

V2

Developed by:

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## 1 Background and objectives

Government has made a decision to establish two new universities in the inner city of Kimberley in the Northern Cape and on the site of the Lowveld Agricultural College, Nelspruit in Mpumalanga. It is envisaged that both institutions will be comprehensive universities, each aspiring to be destinations of choice for qualifying school leavers across South Africa and the continent. The new universities will support both national and provincial goals. When established, *government envisions these new universities:*

- *as sites of learning and culture which give expression to democracy and social justice and increase participation in political, social, cultural and economic life;*
- *as active participants taking centre stage in addressing the challenges confronting society and playing their role in the context of a Developmental State;*
- *as African universities, part of a broader network and community of African institutions of higher learning with a long tradition of scholarship, rooted in the African experience, contributing to African knowledge production and generating ideas and insights with global relevance;*
- *as 21st century social institutions that must develop innovative modalities of governance, funding, teaching and learning, research and civic engagement in order to respond to ever-changing social, cultural, political, environmental and economic demands;*
- *as relevant leaders of the knowledge economy, actively engaging communities to produce knowledge for social development and delivering innovation-driven research for commercial and economic advancement.*

The new universities in the Northern Cape and Mpumalanga will be comprehensive universities with a maximum of 5 000 and 15 000 students, respectively, by 2024. Both universities offer a combination of academic programmes usually offered by universities of technology and by traditional universities i.e. they will offer programmes to students ranging from vocational and professional to general formative. The universities will open their doors to new students as from the beginning of 2014. A maximum of 80% of the headcount will be housed in on-campus residences.

## 2 Stakeholder management arrangements

The Department of Higher Education and Training (DHET) has entered into an agreement with the University of the Witwatersrand, Johannesburg, (Wits) to project manage and resource the spatial and physical planning and development for the new institutions of higher learning in Mpumalanga and the Northern Cape Provinces for the first phase of the project. An amendment to the agreement is currently being prepared to extend Wits' services to execute the next phase of development on an agency basis.

The current agreement makes provision for a Steering Committee, a Technical Integration Committee and a Project Management Team. The Steering Committee comprises:

- three senior representatives from the DHET;
- three senior representatives from Wits;

- a senior representative from key stakeholders such as the Premier's Office and the National Institute of Higher Education in each Province; and
- representatives from the University of Johannesburg and University of Pretoria

The Steering Committee meets every two months to receive and review reports on the Implementation Plan from the Project Management Team and the Technical Integration Committees. The Steering Committee may support recommended adjustments to such a plan for approval by the DHET including those of a scope, timing and budgetary nature.

The Technical Integration Committee comprises three representatives from the DHET and three from Wits who meet to enable integration of planning for academic, operational and physical development. These representatives are directly engaged in aspects of the planning for the new universities. This committee meets generally fortnightly and makes recommendations for implementation by the Project Management Team on studies and investigations relating to the academic, spatial and operational aspects of the University.

The Project Management team is put in place by the Wits Campus Development and Planning Department. This team is responsible and accountable for the delivery of the Implementation Plan. The current composition of this team is indicated in the organogram contained in Figure 2.

The agreement requires Wits to utilise its own procurement procedures and policies to procure. It also requires the university to provide the DHET with copies of the University's procurement procedures and policies and requires transactions to be audited.

