

A generic approach to procurement processes, methods and procedures

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Procurement activities commence once the need for procurement is identified and end when the transaction is completed.

There are six principal procurement activities and a number of generic steps that need to be taken to proceed from one activity to another. These generic steps may be categorised as either inputs towards the attainment of a milestone within the procurement process or procedural milestones that require decisions or approvals in order to proceed to the next step (see fig 1). Not all of these steps will necessarily be required in a particular procurement.

A procurement system comprises processes (see fig 1) which are underpinned by methods and procedures, which in turn are informed and shaped by the policy of an organisation (fig 2). There are a finite range of methods and procedures associated with the various procurement sub-processes. Many aspects of procurement documents that are required to solicit tender offers and to conclude contracts can at the same time be rationalised and standardised.

The starting point in the development of any procurement system is to determine the primary objectives of the system. The procurement objectives of the World Bank, World Trade Organisation, and United Nations Commission on International Trade Law (UNCITRAL) may be summarised by section 217(1) of South Africa's Constitution (Act 108 of 1996), which requires the procurement system to be fair, equitable, transparent, competitive and cost effective.

The methods of implementing preferential procurement policies to attain social and economic objectives that are least likely to compromise these objectives relate to preferencing at the short-listing stage and award (tender evaluation) criteria.

Targeted procurement procedures can be used to implement preferential procurement policies relating to the targeting of enterprises and labour using preferencing at the short-listing stage, or award criteria. Based on the work by the Procurement Reform Task Team in South Africa, Standards South Africa has standardised the methods associated with these procedures and has published SANS 10396 (2003), 'Implementing preferential procurement policies using targeted construction pro-

curement procedures', and the SANS 1914 (2002) family of performance-based targeted construction procurement standards (fig 3) that may be used to secure the participation of targeted enterprises and/or labour in the performance of a contract.

STANDARDISING THE APPROACH TO PROCUREMENT DOCUMENTATION

Procurement documents are required primarily to solicit tender offers and to form the basis for a contract.

Figure 4 illustrates the concept of offer

and acceptance that results in a contract being entered into. Procurement documents provide tenderers with the necessary inputs to allow them to compile their tender submissions. Their tender submissions are in turn inputs into the contract that may be concluded following the acceptance of their tender offer. In order to have a fair, transparent and equitable solicitation process, employers should provide tenderers with clear instructions as to how they are to submit their tender offers and inform them as to how their tenders are to be processed following their receipt.

