

CONSTRUCTION PROCUREMENT STRATEGY

Practice Note # 23
September 2010
(Version 1 – September 2010)

Content

1. Introduction	2
2. A strategic approach to procurement	2
3. Delivery management strategy	3
4. Contracting arrangements	4
5. Procurement arrangements	8
6. Documenting a construction procurement strategy	9

cidb's **inform practice notes** provide guidance and clarity in achieving client objectives in construction procurement and delivery. Practice notes inform clients and practitioners on how to embrace best practice and to deal with issues that may arise. They are aligned with, but do not replace regulation.

Synopsis:

Construction procurement strategy is the combination of the delivery management strategy, contracting arrangements and procurement arrangements for a particular procurement. It necessitates that a number of choices be made from the available options. A construction procurement strategy can be developed for a single project, a programme of projects or a portfolio of projects to identify the best way of achieving objectives and value for money, whilst taking into account risks and constraints. This practice note outlines a methodology to develop construction procurement strategies at a portfolio, programme or project level.

1. Introduction

Research indicates that the traditional approach to infrastructure delivery works best when:

- a department or municipality has sufficient in-house capabilities and capacity to either undertake the design or to brief consultants and to oversee the design process, and
- the design and associated documentation is completed before tenders are invited.

The current reality is that departments are experiencing difficulties in attracting and retaining suitably qualified staff while multi-disciplinary consulting teams involved in the delivery of infrastructure rarely have completed designs at the time that the contractor is appointed. This has resulted in:

- severely stressed departmental and municipal oversight resources,
- a crisis management culture which cuts corners in the planning processes,
- the fragmentation of design and construction, with aspects such as constructability and cost modelling determined by the design team and cost consultant only,
- tasks being allowed to take their course relatively uncontrolled, sometimes resulting in extreme and inappropriate risk avoidance or risk transfer,
- a “pay as you go” culture where significant cost overruns are the order of the day,
- consultant driven projects with perverse incentives (for example fee rates as a percentage of the value of the works), and
- a history of under-expenditure and poor service delivery, particularly by weaker rural municipalities.

Alternative procurement and contracting strategies are needed to deliver and maintain much needed infrastructure.

2. A strategic approach to procurement

Strategy in the delivery and maintenance of construction works may be considered to be the skilful planning and managing of the delivery process. It involves a carefully devised plan of action which needs to be implemented. It is all about taking appropriate decisions in relation to available options and prevailing circumstances in order to achieve optimal outcomes.

Construction procurement strategy is the combination of the **delivery management strategy, contracting arrangements** and

The Association for Project Management's *Body of Knowledge* states that “*The procurement strategy should include potential sources of supply, terms and types of contract / procurement (for example, partnering or alliancing - versus commodity purchasing), conditions of contract, type of pricing, and method of supplier selection*”

procurement arrangements for a particular procurement. A construction procurement strategy can be developed for a single project, a programme of projects or a portfolio of projects to identify the best way of achieving objectives and value for money, whilst taking into account risks and constraints. Once the necessary decisions relating to the delivery management strategy, the contracting strategy and the procurement arrangements have been made, the procurement strategy may be implemented in respect of each package. Thereafter, depending upon the choices that are made, the design team might need to be managed, and the contract managed or administered in accordance with the provisions of the contract. Programme management will also be required where projects are delivered in terms of a programme.

It is important to conduct an annual evaluation of the efficacy of decisions made. This will inform the choices made in the subsequent year and contribute to any improvements in decisions made in subsequent years.

3. Delivery management strategy

The first stage in developing a procurement strategy is to decide on the delivery management strategy. The development of a delivery management strategy can, however, only be embarked upon for a portfolio or programme of projects after the deliverable at the end of the infrastructure planning stage has been produced i.e. a medium term expenditure infrastructure plan which links prioritised needs to a forecasted budget. (See inform practice note #22 CIDB Infrastructure Gateway System)

The key activities in this stage are as follows:

Activity 1: Gather and analyse information

Step	Description	Output
1	Conduct a spend analysis	Spatially located work items in the infrastructure plan grouped into categories of spend with common attributes.
2	Conduct an organisational analysis	Descriptions of client organisational characteristics
3	Conduct a market analysis	Descriptions of market characteristics