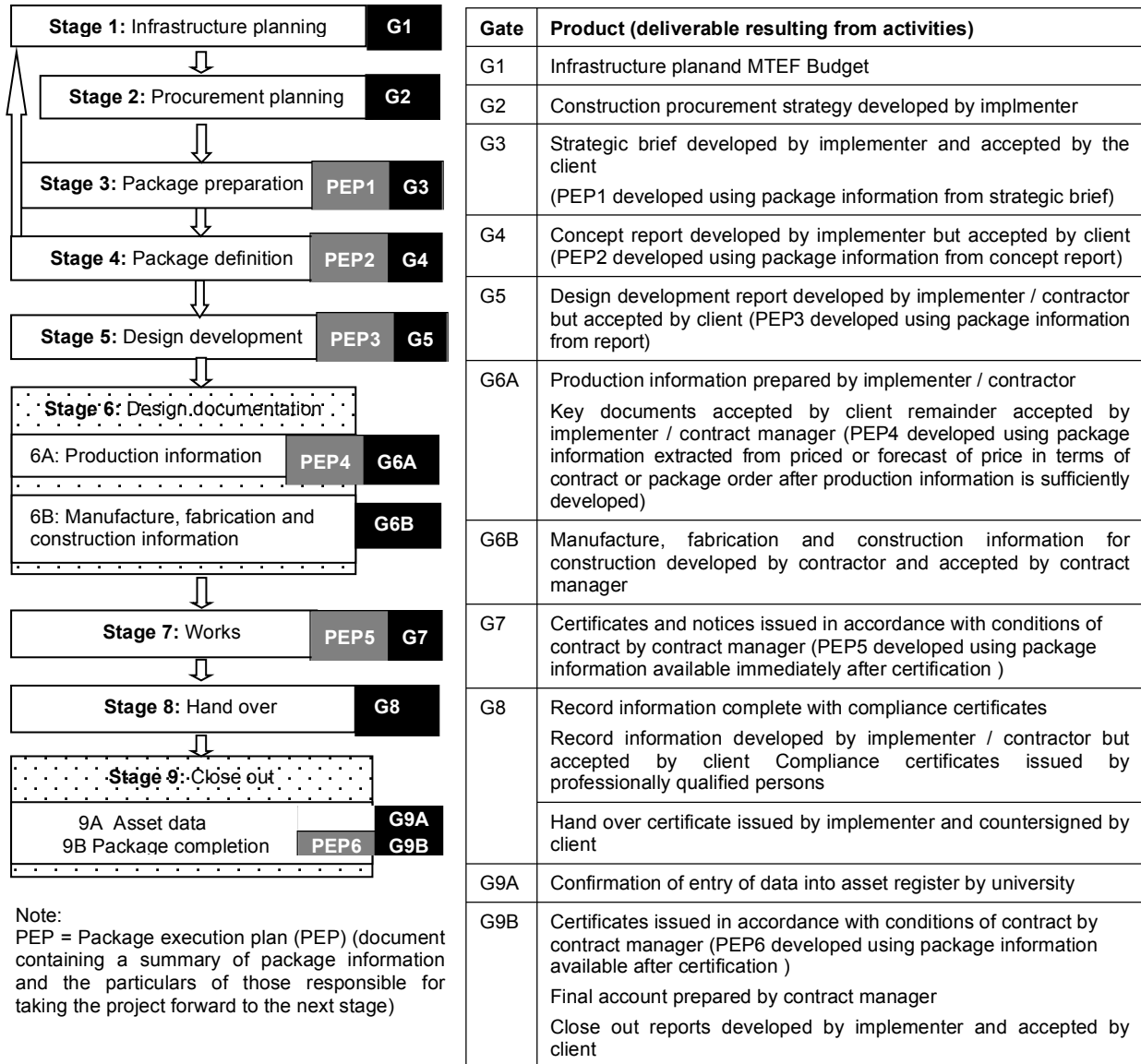
Figure 1 depicts the CIDB Infrastructure Gateway System that forms the basis for the Infrastructure Delivery Management System which has been developed by National Treasury and the Construction Industry Development Board. Wits is currently the "implementer" for the project. The role of the "client" is currently being performed by the DHET through the Technical Integration Committee. This will however change when the interim university councils are established. These interim councils will become the "client" who accepts the products at the end of each stage from stage 3 onwards. The detail of the relationship between these interim councils and governance structures is still evolving.

### **3 Wit's construction procurement system**

Wits has recently established a separate procurement system to serve its needs relating to the delivery and maintenance of infrastructure, the details of which are contained in the document "*Construction procurement policy, processes, procedures, methods and delegations (August 2012)*." This document covers:

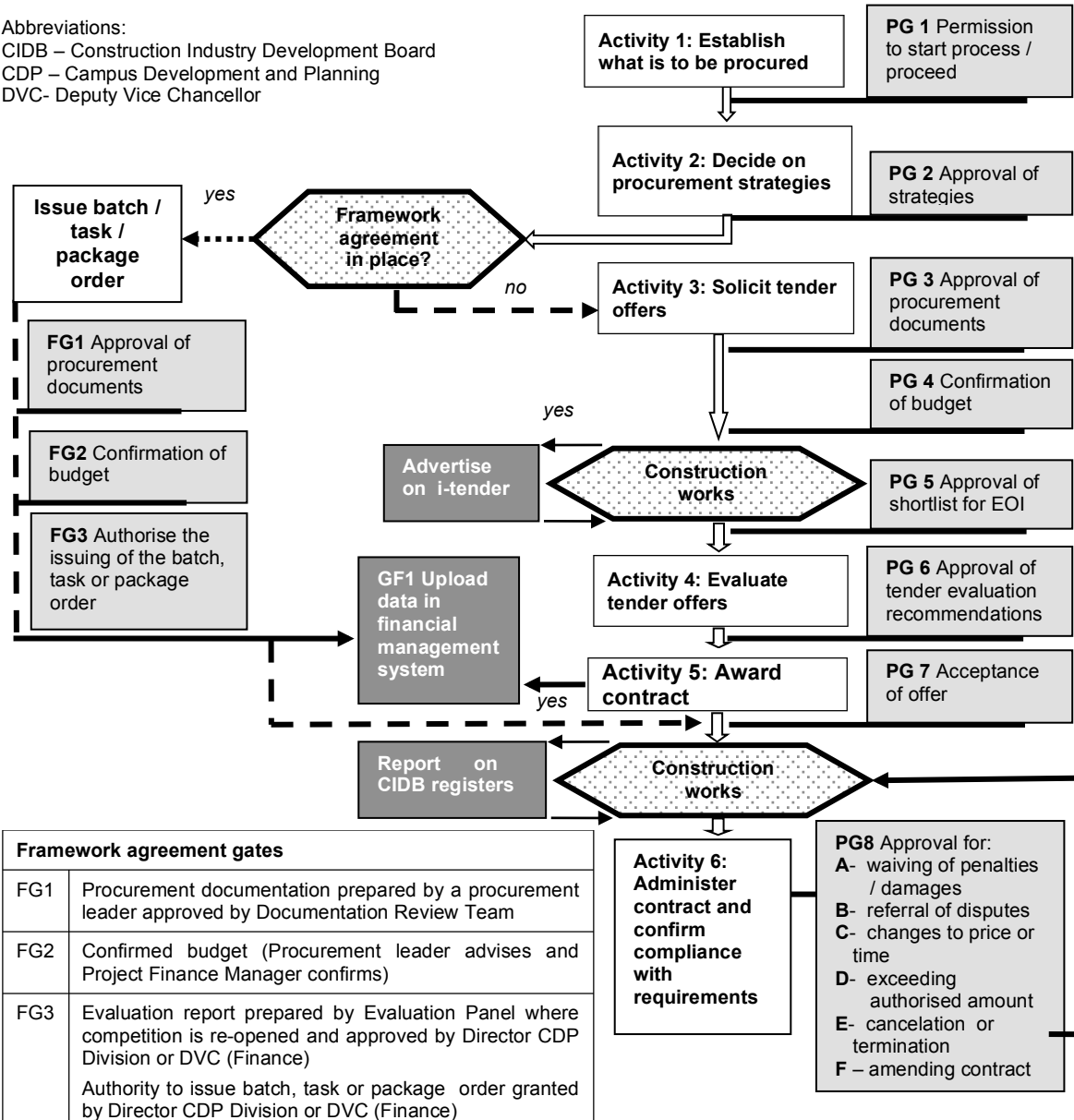
- a) goods, services and engineering and construction works and disposals relating to the delivery and maintenance of fixed assets that are constructed or result from construction operations; and*
- b) goods or services necessary for a new facility as delivered to be occupied and used as a functional entity; and*
- c) goods or services associated with the discharging of obligations in terms of an agency agreement with an organ of state.*