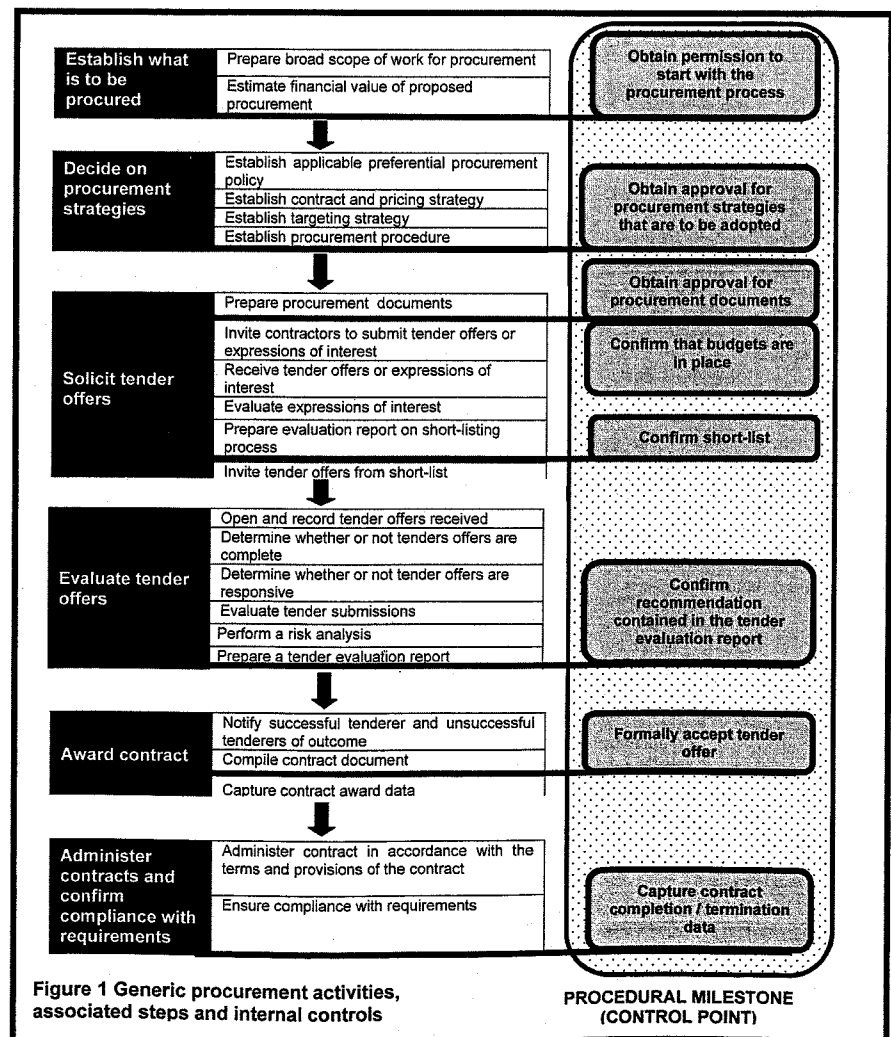


Table 1 Documents that relate to the 'tender' (see SANS 10403, 2003)

Contents		Function and broad outline of contents
Number	Heading	
Tendering procedures		
T1.1	Tender notice and invitation to tender	Alerts tenderers to the nature of the supplies, services and engineering and construction works required by the employer and should contain sufficient information to enable them to respond appropriately
T1.2	Tender data	States what the applicable conditions of tender are and where they may be found. Tender data also provides the variables for standardised conditions of tender
Returnable documents		
T2.1	List of returnable documents	Ensures that everything the employer requires a tenderer to submit with his tender is included in, or returned with, his tender submission
T2.2	Returnable schedules	Contains documents that the tenderer is required to complete for the purpose of evaluating tenders and other schedules which upon acceptance become part of the subsequent contract

Table 2 Documents that relate to the 'contract' (see SANS 10403, 2003)

Contents		Broad outline of contents
Number	Heading	
Part 1: Agreements and contract data		
C1.1	Form of offer and acceptance	Formalises the legal process of offer and acceptance
C1.2	Contract data	States the applicable conditions of contract and associated contract specific data that collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the contract
Part 2: Pricing data		
C2.1	Pricing instructions	Provides the criteria and assumptions which it will be assumed (in the contract) that the tenderer has taken into account when developing his prices, or target in the case of target and cost reimbursable contracts
C2.2	Activity schedule/ bill of quantities	Records the contractor's prices for providing supplies/services/engineering and construction works which are described elsewhere in a specification within the scope of work section of the contract
Part 3: Scope of work		
C3	Scope of work	Specifies and describes the supplies, services, or engineering and construction works which are to be provided and any other requirements and constraints relating to the manner in which the contract work is to be performed
Part 4: Site information (engineering and construction works contracts only)		
C4	Site information	Describes the site as at the time of tender to enable the tenderer to price his tender and to decide upon his method of working and programming and risks

Table 3 Broad categories of contract (SANS 294, 2004)

Category of procurement	Description
Supplies contract	A contract for the provision of materials or commodities made available for purchase
Services contract	A contract for the provision of labour or work, including knowledge-based expertise, carried out by hand, or with the assistance of equipment and plant
Engineering and construction works contract	A contract for the provision of a combination of supplies and services, arranged for the development, extension, installation, repair, maintenance, renewal, removal, renovation, alteration, dismantling or demolition of structures, including building and engineering infrastructures
Disposal contract	A contract for the divestiture of assets, including intellectual property and other rights and goodwill by any means, including sale, rental, lease, license, tenancy, franchise, auction or any combination thereof

Table 4 Standard procurement procedures (SANS 294, 2004)

Procedure	Description
Negotiated procedure	Tender offers are solicited from a single tenderer
Nominated procedure	Tenderers that satisfy prescribed criteria are admitted to an electronic data base. Tenderers are invited to submit tender offers based on search criteria and their position on the data base. Tenderers are repositioned on the data base upon appointment or upon the submission of a tender offer
Open procedure	Tenderers may submit tender offers in response to an advertisement by the organisation to do so
Qualified procedure	A call for expressions of interest is advertised and thereafter only those tenderers who have expressed interest, satisfy objective criteria and are selected to submit tender offers are invited to do so
Quotation procedure	Tender offers are solicited from not less than three tenders in any manner the organisation chooses, subject to the procedures being fair, equitable, transparent, competitive and cost effective
Proposal procedure using the two-envelope system	Tenderers submit technical and financial proposals in two envelopes. The financial proposal is only opened should the technical proposal be found to be acceptable
Proposal procedure using the two-stage system	Non-financial proposal are called for. Tender offers are then invited from those tenderers that submit acceptable proposals based on revised procurement documents. Alternatively, a contract is negotiated with the tenderer scoring the highest number of evaluation points
Shopping procedure	Written or verbal offers are solicited in respect of readily available supplies obtained from three sources. The supplies are purchased from the source providing the lowest price once it is confirmed in writing

