificate), as per the Department's prescribed format, is approved.

End-of-stage Deliverables:

- Handover / Record Information Report
- Draft Final Account
- IPAC Certificate

Approval process for this end-of-stage deliverable:

IPAC shall review and approve the Handover / Record Information Report. IPAC shall only
review and recommend the Handover / Record Information Report on behalf of the Sector
Departments if the Sector Departments Delegated Representative is not present in the IPAC
meeting. The Handover / Record Information Report to be forwarded to Sector Department for
approval and authority to proceed to Stage 7: Close-out.

Proforma letters and forms available for this stage are:

- Handover / Record Information Report
- Final Account
- · IPAC submission letters and forms

Stage 6 occurs between Practical completion and final completion when the completion of stage 5 (the Works) would have been deemed fit for occupation and ready for use.

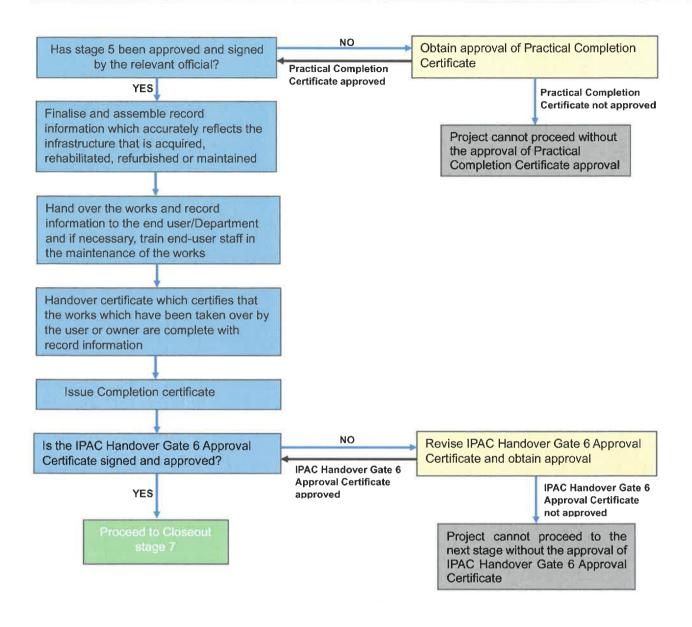


Figure 11: Workflow diagram of processes to follow under Stage 6: Handover

3.9 CLOSE-OUT (STAGE 7)

The primary focus of this stage is to fulfil and complete the project close-out including the preparation of the necessary documentation to facilitate effective completion, handover, and operation of the project.

The Close-out Stage commences when the end user accepts liability for the works. This stage is complete when:

- Record information is archived.
- Defects certificates and certificates of final completion are issued in terms of the contract.
- Defects liability period ends, and the latent defects period commences.
- Final amount due to the contractor is certified, in terms of the contract.
- Close-out Report is prepared by the Project Team and approved by IPAC.

The following processes to be undertaken by the Project Team for this stage:

- · Record information is archived.
- Prepare and/or procure operations and maintenance manuals, guarantees and warranties.
- · Defects Certificate and Final Completion Certificate are issued in terms of the contract.
- Final amount due to the contractor is certified by the delegated official in terms of the contract.
- Rectification of any maintenance items before the expiry of the maintenance period.
- Engage with the Sector and obtain approval for significant decisions where applicable.
- Release of the balance of the retention held against the contractor.
- Close-Out Report is prepared by the Professional Service Provider (Consultant) and approved by the Sector Department, confirming that all the deliverables for Stage 7 have been received and distributed accordingly.
- Capture the completed project on the Asset Register as required.

Refer to workflow diagram depicted in Figure 12 below which provides a summary of the processes under FIDPM Stage 7 - Close-out.

End-of-stage Deliverables:

- Close-out Report
- Final Payment Certificate and Final Fee Claims
- IPAC Certificate

Approval process for this end-of-stage deliverable:

IPAC shall review and approve the Close-out Report. IPAC shall only review and recommend
the Close-out Report on behalf of the Sector Departments if the Sector Departments Delegated
Representative is not present in the IPAC meeting. The Close-out Report to be forwarded to
Sector Department for approval and authority to allow the Department to allow the Consultants
to claim their final fees and the Project Manager to close the project on WIMS.