This document is based on the Standard for a Construction Procurement System which has been incorporated into the recently published Western Cape Provincial Treasury Instructions and which has formed the basis for the proforma standard made available by National Treasury's Infrastructure Delivery Improvement Programme (IDIP) to the provinces. The Wit's document which has been informed by the provisions of ISO 9001: *Quality Management Systems – Requirements*, provides a framework for procurement (see Figure 3) that not only complies with the CIDB prescripts, a plethora of National Treasury guidelines and international best practice but also links systems, processes, procedures and products (i.e. results of processes). It also establishes control points (gates) and enables responsibilities to be allocated. This approach allows the quality of decision making to be reviewed in a transparent and fully auditable manner before and after making decision to proceed to the next activity.



**Figure 1: CIDB Infrastructure Gateway System**

Abbreviations:  
 CIDB – Construction Industry Development Board  
 CDP – Campus Development and Planning  
 DVC- Deputy Vice Chancellor



Framework agreement gates	
FG1	Procurement documentation prepared by a procurement leader approved by Documentation Review Team
FG2	Confirmed budget (Procurement leader advises and Project Finance Manager confirms)
FG3	Evaluation report prepared by Evaluation Panel where competition is re-opened and approved by Director CDP Division or DVC (Finance) Authority to issue batch, task or package order granted by Director CDP Division or DVC (Finance)

<b>Activity 6: Administer contract and confirm compliance with requirements</b>	<b>PG8 Approval for:</b> <b>A-</b> waiving of penalties / damages <b>B-</b> referral of disputes <b>C-</b> changes to price or time <b>D-</b> exceeding authorised amount <b>E-</b> cancellation or termination <b>F –</b> amending contract
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Procurement gates			
PG1	Approved broad scope of work, estimated financial value and timing developed by a procurement leader and approved by Director CDP Division	PG7	Final contract document provided by procurement leader and signed by Director CDP or DVC (Finance) depending on value
PG2	Approved contract procurement strategy developed by a procurement leader and approved by Director CDP Division	PG8	Authority by a Designated Person to: A) waive penalties / damages (Tender Committee) B) referral of dispute for resolution (Head of legal services) C) increase contract value /contract period (Director CDP Division) D) exceed authorized amount (Director CDP Division or DVC (Finance)) E) cancel or terminate contract (Head of legal services) F) amend a contract (DVC( Finance))
PG3	Procurement documentation prepared by a procurement leader approved by Documentation Review Team		
PG4	Confirmed budget (Procurement leader advises and Project Finance Manager confirms)		
PG5	Approved shortlist contained in evaluation report prepared by the Evaluation Panel following an Expression of Interest by Tender Committee		
PG6	Evaluation report prepared by Evaluation Panel approved by Tender Committee		

**Figure 3: Wit's Construction Procurement framework**

Wits' *Construction procurement policy, processes, procedures, methods and delegations* assigns responsibilities to perform all the activities and sub-activities associated with the planning for procurement, the solicitation of tender offers, the awarding of contracts, the issuing of orders in terms of a framework agreement and the administration of contracts. Wits has developed standard approved templates for all the types of contracts that might be encountered in the execution of the project, based on the NEC3 family of contracts and the CIDB Standard for Uniformity in Construction Procurement.