Uniformity in procurement documentation can be achieved, provided there is a complete separation in the component documents (ie the conditions of tender, the conditions of contract, the specifications and methods of measurement, and payment) that make up a procurement document between the conditions of tender, the conditions of contract, the specifications and methods of measurement and payment. Should this be done, different conditions of contract, or, for that matter, payment systems, can be used without affecting the remaining component document.

SANS 10403 (2003), 'Formatting and compilation of procurement documents', provides a series of standard headings of component documents based on an 'offer' and 'acceptance' process illustrated in figure 4 (see tables 1 and 2) and provides comprehensive guidance on the formulation of these component documents.

Procurement documents comprise several component documents dealing with different topics bound together in a logical sequence. The first cluster of documents contains only those documents that are relevant to the tender enquiry (table 1) and the second cluster those documents that relate to the contract that will be created upon the acceptance of the tender (table 2).

When tenders are invited, it is advisable, however, that three volumes be issued:

- Volume 1, comprising the tendering procedures (Part 1 of the tender)
- Volume 2, comprising the returnable documents (Part 2 of the tender and documents C1.1 and C1.2 of Part 1 of the contract and documents C2.1 and C2.2 of Part 2 of the contract, if relevant – ie all the documents in which the tenderer is required to insert data to complete his tender), and
- Volume 3, which contains the draft contract (ie all components of the contract that are not included in Volume 2).

Tenderers will complete and return Volume 2 as their tender submission. Organisations will compile the contract (see table 2) from the tender submission (Volume 2). In this manner, the final contract will contain all the provisions agreed to by the parties during the tender process and will not include redundant information relating to the process that led to the formation and signing of the contract (see fig 5).

Users of this system who are familiar with the standardised procurement documents of an organisation will only need to read the project specific sections for any specific project in order to know what the procurement entails. On the other hand, users who are not familiar with an organisation's standardised documents can quickly locate information that they may require should they have a working knowledge of the framework for the compilation of procurement documents provided in SANS 10403.

STANDARDISING THE APPROACH TO PROCUREMENT METHODS AND PROCEDURES

Procurement can be broadly categorised in accordance with the provisions of table 3. In many procurement systems, for example those of the World Bank and the European Union, each category of procurement is dealt with separately and separate implementation guidelines/regulations are provided. This compartmentalised approach to procurement causes much confusion and makes procurement unnecessarily complex. An alternative approach is to develop a generic procurement system and then to identify which methods and procedures are best suited to particular categories of procurement.

An analysis of the World Bank procurement procedures, WTO's Government Procurement Agreement, the UNICTRAL Model Law on the Procurement of Goods, Construction and Services complete with a guide to enactment, and a number of South African procurement procedures concluded that

- there are eight generic procurement procedures associated with procurements other than those relating to disposals (see table 4)
- there are four generic evaluation methods (see table 5), and
- eligibility criteria can form part of a procurement procedure

Not all these procurement procedures are necessarily appropriate to the procurement of all categories of procurement, namely supplies, services and engineering and construction works. These procedures facilitate the solicitation of tender offers, that is, the activities and sub-activities associated with 'solicit tender offers' activity shown in figure 1.

Disposals, on the other hand, may be undertaken using one of following procedures:

- the negotiated procedure as described in table 4
- the open procedure as described in table 4
- the qualified procedure as described in table 4, or
- public auction, that is, the advertising and displaying of items and assets that are to be auctioned prior to their auction sale

Eligibility criteria in the form of attaining a minimum quality score can provide a simple and cost-effective alternative to the scoring of quality in tender submissions in professional service contracts. In this procedure, the scoring of quality is merely to establish that the tenderer is capable of providing the service and to reject the tender submissions of those who fail to attain the threshold score. Thereafter the tender offers can be evaluated on the basis of price or price and preference.