Activity 2: Formulate procurement objectives

Step	Description	Output
1	Formulate primary procurement objectives	Identified primary procurement objectives
2	Formulate secondary procurement objectives	Documented and prioritised secondary procurement objectives

Activity 3: Make strategic delivery management decisions

Description	Output
Decide on how needs are to be met i.e. through: Proposition 1: a public private partnership (PPP) Proposition 2: an implementing agent Proposition 3: another organ of state's framework agreement Proposition 4: leasing of property Proposition 5: outsourcing Proposition 6: own resources	A delivery management plan which indicates how each categories of spend or portions thereof are to be delivered.

Definitions from ISO 10845-1:

Construction procurement – Part 1: Processes, methods and procedures

procurement strategy: selected packaging, contracting, pricing and targeting strategy and procurement procedure for a particular procurement

contracting strategy: strategy that governs the nature of the relationship which the employer wishes to foster with the contractor, which in turn determines the risks and responsibilities between the parties to the contract and the methodology by which the contractor is to be paid

pricing strategy: strategy which is adopted to secure financial offers and to remunerate contractors in terms of the contract procurement strategy: selected packaging, contracting, pricing and targeting strategy and procurement procedure for a particular procurement

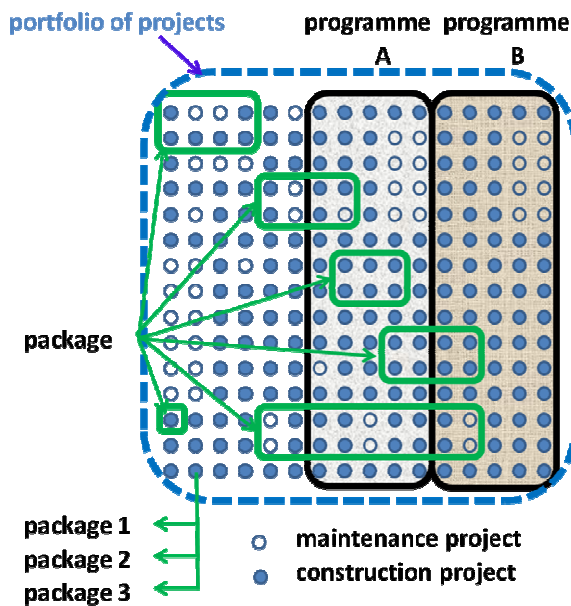
targeting strategy: strategy which is adopted to promote secondary procurement policy objectives

secondary procurement policy: procurement policy that promotes objectives additional to those associated with the immediate objective of the procurement itself

delivery management is the management of the process of public service delivery as applied to infrastructure and maintenance projects

package: construction works which have been grouped together for delivery under a single contract or a package order

The concept of packages



Projects are grouped together or divided into packages for delivery under a single contract or a package order issued in terms of a framework agreement.

Depending upon the decisions that is taken, it may be necessary to:

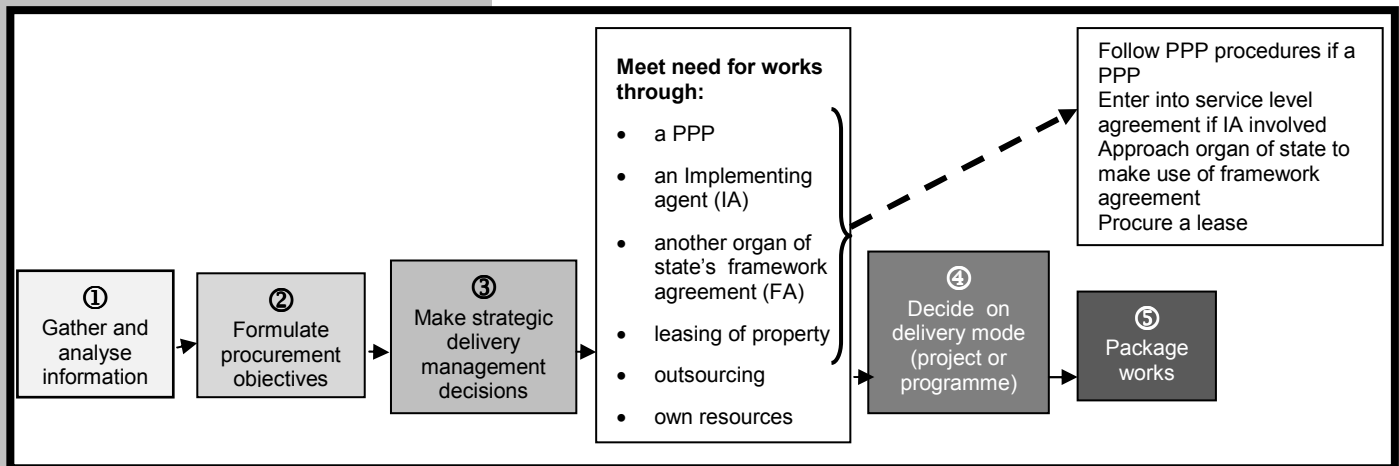
- follow National Treasury PPP procedures;
- enter into service level agreement with an implementing agent;
- approach an organ of state to make use of their framework agreement; or
- procure a lease

Activity 4: Decide on delivery mode (project or programme)

Description	Output
Decide on programme of projects or series of independent projects	Categories of spend or portions thereof delivered as a programme of projects or a series of independent projects

Activity 5: Package works

Step	Description	Output
1	Identify opportunities for framework agreements	Categories of spend or portions thereof to be implemented through own framework agreements.
2	Identify packages	A package plan for construction and maintenance projects or a combination thereof which states the mode of delivery for and identifies each package



Developing a delivery management strategy

4. Contracting arrangements

The second stage in developing a procurement strategy is to decide on the contracting strategy for each package and the professional services required to implement the contracting strategy. The organisational and market analyses and primary and secondary procurement objectives provide the basis for the making of decisions regarding the choice of contracting options.

Activity 1: Allocate risks for packages

Step	Description	Output
1	Decide service requirements and / or contracting strategy	Risk allocations for each package i.e. allocation of responsibilities, pricing strategy and standard form of contract
2	Decide on pricing strategy	
3	Decide on form of contract	

The options for service requirements are:

- construction only
- maintenance only
- maintenance and construction
- construction, maintenance and operation

The responsibilities for design and management of the construction works can be allocated between the parties in terms of any of the following contracting strategies:

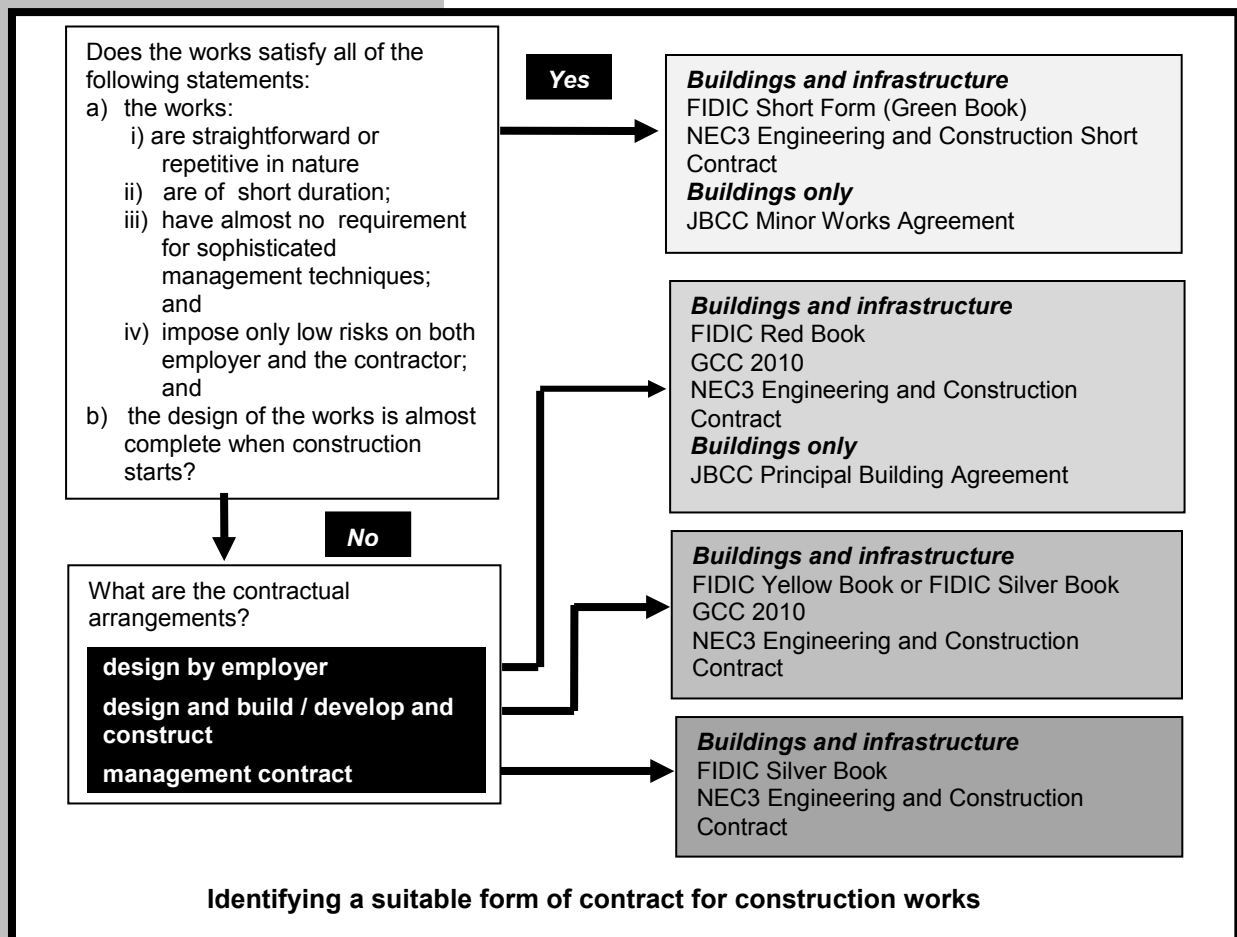
Contracting strategy	Description
Design by employer	Contract under which a contractor undertakes only construction on the basis of full designs issued by the employer (Design is a separate function to construction)
Develop and construct	Contract based on a scheme design prepared by the client under which a contractor produces drawings and constructs it
Design and construct	Contract in which a contractor designs a project based on a brief provided by the client and constructs it
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 contractors appointed by the employer
Management contractor	Contract under which a contractor provides consultation during the design stage and is responsible for planning and managing all post-contract activities and for the performance of the whole of the contract

The pricing strategies are:

Pricing strategy	Description
Price based contracts	Construction works contracts only
	Activity schedule (lump sum) The contractor undertakes to break the scope of work down into activities related to a programme and price 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.
	Bill of quantities The 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
	Maintenance contracts only
	Priced contract with price list The price list contains the lump sum prices for each required service and quantities and rates for repeated services to enable contractors to be paid for services provided.
Cost based contracts	Construction works and maintenance
	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 cost is estimated and on completion of the works the difference between the target cost and the actual cost is apportioned between the employer and contractor on an agreed basis

The options for forms of contract are stipulated in the CIDB Standard for Uniformity in Construction Procurement, as follows:

Option	Form of contract
Construction only	<ul style="list-style-type: none"> • NEC3 Engineering and Construction Contract • NEC3 Engineering and Construction Short Contract. • FIDIC Conditions of Contract for Construction and Building and Engineering Works Designed by the Employer • FIDIC Conditions of Contract for Plant and Design • FIDIC Conditions of contract for EPC Turnkey Projects • FIDIC Short Form of Contract General Conditions (Short Form) • JBCC Principal Building Agreement • JBCC Minor Works Agreement • GCC 2010
Maintenance only	<ul style="list-style-type: none"> • CIDB General conditions of contract • NEC3 Term Service Contract • NEC3 Short Term Service Contract
Maintenance and construction	NEC3 Engineering and Construction Contract with or without NEC3 Term Service Contracts
Construction maintenance and operation	<ul style="list-style-type: none"> • FIDIC Conditions of Contract for Design, Build and Operate Projects • NEC3 Engineering and Construction Contract plus NEC3 Term Service Contracts