Table 1 establishes the duties of and arrangements for a Documentation Review Team, an Evaluation Panel, a Tender Committee and Delegated Authorities. A suitably qualified service provider has been appointed to manage and lead the procurement processes.

**Table 1: Documentation Review Team, Evaluation Panel, Tender Committee and Delegated Authority**

Functionary	Overview of duties	Arrangements
Documentation Review Team	Review the procurement documents with a view to confirming that documents are compiled and formatted in accordance with requirements, appropriate prompts for judgement are included whenever quality is evaluated and scored, the form of contract and risk allocation is appropriate, the selected data are likely to yield best value outcomes, the scope of work adequately establishes what is required and the returnable documents are necessary and will enable submissions to be evaluated fairly and efficiently.	Have framework agreements in place with professional service providers who have in their employ professionally registered architects, engineers, project construction managers, construction managers and quantity surveyors with 10 years and more experience who are able to serve on the Documentation Review Team and the Evaluation Panel as the need arises
Evaluation Panel	Negotiate contracts where the negotiation procedure is applied, evaluate submissions for calls for expressions of interest, evaluate tenders received where the competitive selection or competitive negotiation procedure is applied and evaluate quotations from contractors who compete for the award of a task / batch / package order.	
Tender committee	Approve or refer back the items submitted for approval to the originator	Wits as a Standing Tender Committee which includes the CFO, Legal manager and Head of Procurement.
Delegated authority	Verify compliance of the processes, confirm the integrity of the process and approve the award of the contract.	Delegations of authority to award contracts are set out in the Delegation of Authority Document. Depending upon the value, the Deputy Vice Chancellor (Finance) of the Director Campus Development and Planning Division is authorised to award contracts and task / batch / package orders

## 4 Construction procurement strategy

### 4.1 Background

The development of a new university requires that an entire campus be built over time. This will involve the provision of bulk services to the university precincts, the provision of services including roads and parking areas within the university's precincts, the construction of residences, administrative offices, places of assembly, teaching spaces, landscaped areas and sports fields. This needs to be done in a phased manner which aligns with the academic programme and the flow of funding.

The New Universities Project Management Team have been mandated by the agreement between DHET and Wits to *"project manage and resource the spatial and physical planning and development for new institutions of higher learning in the Mpumalanga and the Northern Cape Provinces respectively, in accordance with the approved preliminary Phase 1 Implementation Plan.*

State owned land has been identified and approved for the development of the new universities. Contracts have already been put in place to secure the services of those serving on the Project Management Team. Tenders have been invited and are currently being evaluated in the following service areas:

- data information system management
- cost consulting
- social impact assessment
- landscape architecture
- land surveying
- heritage assessment
- geotechnical engineering
- environmental impact assessment
- electrical engineering
- civil engineering
- town planning
- traffic engineering

These services will enable the precise status of the identified land to be established and preliminary assessments to be made. This will inform the need for detailed investigations and enable the strategic actions and related timetable to develop the land to be finalised over the 2013 to 2015 MTEF period.

## **4.2 Delivery management strategy**

### **4.2.1 Nature and spatial arrangement of projects and clusters**

The sites for the projects associated with the Northern Cape University are located within the inner city of Kimberley. The site for the Mpumalanga University is located on the site of the Lowveld Agricultural College in Nelspruit. The development of satellite campuses outside of these areas will not take place within the next MTEF period.

It is anticipated that the projects listed in Tables 2 to 5 will be implemented over the next MTEF period i.e. the projects will be completed by the end of 2015.

The focus in the 2013/2014 financial year will be develop a number of key packages to the end of stage 4 (Package Definition) in the CIDB Infrastructure Gateway System so that approval of the concept report can be obtained to enable implementation in 2014/2015. Work will nevertheless start during 2013/2014 on some of the packages to facilitate implementation in 2014/2015.

### **4.2.2 Organisation characteristics**

Wits is the implemented appointed by the DHET to deliver the new university on their behalf. They have a small Project Management Team which is capable of procuring and managing a limited number of contracts. Wits does not have an appetite to manage a large Project Management Team.

### **4.2.3 Market characteristics**

The number of CIDB graded GB (General buildings), CE (civil engineering) and EP (electrical engineering – infrastructure) contractors according to the CIDB register of contractors who have a registered head office in the region in the provinces in which the Universities are to be located are as indicated in Table 6.