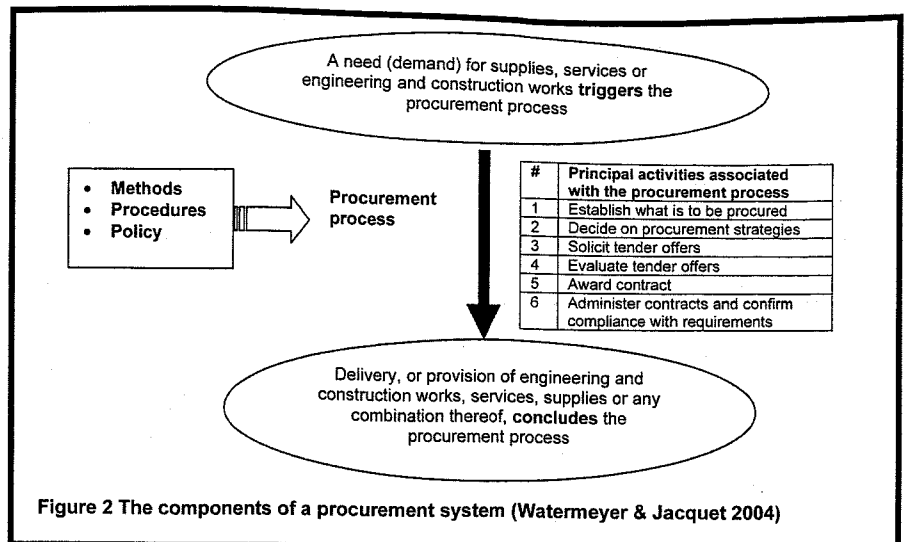


Figure 2 The components of a procurement system (Watermeyer & Jacquet 2004)

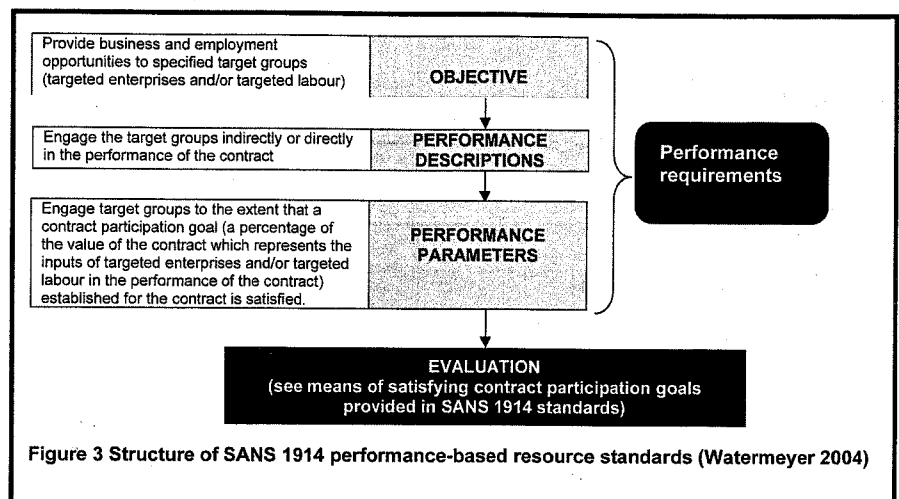


Figure 3 Structure of SANS 1914 performance-based resource standards (Watermeyer 2004)

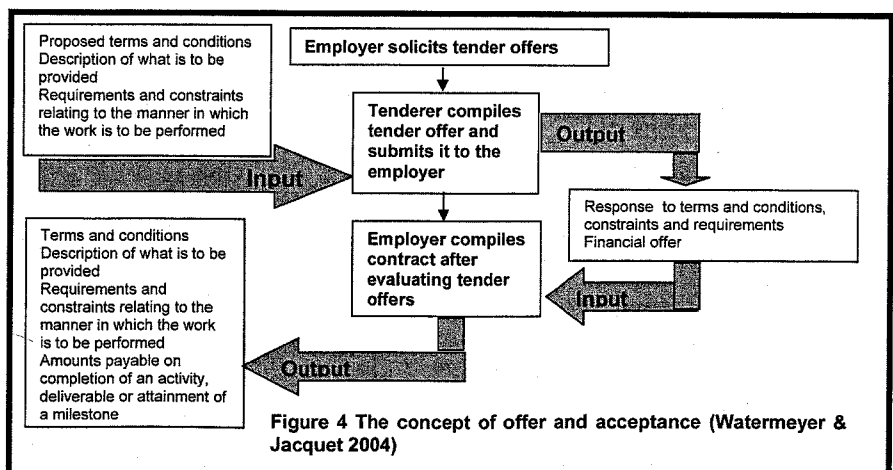


Figure 4 The concept of offer and acceptance (Watermeyer & Jacquet 2004)

Combinations of the generic procedures and methods outlined in tables 4 and 5, with or without eligibility criteria, can be used to simulate most international procurement procedures and methods applicable to supplies, services and works (see fig 6). Table 6 illustrates this relationship with the World Bank's Guidelines for the Selection and Employment of Consultants by

World Bank Borrowers and these generic procedures.