Proforma letters and forms available for this stage are:

- · Close-out Report
- · IPAC submission letters and forms

The Close-Out Stage commences when the end user accepts the Completion of the Works. Has stage 6 been approved and signed Obtain approval of Handover Stage 6 by the relevant official? Handover Stage 6 IPAC **IPAC** Certificate Certificate approved YES Handover Stage 6 IPAC Archived record information Certificate not approved Project cannot proceed without the approval of Handover Stage 6 IPAC Certificate Prepare and/or procure operations and maintenance manuals, guarantees and warranties Final amount due to the contractor is certified by the delegated official in terms of the contract Issue defects certificate and Final Completion Certificate in terms of the contract Rectification of any maintenance items and expiry of the maintenance period Professional service provider shall prepare Close-Out Report NO Revise Close-out Stage 7 IPAC Is the Close-out Stage 7 IPAC Certificate and obtain approval Certificate signed and approved? Close-out Report approved YES Close-out Stage 7 IPAC Certificate not approved Project cannot proceed without the approval of Close-out Stage 7 IPAC Certificate

Figure 12: Workflow diagram of processes to follow under Stage 7: Close-out

4 SECTION 3: INFRASTRUCTURE PROCUREMENT

The purpose of this document is to prescribe the minimum set of standards that are to be observed during Infrastructure Procurement within the KwaZulu-Natal Department of Public Works. Government procurement rests upon five (5) core principles of behaviour also known as the Five Pillars of Procurement. The Department's procurement system will fail if any of these pillars are broken.



Figure 13: Five Core Pillars of Procurement

SCM is required to be implemented in line with a variety of acts, regulations, and guidelines. Refer to workflow diagram depicted in Figure 14 below for an overview of acts, regulations, and guidelines that impacts on Infrastructure Procurement.

The goals of infrastructure procurement management are to obtain the optimum provision of infrastructure services from the market in terms of cost, time, and quality. At the same time as providing infrastructure services, SCM needs to maintain integrity, manage risk, and accomplish socioeconomic objectives (including promoting competition), local production content, as well as achieving B-BBEE objectives.

The infrastructure procurement plan needs to collate information from the Infrastructure Programme Management Plans (IPMPs) and Infrastructure Project Implementation Plans (IPIPs) for all proposed tenders for the next financial year, which contains the following information:

- A description of the goods, services or works.
- The estimated value of such goods, services or works including all applicable taxes.
- The envisaged date of advertisement.
- The envisaged closing date for bids.
- The envisaged date of award.
- The responsible office (Head, Regional, or District Office).

The Control Framework for Infrastructure Procurement (FIDPM) prescribes the minimum requirements for the effective governance of infrastructure delivery and procurement management through eight (8) Procurement Gates (PG).

To review, comment, request amendments, make recommendation, and approve the outputs of each Procurement Gate, the Accounting Officer established the Bid Specifications Committee (BSC), the Bid Evaluation Committee (BEC) and the Bid Adjudication Committee (BAC).