**Table 2: Building requirements for Northern Cape University**

Building type	Floor area	Budget (million)	Sub-total	Total
<b>New buildings – Oppenheimer Memorial Park</b>				
3 storey general mixed academic/administration, 60 seater class rooms, academic & administration offices and 1 no 100 seater lecture theatre	4334	73.7	217.7	
3 storey general 60 seater class rooms, academic offices and 1 no 100 seater lecture theatre	8469	144.0		
<b>Refurbishments</b>				
Refurbish existing administration block ex provincial legislature plus additions	7197	93.6	109.4	
Existing Music School and offices – additional classrooms	2263	15.8		
<b>New residences</b>				
3 Storey walk up with 2 beds per room, common areas, communal ablutions and kitchens	1128	14.1	367.1	
	1413	17.7		
	2640	33.0		
	1164	14.6		
	1362	17.0		
	2694	33.7		
	957	12.0		
	5574	69.7		
	2640	33.0		
	2220	27.7		
	2598	32.5		
	1899	23.7		
3069	38.4			
<b>Total</b>				<b>694.2</b>

**Table 3: Services and amenities required for the Northern Cape University**

Service or amenity	Budget (millions)	Total
Land improvements other than buildings -traffic and road -water supply -sewer and stormwater -bulk electricity	90.2	138.3
ICT Bulk infrastructure	0.8	
ICT infrastructure on site	12.6	
Sports amenities	34.7	
<b>Total</b>		

**Table 4: New buildings required for the Mpumalanga University**

Building type on a land parcel	Floor area	Budget (million)	Sub-total	Total
3 storey general mixed academic/administration, 60 seater class rooms, academic & administration offices and 1 no 100 seater lecture theatre	6102	103.7	307.6	1755.1
	4032	68.5		
	5949	101.1		
	2015	34.3		
3 storey academic offices, classrooms for 60 seater class rooms, 1 no 100 seater lecture theatre	6558	111.5	446.9	
	5668	96.3		
	2659	45.2		
	5173	87.9		
	6234	106.0		
3 Storey walk up with 2 beds per room, common areas, communal ablutions and kitchens	4897	83.2	1000.6	
	4029	50.4		
	5324	90.3		
	4248	50.1		
	4026	50.3		
	4030	50.3		
	2806	35.0		
	7167	89.6		
	1709	21.4		
	1439	18.0		
	6561	82.0		
	6653	83.2		
	2786	34.8		
	3455	43.2		
	6146	76.8		
4125	51.5			
3776	47.2			
3461	43.3			

**Table 5: Services and amenities required for the Mpumalanga University**

Service or amenity	Budget (millions)	Total
Land improvements other than buildings -traffic and road -water supply -sewer and stormwater -bulk electricity	228.6	353.2
ICT Bulk infrastructure	12.7	
ICT infrastructure on site	24.0	
Sports amenities	87.9	
<b>Total</b>		



**Table 6: CIDB registered contractors in the general building class of work in the Northern Cape and Mpumalanga**

CIDB Grade	Tender value range	Northern Cape			Mpumalanga		
		GB	CE	EP	GB	CE	EP
5 GB	R4 – R6,5m	7	10	7	72	96	31
6GB	R6,5 – R 13 m	13	15	-	79	92	11
7GB	R13 – R40 m	1 (Kimberley)	2	-	9	13	2
8GB	R40 – R130m	1 (Springbok)	1	-	6 - 3 Nelspruit; 1 Secunda and 2 White River	4	-
9GB	> R 130 m	-		-	1 (Nelspruit)	0	-

#### **4.2.4 Primary procurement objectives**

The primary procurement objectives are:

- 1) Deliver the university within the funding formula which is linked to assignable teaching space.
- 2) Ensure that expenditure is within the amounts allocated in each financial year of the MFET period and is capable of being accelerated should additional funding become available.
- 3) Ensure that teaching spaces are capable of being occupied at the start of the required academic year.
- 4) Provide works that are capable of being readily maintained.
- 5) Make use of expertise within universities to ensure that the designs of the teaching spaces are aligned with current and future best practice.
- 6) The quality is such that maintenance costs are minimised.

#### **4.2.5 Secondary procurement objectives**

The secondary procurement objectives are to:

- 1) Promote broad based black economic empowerment.
- 2) Engage local consultants and contractors in the delivery of the works.
- 3) Provide CIDB registered contractors who are registered in grades 1 to 5 with work opportunities.
- 4) Contribute to the increase in the number of people who have part qualifications, national qualifications and professional designations awarded by statutory councils.

#### **4.2.6 Delivery management plan**

All projects will be delivered through an implementing agent, namely Wits.

#### **4.2.7 Delivery mode**

The projects falling within each university will be managed as a programme of projects.

#### 4.2.8 Packaging strategy

The total value of building work over the 3 year MTEF period is R 694.2 million and R 1755.1 million for the Northern Cape University and the Mpumalanga University respectively. This work is ideally suited to framework contracts as the work in the main involves buildings of a repetitive nature on the same site. Ideally not less than three framework contracts should be entered into. The average work load of 3 framework contractors is around R 70 million per annum in the Northern Cape. The average work load of 5 contractors in Mpumalanga is around R100 million per annum.

The construction of the services and amenities are more specialised in nature and lend them to separate contracts. The size of these contracts needs to match the local contracting capacity.

The packages which are proposed are described in Tables 7 and 8 for the Northern Cape University and the Mpumalanga University, respectively.