Activity 2: Establish requirements for outsourced professional services

Description	Output
Identify services areas that are required	Identified professional services which need to be procured

Activity 3: Package professional service contracts

Step	Description	Output
1	Decide on contracting strategy	Requirements for outsourced professional services categorized as single discipline or multidisciplinary
2	Decide on the type of contract	Requirements for outsourced professional services linked to a specific package or a programme or a number of undefined packages or programmes

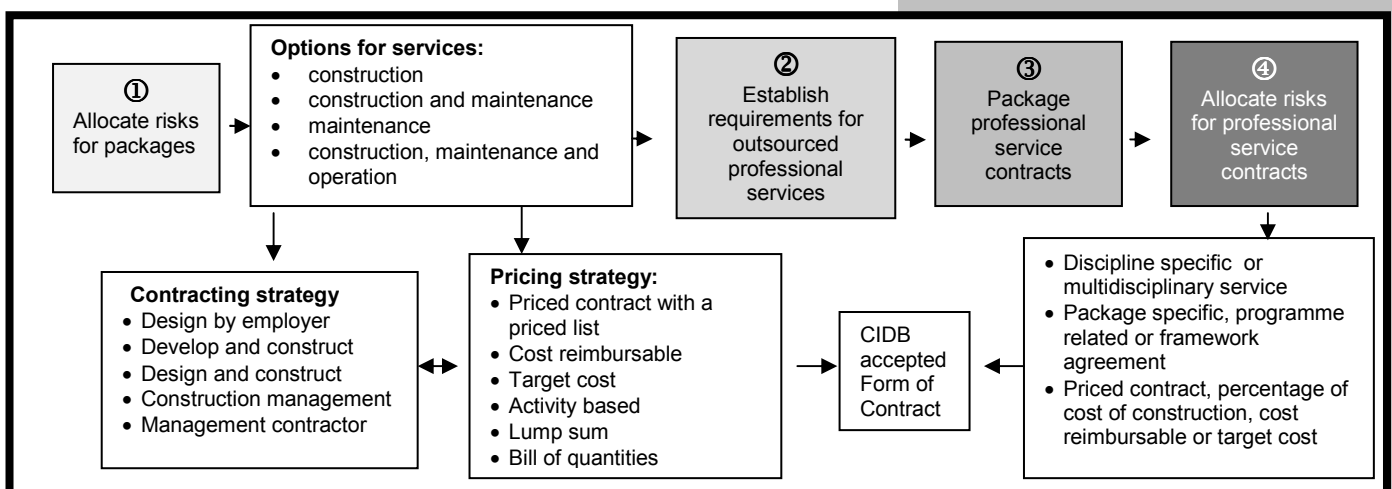
The contracting strategy can be discipline specific or for a multidisciplinary service. The type of contract can be package specific, programme related or linked to a framework agreement.

Activity 4: Allocate risks for professional service contracts

Step	Description	Output
1	Decide on pricing strategy	Identified pricing strategy for required professional services
2	Decide on form of contract	Identified standard form of contract for a professional service contract

The options for pricing strategy options are priced contract, fee percentage based on cost of construction, cost reimbursable contract or target cost contract. Use can only be made of the NEC Professional Service Contract or the CIDB Standard Professional Service Contract.

Pricing strategy		Description
Price based		The consultant undertakes to break the scope of work down into activities and price 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
Cost of construction		The consultant's fee is based on a percentage of the cost of the construction works
Cost of construction	Cost reimbursable	Contract in which the consultant is paid for his time expended at agreed rates
	Target cost	Cost reimbursable contract in which a target cost is estimated and on completion of the service the difference between the target cost and the actual cost is apportioned between the employer and contractor on an agreed basis



Deciding on contractual arrangements

5. Procurement arrangements

The final stage in developing a procurement strategy is to decide on the procurement arrangements.