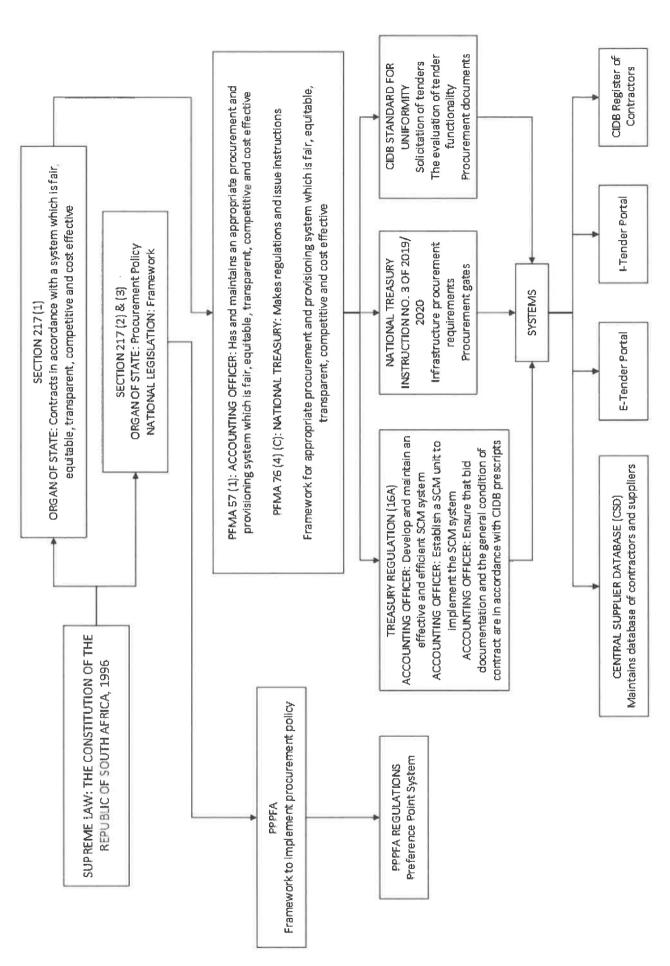


Figure 14: Legislative requirements applicable to Supply Chain Management

These legislative requirements are further underlined by Treasury Instruction Notes, Practice Notes and Guidelines, CIDB Standard for Uniformity, CIDB Practice Notes and Guidelines, SANS 10845 latest edition, and departmental SCM Infrastructure Procurement Policy, Preferential Procurement Policy, Delegations, etc.

To allow for effective and efficient procurement, the Control Framework for Infrastructure Procurement was subdivided into three (3) phases:

- Procurement Phase 1
 - PG 0-1: Establish infrastructure requirements (I-AMP)
 - PG 0-2: Develop infrastructure procurement strategy and infrastructure programme / project management implementation plans (IPS, IPMP & IPIP)
 - PG 1: Obtain permission to start the procurement processes.
 - PG 2: Obtain approval of the procurement strategy to be adopted.
 - PG 3: Obtain approval of the procurement documents
 - PG 4: Confirm that cash flow is sufficient to meet projected contractual obligations.
- Procurement Phase 2
 - PG 5: Solicit tender offers.
 - PG 6: Evaluate tender offers in terms of undertaking and parameters established in the procurement documents.
 - PG 7: Award the contract.
- Procurement Phase 3
 - PG 8: Administer the contract and confirm compliance with all contractual requirements.

The deliverables for each Procurement Phase will be submitted to the relevant committee for review, evaluation, and approval.

4.1 PROCUREMENT PHASE 1 - GENERAL

Each time the Department undertakes procurement, it should consider and establish the following:

- The broad scope of work associated with the procurement, including aspects such as:
 - Sustainability (social, economic, and environmental aspects)
 - Health and Safety
 - Considerations involving the service life construction works.
- The need and justification for the procurement
- If it is possible to avoid unnecessary consumption through demand management initiatives or by considering alternatives, reuse, repurposing, recycling, refurbishment or reconditioning or the acquiring of second-hand or used items.
- The estimated market-related costs, whole-life costs, and benefits of the procurement.
- The resources and expertise available for the management, administration, and supervision of the procurement
- The risks associated with the procurement.
- The public authorities, if any, which should be consulted in connection with the procurement.
- The secondary procurement policies and targeted procurement strategies, if any, which apply to the contract or project.
- The appropriate contracting strategy.
- · The appropriate selection method.
- The funding source(s) for the contract or project.

4.1.1 PG 0-1: ESTABLISH INFRASTRUCTURE REQUIREMENTS

In establishing infrastructure requirements, an institution must review its service delivery strategic objectives and develop an Infrastructure Asset Management Plan (I-AMP). The I-AMP must summarise the activities that an organisation intends to undertake to deliver its infrastructure asset management objectives, along with the resources required, timescales and costs.

An approved I-AMP must inform the development of the Infrastructure Programme Management Plan (IPMP), with respect to describing the infrastructure programmes and projects that will be executed, monitored, and controlled over the planned Medium-Term Expenditure Framework (MTEF) period.

An approved I-AMP must be handed over the SCM: Director as part of integrated planning.