**Table 7: Proposed packages for the 2013 to 2015 MTEF period for the Northern Cape University**

Package	Description	Comment
NC1	Oppenheimer Memorial Park – 3 storey mixed academic / administration building	Issue as a package order in terms of one of three framework agreements (Budget = R 73.7 m)
NC 2	Oppenheimer Memorial Park – 3 storey mixed academic building	Issue as a package order in terms of one of three framework agreements (budget - R 144.0 m)
NC 3	Refurbish existing administration block	Issue as a package order in terms of one of three framework agreements (budget - R 93.6 m)
NC 4	Refurbish and extend existing music school	Issue as a package order in terms of one of three framework agreements (budget - R 15.8 0 m)
NC 5	New residences	Issue as 13 separate package orders in terms of one of three framework agreement (budget range from R 12.0 m to R 69.7 m)
NC 6	Civil engineering (roads and stormwater)	Two or three separate contracts to target local contractors*
NC 7	Civil engineering (water and sewer)	Two or three separate contracts to target local contractors*
NC 8	Bulk electricity	One or two separate contract to target local contractors*
NC 9	ICT	Separate contract *
NC 10	Sports amenities	Separate contract which may be split into smaller contracts to attract specialists*

\*Need to refine when more information is available

**Table 7: Proposed packages for the 2013 to 2015 MTEF period for the Northern Cape University**

Package	Description	Comment
M1	3 storey general mixed academic and administration buildings	Issue as 4 separate package orders in terms of one of five framework agreement (budget range from R 34.3 m to R 103.7 m)
M2	3 storey academic buildings	Issue as 5 separate package orders in terms of one of five framework agreement (budget range from R 45.2 m to R 106.0 m)
M3	New residences	Issue as 4 separate package orders in terms of one of five framework agreement (budget range from R 18.0 m to R 90.3 m)
M4	Civil engineering (roads and stormwater)	Two or three separate contracts to target local contractors*
M5	Civil engineering (water and sewer)	Two or three separate contracts to target local contractors*
M6	Bulk electricity	One or two separate contract to target local contractors*
M7	ICT	Separate contract *
M8	Sports amenities	Separate contract which may be split into smaller contracts to attract specialists*

\*Need to refine when more information is available

## **4.3 CONTRACTING ARRANGEMENTS**

### **4.3.1 Risk allocations for packages**

#### **4.3.1.1 Contracting and pricing strategies**

Flexibility is required in the contracting arrangements for contractors and consultants to enable both the primary and secondary objectives to be achieved. Integration between design and construction is also essential to produce higher value and less waste. It is also important to keep the number of contractual relationships (professional service provider and contractor) to a manageable number.

The design and construct and develop and construct contracting strategies satisfy these aforementioned considerations in the case of buildings and the sporting amenities (see Annexure A). The quantum of services and the available capacity of local EP and CE contractors suggest that such strategies may not be appropriate for the services. A design by employer strategy is therefore suggested for the services.

The spatial development framework has not as yet been completed. As a result, Wits may wish to retain some control over the architectural design of the buildings. Wits may accordingly elect to instruct independent consultants to develop the design development report (stage 5).

The nature of the framework contracts for the buildings lends itself to target cost pricing strategies. Design work can be undertaken on a time and cost basis and a target price agreed when the design is complete. Data on costs can be obtained as the work progresses. Comparisons between different framework contractors can be made when determining costs. The opportunity exists to reduce costs over time due to the repetitive nature of the packages.

The most appropriate pricing strategy, due to uncertainties in earthworks quantities, for the services is either a price list or a bill of quantities. The bulk earthworks for the sporting amenities can be included in the civil engineering contracts. As a result, a design and construct linked to a price list is considered to be most suited to the sporting amenities.

The proposed contracting and pricing strategies for both universities are indicated in Table 8.

#### **4.3.2 Forms of contract**

The NEC3 Engineering and Construction Contract or the NEC3 Engineering and Construction Short Contract will be used on all packages. These forms of contract cater for all the contracting and pricing strategies identified in Table 8.

#### **4.3.4 Professional service contracts**

##### **4.3.4.1 Requirements for outsourced professionals**

Wits requires a design capability to develop briefings and to provide technical supervision for the framework contractors. Wits also needs a design capability to design the services and to brief the sporting amenity contractors as well as specialist inputs into design and planning activities.

##### **4.3.4.2 Packaging of professional service contracts**

Framework discipline specific contracts having a 4 year term will be entered into with a limited number of professional service providers to provide package planning and design services enabling the scope of work for contractors to be developed and to supervise the implementation by contractors.

Framework contracts having a four year term will be entered into with consultants providing specialist services to provide specialist inputs.

#### 4.3.4.2 Allocation of risks for professional service contracts

The professional service providers need have been appointed in terms of the NEC3 Professional Service Contract (Option G: Term contract). This option makes provision for the issuing of task orders over the term.