Quality (ie totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs) can be addressed in procurement using one of the methods outlined in table 7 under the circumstances that are indicated in the table.

Table 5 Standard tender evaluation methods (SANS 294, 2004)

Method	Procedure
Method 1 Financial offer	1 Rank tender offers from the most favourable to the least favourable comparative offer 2 Recommend highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so
Method 2 Financial offer and preferences	1 Score tender evaluation points for financial offer. 2 Confirm that tenderers are eligible for the preferences claimed and if so, score tender evaluation points for preferencing 3 Calculate total tender evaluation points 4 Rank tender offers from the highest number of tender evaluation points to the lowest 5 Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so
Method 3 Financial offer and quality	1 Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any 2 Score tender evaluation points for financial offer 3 Calculate total tender evaluation points 4 Rank tender offers from the highest number of tender evaluation points to the lowest 5 Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so
Method 4 Financial offer, quality and preferences	1 Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any 2 Score tender evaluation points for financial offer 3 Confirm that tenderers are eligible for the preferences claimed, and if so, score tender evaluation points for preferencing 4 Calculate total tender evaluation points 5 Rank tender offers from the highest number of tender evaluation points to the lowest 6 Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so

There are a number of other procedures that may be standardised. These include:

- requirements for the preparation of specifications
- conditions of tender should they be framed around the obligations of the tenderer and the undertakings of the employer (see table 8)
- conditions for the calling for expressions of interest should they be framed around the obligations of the respondent and the undertakings of the employer
- advertisements
- tender procedures (receipt of tender submissions and opening of tender submissions)
- evaluation of tender submissions (disqualification of tenders, test for responsiveness, arithmetical errors, ranking and scoring of responsive tenderers, risk assessment, negotiations with tenderers, and tender evaluation reports)
- award of contracts
- contract administration
- resolution of disputes

STANDARDISING CONSTRUCTION PROCUREMENT PROCESSES, PROCEDURES AND METHODS

SANS 294, 'Construction procurement processes, procedures and methods', provides processes, methods and procedures for the establishment within an organisation of a procurement system that is fair, equitable, transparent, competitive and cost effective. SANS 294 accordingly

- describes generic procurement processes around which an organisation may develop its procurement system
- establishes minimum requirements for the conduct of an organisation's employees, agents, board members and office bearers when engaging in procurement
- establishes the framework for the development of an organisation's procurement policy including any preferential procurement policy
- establishes generic methods and procedures for procurements including those pertaining to disposals, and
- provides standard conditions of tender and conditions for the calling for expressions of interest

SANS 294 provides the generic processes around which an organisation can develop its procurement system, as illustrated in figure 7. It provides standard generic methods and procedures which can by reference be adopted by organisations in their procurement system.

The processes, methods and procedures embodied in SANS 294 are based on an underlying requirement for the procurement system to be fair, equitable, transparent, competitive and cost effective. This