Output:

Approved I-AMP

Note:

I-AMP Currently known as a User Asset Management Plan (U-AMP) and

a Custodian Asset Management Plan (C-AMP)

4.1.2 PG 0-2: DEVELOP INFRASTRUCTURE PROCUREMENT STRATEGY AND INFRASTRUCTURE PROGRAMME / PROJECT MANAGEMENT IMPLEMENTATION PLANS

In response to the U-AMP, an IPS and IPMP must be developed by the Sector Department at the programme management level.

The Infrastructure Procurement Strategy (IPS) indicates the methodology for procurement of resources per project, package, or programme, required to execute the delivery of infrastructure, by means of a delivery plan, contracting and procurement arrangements for contractors / professional services, and aligns the procurement of resources with government's infrastructure delivery objectives.

The Infrastructure Programme Management Plan (IPMP) is a 3-year budgeted infrastructure delivery plan that specifies how the infrastructure programmes will be executed, monitored, and controlled over the planned MTEF period. The IPMP must indicate the total budget allocation and split as per the infrastructure programmes i.e. new asset requirements, upgrades and additions, refurbishment, operations, and maintenance.

The Department will collate the I-AMP, IPS and IPMP to prepare an IPIP for review and approval by the Sector Department.

Output:

Approved IPMP & IPIP

4.1.3 PG 1: OBTAIN PERMISSION TO START WITH THE PROCUREMENT PROCESS

Minimum FIDPM requirements for PG 1 are:

- Establish and clarify what needs to be procured.
- Prepare broad scope of work for procurement.
- Ascertain a title for the procurement for the purposes of project identification.

- estimate financial value of proposed procurement and contract for budgetary purposes, based on the broad scope of work.
- · Confirm the budget.

PG 1 is complete when a designated person or body makes a decision to proceed / not to proceed with the procurement based on the broad scope of work and the financial estimates.

Output:

Permission to start the procurement process

4.1.4 PG 2: OBTAIN APPROVAL FOR PROCUREMENT STRATEGIES THAT ARE TO BE ADOPTED

Minimum FIDPM requirements for PG 2 are:

- · Decide on procurement strategies.
- Establish opportunities for promoting preferential procurement in line with legislative provisions and the Construction Sector Code.
- Establish contracting and pricing strategy comprising of an appropriate allocation of responsibilities and risks and the methodology by which contractors are to be paid.
- Establish procurement procedures.

PG 2 is complete when a delegated person or body approves procurement strategies that are to be adopted.

Output:

Approval of the procurement strategy

4.1.5 PG 3: OBTAIN APPROVAL FOR PROCUREMENT DOCUMENTS

Minimum FIDPM requirements for PG 3 are:

 Prepare procurement documents that are compatible with the approved procurement strategies.

PG 3 is complete when a delegated person or body reviews the procurement document, identifies sections, if any, which require amendments or improvement, and grants the necessary approval.

Output:

Approval of the procurement document

4.1.6 PG 4: CONFIRM SUFFICIENT CASH FLOW TO MEET PROJECTED CONTRACTUAL OBLIGATIONS

Minimum FIDPM requirements for PG 4 are:

- Confirm sufficient cash flow to meet contractual obligations.
- Establish control measures for payment of contractors within the time period provided for in the contract.

PG 4 is complete when a delegated person or body ensures that cash flow is sufficient for the procurement to take place.

Output:

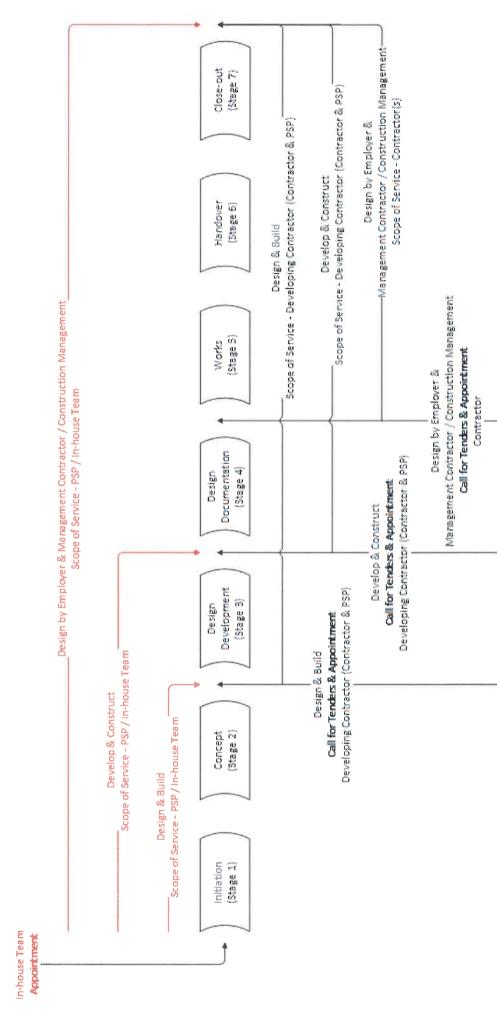
Confirmation of the budget

4.2 PROCUREMENT PHASE 1 - PROCESSES

Depending on the proposed Contracting Strategy, the following procurement process will commence at various stages of the project i.e. -

- · Design by Employer
 - Appoint in-house professionals or consultants to implement Stages 1 7; and
 - Appoint contractor to undertake Stages 5 7
- Design and Build
 - Appoint in-house professionals or consultants to undertake Stages 1 & 2; and
 - Appoint contractor to implement Stages 3 7 by further developing the approved design concept and specifications.
- Develop and Construct
 - Appoint in-house professionals or consultants to undertake Stages 1 3; and
 - Appoint contractor to implement Stages 4 7 by further developing the approved detailed design and specifications.
- · Management Contractor / Construction Management
 - Appoint a consultant as implementer to undertake the procurement and management of a team of consultants and contractor to implement the project on behalf of the Department; or
 - Appoint a professional Construction Manager to manage a multi-procurement contract with numerous direct contractors and or sub-contractors to implement Stages 5 7.

Refer to workflow diagram depicted in Figure 15 below which provides a summary of the various stages when procurement of Professional Services Providers (Consultants) and a Contractor should occur depending on the preferred Contracting Strategy.



Professional Service Providers (PSP)
Call for Tenders & Appointment

Call for Tenders & Appointment

Warragement Contractor / Construction Management

Figure 15: This workflow diagram depicts the various points during the project implementation stages where the call of tenders and appointment of Professional Service Providers (Consultants) and/or Contractors should occur,

Taking the various Contracting Strategies into account, the following processes should be undertaken to complete this procurement phase:

- Depending on the proposed Procurement Strategy identified in the approved planning documents (IPS, IPMP, IPIP and Project Charter / Project Brief), the Project Manager is required to submit a request to SCM Acquisitions to procure the necessary service.
- The submission to SCM Acquisition should include, but not be limited to:
 - The approved IPIP (collated out of the I-AMP, IPS and IPMP) / Letter of Instruction from the Accounting Officer from the relevant Sector Department, which authorises the initiation of the project.
 - The IPSC approved Project Charter / Project Brief
 - All relevant IPAC approval certificates and estimates, where relevant (Refer Figure 15 above)
 - The proposed procurement strategy (Refer to template PP 1: Infrastructure Procurement Phase 1)
 - The draft advertisement
 - The draft procurement documents (Calls for expression of interest / tender documents)
 - The estimated cash flow for the service required (Refer to template Project Cashflow).
- SCM Acquisitions to circulate the submission for review, comment, recommendation, and final approval through the BSC and BAC.
- Upon approval, the final procurement documents to be issued to SCM Acquisitions to commence with Procurement Phase 2

4.3 PROCUREMENT PHASE 2 - GENERAL

Tender offers should not be solicited unless and until:

- The necessary resources to administer the contract or project have been obtained or put in place.
- All the necessary organisational approvals for the project or contract have been obtained.
- Organisational approval has been obtained for the selected construction strategy, for the selection method, and, where a secondary procurement policy is to be pursued, for the targeting strategy.
- All necessary feasibility studies, impact assessments, preliminary investigations, and life-cycle
 costs commensurate with the selected contract strategy have been completed and their
 outcomes captured in the procurement documents.
- All the necessary and appropriate procurement documents have been prepared and approved.
- The need for the procurement, the financial and technical viability of the proposed procurement, and the employer's firm intention of proceeding with the procurement is confirmed.
- The funding for, or the arrangements for, the financing of the contract or project are in place.
- A procurement plan which indicates the timeline for advertising and closing of tenders, and the
 obtaining of the necessary approvals leading up to the award of the contract or the issuing of
 and order has been developed.