**Table 8: Proposed contracting and pricing strategies (see Annexure A)**

Package	Description	Contracting strategy	Pricing strategy
NC1	Oppenheimer Memorial Park – 3 storey mixed academic / administration building	Design and construct / develop and construct	Target contract with activity schedule
NC 2	Oppenheimer Memorial Park – 3 storey mixed academic building		
NC 3	Refurbish existing administration block		
NC 4	Refurbish and extend existing music school		
NC 5	New residences		
NC 6	Civil engineering (roads and stormwater)	Design by employer	Price List or bill of quantities
NC 7	Civil engineering (water and sewer)		
NC 8	Bulk electricity		
NC 9	ICT		
NC 10	Sports amenities	Design and construct / develop and construct	Price list
M1	3 storey general mixed academic and administration buildings	Design and construct / develop and construct	Target contract with activity schedule
M2	3 storey academic buildings		
M3	New residences		
M4	Civil engineering (roads and stormwater)	Design by employer	Price List or bill of quantities
M5	Civil engineering (water and sewer)		
M6	Bulk electricity		
M7	ICT		
NC 10	Sports amenities	Design and construct / develop and construct	Price list

## 4.4 PROCUREMENT ARRANGEMENTS

### 4.4.1 Quality strategy

Particular attention will be paid to developing the scope of work for each contract or package order.

Eligibility criteria will be used to pre-qualify tenders on the basis of the quality offered. Quality linked to Method 4 (see 4.4.4) will also be evaluated in tender submissions.

### 4.4.2 Procurement procedure

Open tenders will be invited in all instances. Stringent eligibility criteria will be set to obviate the need for a call for an expression of interest.

### 4.4.3 Targeted procurement strategy

Preferences will be offered for contributions to broad based black economic empowerment in all tenders. Preferences will also be offered in the case of engineering and construction contracts for

contract participation goals relating to the engagement of targeted enterprises (smaller CIDB registered contractors and, where appropriate, to local consultants) and to skills development goals relating to the increase in the number of people who have part qualifications, national qualifications and professional designations awarded by statutory councils.

Mandatory requirements for subcontracting work to local enterprises and / or achieving minimum skills development goals will also be included in package orders.

#### **4.4 Tender evaluation procedure**

Method 4, namely, financial offer, preference and quality, will be used in all instances.

#### **4.5 SATISFYING PRIMARY AND SECONDARY PROCUREMENT OBJECTIVES**

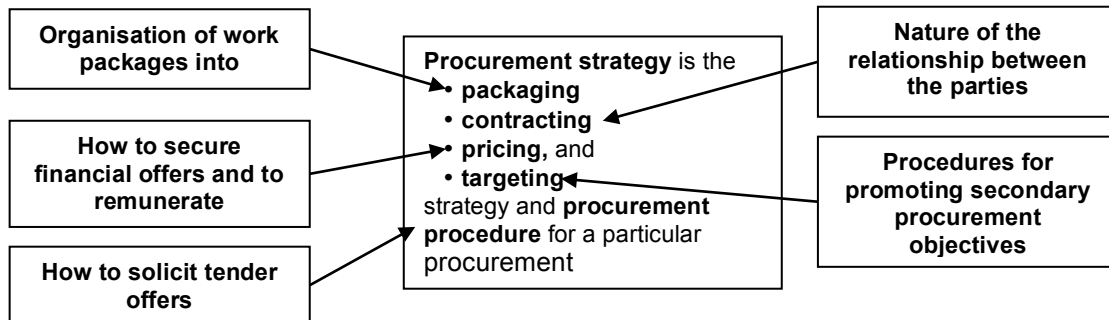
The construction procurement strategy developed to satisfy the primary and secondary procurement objectives may be summarised as follows:

- 1) The civil engineering, electrical and ICT services will be provided by discipline specific contractors on a design by employer basis using either a price list or a bill of quantities. The number and type of contractors will be decided upon once the planning processes have been completed and the precise requirements for such services are known.
- 2) The sporting amenities will be delivered on a design and construct basis using a price list.
- 3) A limited number of framework contractors, having a 4 year term, will be entered into with contractors who may be assigned any level of design responsibilities to construct the different type of buildings that are required, using a target contract with an activity schedule.
- 4) Framework contracts having a 4 year term will be entered into with a limited number of discipline specific professional service providers to provide package planning and design services enabling the scope of work for contractors to be developed and to supervise the implementation by contractors.
- 5) Framework contracts having a four year term will be entered into with consultants providing specialist services.

Targeting strategies in the form of preferences, mandatory subcontracting requirements and obligations to achieve minimum key performance indicators will be used to promote secondary objectives.