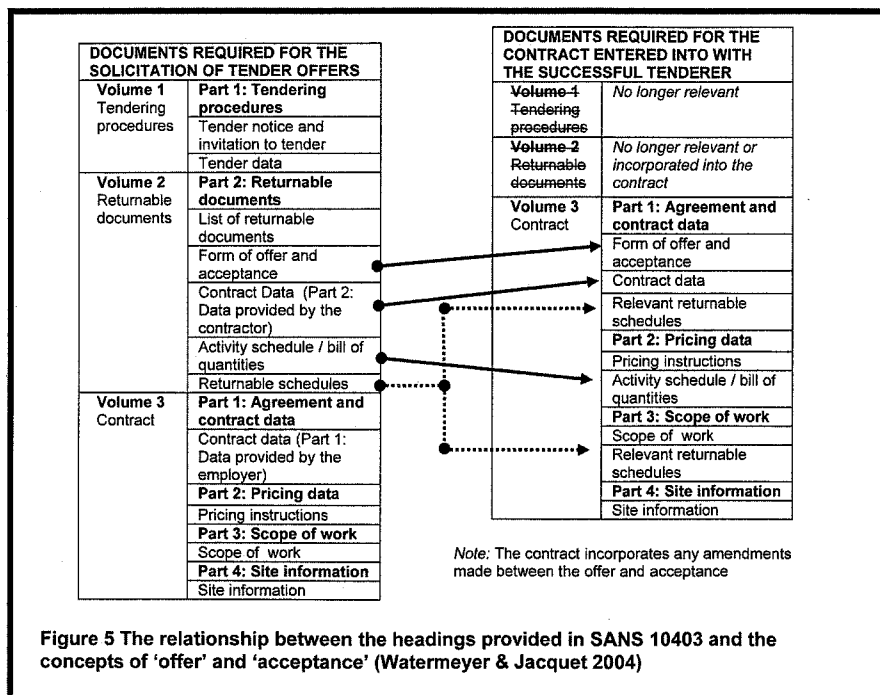


Figure 5 The relationship between the headings provided in SANS 10403 and the concepts of 'offer' and 'acceptance' (Watermeyer & Jacquet 2004)

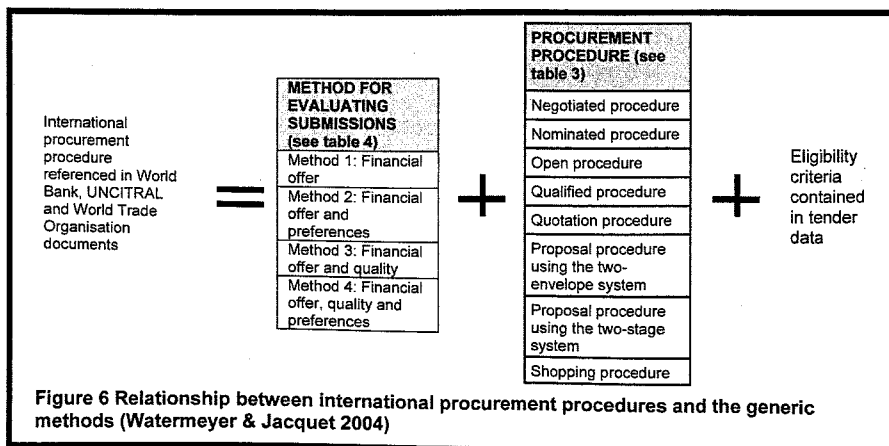


Figure 6 Relationship between international procurement procedures and the generic methods (Watermeyer & Jacquet 2004)

Table 6 The relationship between the World Bank's Guidelines for Consultants and the generic methods and procedures (Watermeyer & Jacquet 2004)

Methods and procedure provided for in the World Bank Guidelines		Equivalent approach using generic methods and procedures		
Descriptor	Description	Procurement procedure	Evaluation method	Tender data
Quality and cost-based selection (QCBS)	This procedure provides a competitive process amongst short-listed tenderers that takes into account the quality of the proposal and the cost of the services in the selection of the successful tenderer. Tenderers are provided with an indication of the expected input of key professionals (staff time)	Nominated or qualified procedure	Methods 3 or 4	Tender data must state which method is to be used
Quality-based selection (QBS)	This procedure requires the submission of either a technical proposal only (without the financial proposal), or both technical and financial proposals at the same time, but in separate envelopes. The tenderer submitting the highest ranked proposal, where only technical proposals are requested, is invited to negotiate the financial proposal. If the two-envelope system is used, the financial proposals of only those respondents that provide acceptable proposals are opened and evaluated on the basis of a balance between quality and financial offer. The final contract is thereafter negotiated. Tenderers are provided with an indication of the expected input of key professionals (staff time)	Proposal procedure using either the two-stage tendering system or the two-envelope system	Methods 3 or 4	Tender data must state which method is to be used
Selection under a fixed budget	In this procedure, tenderers are provided with a scope of work and the available budget and are invited to provide their best technical and financial proposals in separate envelopes, within the budget. The quality of the technical offer is evaluated before opening the financial offer. Financial offers within budget are evaluated. A contract is negotiated with the tenderer submitting the highest ranked technical offer	Proposal procedure using the two-envelope system	Methods 3 or 4	Tender data must state which method is to be used and make it an obligation for tenderers to submit tenders that do not exceed the budget
Least cost selection	In this procedure, a 'minimum' qualifying mark for the 'quality' is established. Proposals are invited in two envelopes from a short-list. Technical envelopes are opened first and evaluated. Those securing less than the minimum are rejected, and the financial envelopes of the rest are opened in public. The tenderer with the lowest price is selected	Nominated or qualified procedure	Methods 1 or 2	The tender data must state which method is to be used and that all the tenders that fail to achieve the threshold score for quality will be rejected
Selection based on consultants' qualifications	In this procedure, a call for expressions of interest and information on the consultants' experience and competence relevant to the assignment is made in order to establish a short-list and to select the tenderer with the most appropriate qualifications and references. A contract is negotiated with a selected tenderer	Select tenderer from electronic data base or call for expressions of interest		The tender/ submission data must state that a contract will be entered into with the tenderer who has the most appropriate qualifications
One source selection	In this procedure, a suitable tenderer is identified and a contract is negotiated	Negotiation procedure		