4.3.1 PG 5: SOLICIT TENDER OFFERS

Minimum FIDPM requirements for PG 5 are:

- · Invite tender offers.
- Receive tender offers.

- · Record tender offers.
- · Safeguard tender offers.
- Prepare a report on tender offers received.

PG 5 is complete when a delegated person or body ensures that all received tender offers are duly accounted for.

Output:

Authorisation to proceed to the next phase of the procurement process

4.3.2 PG 6: EVALUATE TENDER OFFERS IN TERMS OF UNDERTAKING AND PARAMETERS ESTABLISHED IN THE PROCUREMENT DOCUMENTS

Minimum FIDPM requirements for PG 6 are:

- Open and record tender offers received.
- · Determine whether or not tender offers are complete.
- Determine whether or not tender offers are responsive.
- · Evaluate tender submissions.
- Perform a risk analysis.
- Prepare a tender-evaluation report.

PG 6 is complete when a person or body reviews evaluation report and ratifies recommendations.

Output:

Approval of tender evaluation committee recommendations

4.3.3 PG 7: AWARD THE CONTRACT

Minimum FIDPM requirements for PG 7 are:

- Notify successful tenderer and unsuccessful tenderers of outcome.
- · Compile contract document.
- · Formally accept tender offer.

PG 7 is complete when a delegated person or body confirms that the tenderer has provided evidence of complying with all requirements stated in the tender data and formally accepts the tender offer in writing and issues the contractor with a signed copy of the contract.

Output:

Acceptance of a tender offer

4.4 PROCUREMENT PHASE 2 - PROCESSES

The following processes should be undertaken to complete this procurement phase:

- SCM Acquisitions will invite tender offers by placing advertisements in newspapers, upload the
 advertisement and procurement document onto the e-tender portal, departmental and CIDB
 websites.
- Prospective bidders can either download or buy a copy of the procurement documents.
- The SCM Representative and Project Manager indicated in the advertisement and procurement documents will conduct the compulsory briefing meeting.
- The SCM Representative will circulate the minutes of the compulsory briefing meeting, respond to any queries raised and issue any addendums required.

PROCUREMENT PHASE 3 - GENERAL 4.5

PG 8: ADMINISTER THE CONTRACT AND CONFIRM COMPLIANCE WITH ALL 4.5.1 **CONTRACTUAL REQUIREMENTS**

Minimum FIDPM requirements for PG 8 are:

- Capture contract award data.
- Administer contract in accordance with the terms and provisions of the contract.
- Ensure compliance with contractual requirements.

PG 8 is complete when a delegated person captures contract completion / termination date.

Output:

Completion Certificate / Letter of Termination

PROCUREMENT PHASE 3 - PROCESSES

The following processes should be undertaken to complete this procurement phase:

- A copy of the Agreement to be handed over to the Contractor on / or before Site Handover.
- The Project Manager to strictly adhere to the terms and conditions of the Agreement during the construction of the works.
- Variation Orders, Extension of Time, and any other Claim (Compensation Events) to be submitted for approval to the Delegated Official or Committee. Copies of these to be circulated to the Principal Agent (JBCC) / Engineer (GCC) / Project Manager (NEC 3).
- Payment Certificates and Fee Claims to be reviewed and submitted for payment to Finance.
- The Project Manager is required to comply with the termination process indicated in the Contract. An application to terminate to be submitted to the Accounting Officer via BAC. Upon approval to terminate, the Director: SCM will issue the Letter of Termination to the Contractor / Consultant.
- Completion Certificates (as per Contract) to be signed by the Project Manager, End User and Sector Department Representative.
- Final Account to be reviewed by a departmental Quantity Surveyor before the Delegated Official and Contractor signs the Final Statement.
- SCM Contract Administration to safeguard the original documents i.e. the guarantees, Agreement, Site Handover Certificate, VOs, EOTs, Completion Certificates and the Final Account.

RECORDS

The Department shall keep written records of all decisions and determinations made, as well as the reasons and details relating thereto.

APPROVED

51|Page

HEAD OF DEPARTMENT