## Appendix A: Options – developing a construction procurement strategy

Based on the paper accepted for publication in Management, Procurement and Law, July 2011, *A framework for developing construction procurement strategy* by R.B Watermeyer



Note: Procurement strategy is all about the choices made in determining how best to achieve objectives

### PACKAGING STRATEGY

Work packages can be linked either to contracts or to a series of package orders issued in terms of a framework agreement over a term which is typically between 3 and 5 years. A package is accordingly works relating to one or more projects which can be linked to one or more programmes which have been grouped together for delivery under a single contract or a package order. The number of packages within a portfolio of projects establishes the number of contractual relationships which an employer and his management team have to manage and administer. It also establishes the number of procurement transactions which need to be processed. The packaging strategy determines the quantum of resources that an employer has to have at his disposal to procure infrastructure or services relating to the maintenance thereof. The packaging strategy has accordingly a major impact on an organisation's capacity to deliver and maintain infrastructure against a budget, particularly a time related budget. There are a number of factors that need to be considered when packaging works. These include interdependencies between projects and programmes, whether or not framework agreements will be put in place, levels of competition amongst contractors, organisational and managerial complexities, the spatial location of projects, the scale and nature of the works, economy of scale, the manner in which interfaces between packages are to be managed and controlled, project risk, risk allocations, programming (scheduling) requirements, attractiveness to markets, matching contractor skills and capabilities, commissioning requirements, deployment of administrative resources, scope of service and secondary procurement policy objectives.

### CONTRACTING STRATEGY

The contracting strategy determines not only the risk allocations between the parties to a contract but also the project management demands, the design strategy and the nature and number of professional service agreements that are entered into.

Contracting strategy	Description
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 agent)
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 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)
Construction management	Contract under which a third party (professional service provider) provides consultation during the design stage and is responsible for planning and managing all post-contract activities for a group of contractors appointed by the employer
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

The contracting strategy determines not only the risk allocations between the parties to a contract but also the project management demands, the design strategy and the nature and number of professional service agreements that are entered into.

### PRICING STRATEGY

There are two types of pricing strategies – price based and cost based.

Pricing strategy	Description
<b>Price based</b>	
Lump sum	Contract in which a contractor is paid a lump sum to perform the works. (Interim payments which reflect the progress made towards the completion of the works may be made)
Bill of quantities	Contract in which a bill of quantities lists the items of work and the estimated / measured quantities and rates associated with each item to allow contractors to be paid, at regular intervals, an amount equal to the agreed rate for the work multiplied by the quantity of work actually completed. (A bill of quantities is prepared in accordance with a standard system of measurement)
Price list / price schedule	Contract in which a contractor is paid the price for each lump sum item in the Price List / Schedule that has been completed and, where a quantity is stated in the Price List / Schedule, an amount calculated by multiplying the quantity which the contractor has completed by the rate
Activity schedule	Contract in which the contractor breaks the scope of work down into activities which are linked to a programme, method statements and resources and prices each activity as a lump sum, which he is paid on completion of the activity. The total of the activity prices is the lump sum price for the contract work.
<b>Cost based</b>	
Cost reimbursable	Contract in which the contractor is paid for his actual expenditure plus a percentage or fee
Target cost	Cost reimbursable contract in which a target price is estimated and on completion of the works the difference between the target price and the actual cost is apportioned between the employer and contractor on an agreed basis

### TARGETING STRATEGY

There are a number of targeted procurement procedures which can be used to promote secondary procurement objectives.

Method	Description
Evaluation points	Give a weighting to social and economic policy objectives along with the usual commercial criteria, such as quality, which are scored at the short listing stage or the admission to a data base
	Give a weighting to social and economic policy objectives along with price and where relevant, quality, during the evaluation of tenders

Method	Description
Incentives for KPI's	Incentive payments are made to contractors should they achieve a specified target (key performance indicator) associated with a social or economic goal in the performance of a contract
Mandatory subcontracting	Require contractors to invite competitive tenders from targeted enterprises for specified portions of the works in terms of a specified procedure and specific forms of subcontract. Upon the award of the contract, the subcontractor becomes a domestic subcontractor
Contractual obligations	Make policy objectives a contractual condition, e.g. <ul style="list-style-type: none"> <li>A fixed percentage of the work is required to be subcontracted out to enterprises that have prescribed characteristics, or a joint venture shall be entered into</li> <li>Parts of the works are to be executed using employment intensive methods.</li> </ul>

### FRAMEWORK AGREEMENT

A framework agreement as 'an agreement between an employer and one or more contractors, the purpose of which is to establish the terms governing contracts to be awarded during a given period, in particular with regard to price and, where appropriate, the quantity envisaged'. Framework agreements, which are entered into following a competitive selection process, allow the employer to procure work on an as-instructed (call-off) basis over a set term without necessarily committing to any quantum of work.

### PROCUREMENT PROCEDURE

The CIDB Standard for Uniformity in Construction Procurement / ISO 10845 provides for:

- generic procurement procedures associated with procurements other than those relating to disposals by auction and framework agreements (i.e. negotiation, competitive selection (nominated, open, qualified, proposal, quotation and shopping procedure)
- four generic evaluation methods (financial offer, financial offer and preference, financial offer and quality and financial offer, reference and quality); and
- eligibility criteria which have to be satisfied in order for a submission to be evaluated, which may form part of a procurement procedure.

See the CIDB / National Treasury Practice Guide #2: Construction Procurement Strategy for detailed guidance on the development and documentation of a construction procurement strategy