Table 7 Methods for addressing quality in procurement (Watermeyer & Jacquet 2004)

Method	Description of method	Recommended usage
Specifications	Specify the full and unambiguous requirements in the scope of work of a procurement document	In all procurements where the scope of work can be precisely documented
Lifecycle costing	Take cognisance of whole-life costing in the financial evaluation of tender offers	In procurements where lifecycle costs determine the cost of the procurement
Qualified procedure	Make use of the qualified procurement procedure (see table 2.2) and ensure that respondents who are invited to submit tender offers are suitably qualified to do so	Complex work characterised by requirements for higher levels of skills, greater resources or not well defined inputs and outputs
Eligibility criteria	Introduce quality into the eligibility criteria for the submission of tender offers or for the attainment of a minimum score in terms of specified quality criteria for tender offers to be evaluated	
Undertakings at tender stage	Require tenderers to submit plans for monitoring and applying quality management principles in the performance of their contracts	In procurements where it is not desirable or inappropriate to specify quality management requirements
Preference	Establish a category of preference for quality in the evaluation of tenders	Simple/straightforward/routine work where the tasks/activities are of a straightforward nature in terms of which inputs are relatively well known and outputs can be readily defined
Evaluation criteria	Evaluate specified quality criteria as an integral part of the tender offer	Specialist work requiring considerable innovation, creativity, expertise and/or skill or work that has a high downstream impact. Partnering approaches where the scope of work is ill defined when the partners are selected

necessitates that the following two important principles be adhered to:

- All evaluation criteria must be made known to tenderers or respondents in the procurement documents.
- The only grounds for not awarding a tender to a tenderer are:
 - The tenderer is under restrictions from participating in the organisation's procurement for engaging in corrupt and fraudulent practice, or has principals who are under such restrictions.
 - The tenderer cannot demonstrate that he possesses the necessary professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, and the personnel, to perform the contract.
 - The tenderer does not have legal capacity to enter into the contract.
 - The tenderer is insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing.
 - The tenderer does not satisfy the legal requirements, if any, stated in the organisation's procurement policy.
 - The tenderer may not be able to perform the contract in the best interest of the organisation, owing to conflicts of interest.

SANS 294 is based on the premise that, subject to prevailing legislation, preferential procurement policies are implemented using one of the following methods:

- preferences at the short-listing stage
- accelerated rotation on an electronic data base where the nominated procedure is used
- tender evaluation criteria, and
- breaking down (unbundling) of projects into smaller contracts to facilitate the participation of targeted enterprises

SANS 294 is a generic standard that can be applied to both the public and private sectors. As such, it contains the full range of methods and procedures that organisations may require in their procurements without prescribing when and under what circumstances such methods may be utilised or imposing the manner in which procurement is to be managed and controlled. Being generic in nature, it does not impose matters of policy on organisations. It rather establishes a rule-based framework within which an organisation may develop its procurement policy in order to implement the wide range of standard procurement meth-

Table 8 Topics dealt with in generic conditions of tender

General	Tenderer's obligations	Employer's undertakings
Actions	Eligibility	Respond to clarification
Tender documents	Cost of tendering	Issue addenda
Interpretation	Check documents	Return late tender offers
Communication and employer's agent	Confidentiality and copyright of documents	Opening of tender submissions
The employer's right to accept or reject any tender offer	Reference documents	Two-envelope system
	Acknowledge addenda	Non-disclosure
	Site visit and clarification meeting	Grounds for rejection and disqualification
	Seek clarification	Test for responsiveness
	Insurance	Arithmetical errors
	Pricing the tender offer	Clarification of a tender offer
	Alterations to documents	Evaluation of tender offers
	Alternative tender offers	Insurance provided by the employer
	Submitting a tender offer	Acceptance of tender offer
	Information and data to be completed in all respects	Notice to unsuccessful tenderers
	Closing time	Prepare contract documents
	Tender offer validity	Issue final contract
	Clarification of tender offer after submission	Complete adjudicator's contract
	Provide other material	Provide copies of the contracts
	Inspections, tests and analysis	
	Submit securities, bonds, policies, etc	
	Check final draft	
	Return of other tender documents	
	Certificates	