Activity 1: Decide on quality strategy

Description	Output
Determine quality strategy	Suitable quality strategies

Quality may be achieved through:

- Specifications
- Life cycle costing
- Prequalification
- Evaluation criteria
- Undertakings at tender stage
- Preferences
- Eligibility criteria

Activity 2: Decide on procurement procedure

Description	Output
Determine procurement procedure	A suitable procurement procedure

The procurement procedures options involve the use of one of the following procedures with or without eligibility criteria:

- Competitive selection procedure
 - Nominated
 - Open
 - Qualified
 - Quotation
 - Proposal procedure using the two-envelope system
 - Proposal procedure using the two-stage tendering system
- Negotiation procedure
- Competitive negotiations procedure
 - Open
 - Restricted

Activity 3: Decide on targeted procurement strategy

Description	Output
Determine targeted procurement strategy	Suitable targeted procurement procedures

The targeted procurement procedure options are:

- Preferencing
- Incentives for attaining Key Performance Indicators (KPI's)
- Mandatory subcontracting
- Contractual obligations

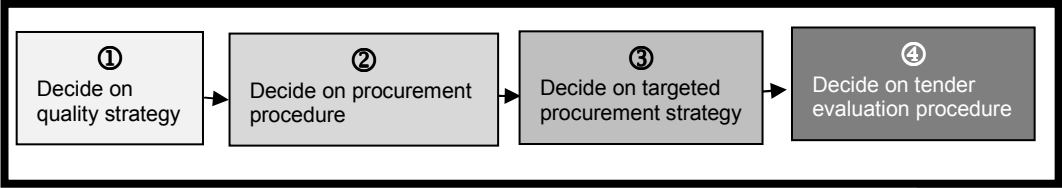
See CIDB Standard for Uniformity in Construction Procurement and ISO 10845-1, Construction Procurement Part 1- Processes, methods and procedures

Activity 4: Decide on a tender evaluation procedure

Description	Output
Identify the appropriate tender evaluation procedure	A suitable tender evaluation procedure

Tender evaluation procedure options are:

- Method 1: Financial offer
- Method 2: Financial offer and preferences
- Method 3: Financial offer and quality
- Method 4: Financial offer, quality and preferences



Deciding on the procurement arrangements

6. Documenting a construction procurement strategy

The construction procurement strategy arrived at by applying the aforementioned procedures needs to be documented in such a manner that the logic behind the choices that are made at each step can be communicated to and reviewed by others. Accordingly, the specific inputs and outputs of the actions at each step in the stages of the development of a strategy needs to be documented.

A construction procurement strategy at a portfolio level should be documented in a tabular form which links each category or portion of a category of spend to a number of high level descriptions. Procurement strategies at a programme level can be similarly presented, with perhaps, more detailed descriptors. The strategic brief that is developed for a package during the package information stage of the package planning phase must, however, set out all the choices made in relation to the package in sufficient detail to enable procurement documents to be drafted to enable the necessary procurement processes to commence.

inform

construction industry development

practice note

Practice note 23 – September 2010

We would like to hear from you about your progress, challenges and ideas.

Contact us:

E-mail: infocus@cidb.org.za

Fax: 012 343 7153

CIDB Switchboard 086 100 2432
Registers Helpdesk 086 010 3353

Registers Post Private Bag x14
Brooklyn Square
0075

CIDB Post: PO Box 2107
Brooklyn Square
0075

See IDMS Practice Guide for Construction Procurement Strategy for comprehensive guidance on the making of appropriate choices and decisions

Procurement strategy for works

Category of spend	Delivery management strategy			Contracting arrangements strategy for work			Procurement arrangements for works			
	Meet needs through proposition no	Programme / project	Packaging no / type	Contracting strategy	Pricing strategy	Form of contract	Quality strategy	Procurement arrangements	Targeted procurement strategy	Evaluation procedure
A										
B										

Procurement strategy for professional services

Category of spend	Delivery management strategy			Contracting arrangements for professional services					Procurement arrangements for professional services			
	Meet needs through	Programme / project	Packaging arrangements	Service area	Contract strategy	Type of contract	Pricing strategy	Form of contract	Quality strategy	Procurement arrangements	Targeted procurement strategy	Evaluation procedure
A												
B												