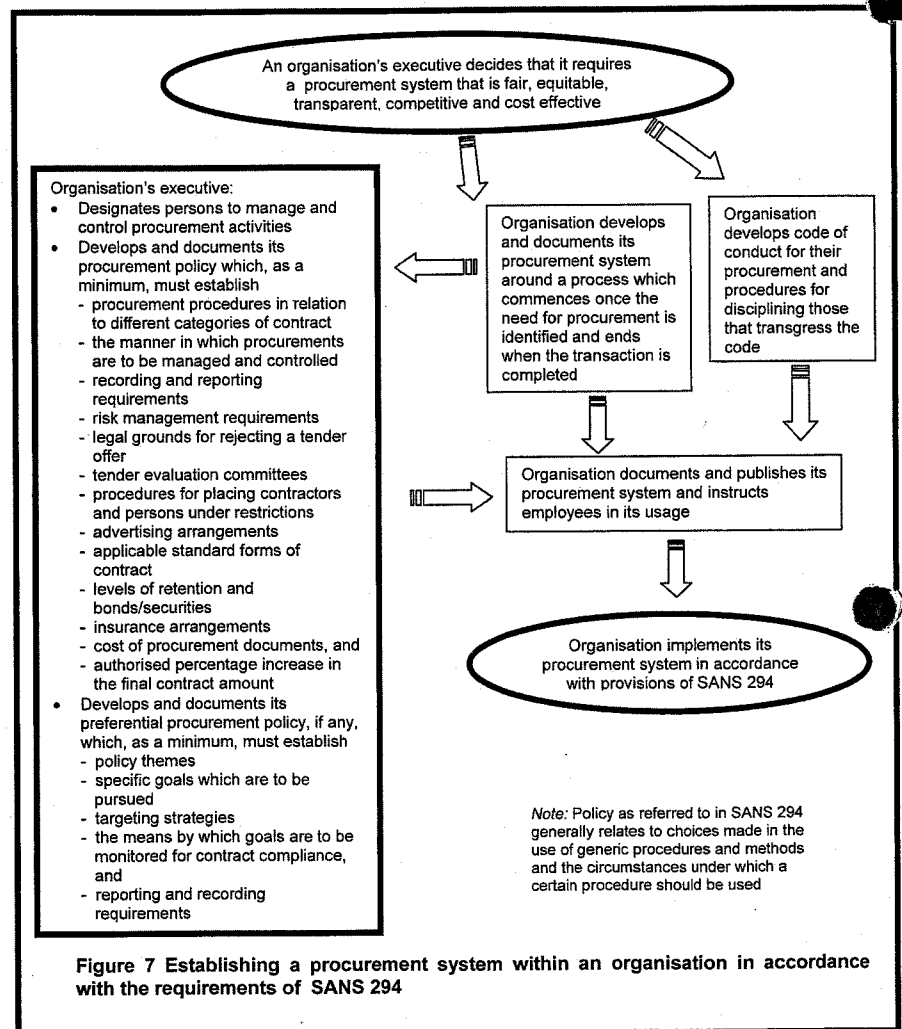


Figure 7 Establishing a procurement system within an organisation in accordance with the requirements of SANS 294

ods and procedures outlined in tables 4 and 5. Compliance with the requirements of SANS 294 will result in a procurement system that not only satisfies requirements for the procurement system to be fair, equitable, transparent, competitive and cost effective but also one that is predictable and ensures equal treatment of tenderers.

References

- Pautz, M, Watermeyer, R B and Jacquet, A 2003. Public construction procurement: a model delivery system. Knowledge Construction. Joint International Symposium of CIB Working Commissions, Singapore, October.
- Watermeyer, R B and Jacquet, A 2004. Practice Manual 1: The Use of South African National Standards in Construction Procurement. Midrand: SAICE.

Watermeyer, R B 2004. Tools and techniques to facilitate the alignment of public and donor procurement systems to promote sustainable development objectives. *Public Procurement Law Review*, 1:30-55.

Watermeyer, R B. A generic and systemic approach to procurement: the case for an international standard. Due to appear in the *Public Procurement Law Review*, January 2005.