Table A.5 — Qualitative indicators or prompts for judgement used in the evaluation of quality (linear scale)

Score ^a %	Qualitative indicator or prompt for judgement		
0	Failed to address the question/issue.		
20	A detrimental response/answer/solution — limited or poor evidence of skill/experience sought, high risk that relevant skills will not be available.		
40	Less than acceptable response/answer/solution — lacks convincing evidence of skill/experience sought, medium risk that relevant skills will not be available.		
60	Acceptable response/answer/solution to the particular aspect of the requirement — evidence given of skill/experience sought.		
80	Above acceptable response/answer/solution — demonstrates real understanding of requirement and evidence of ability to meet it based on		
100	Excellent response/answer/solution — gives real confidence that the supplier will add real value based on		
a The th	The threshold score, below which tenderers are eliminated from further consideration, should be between 45 %		

 $^{^{\}rm a}$ The threshold score, below which tenderers are eliminated from further consideration, should be between 45 % and 60 % .

Table A.6 — Qualitative indicators or prompts for judgement used in the evaluation of quality (logarithmic scale)

	Rating	Qualitative indicator or prompt for judgement			
Score ^a %		Example 1 (Proposed organization and staffing)	Example 2 (Approach paper)	Example 3 (Knowledge of issues pertinent to the project)	
0	No response	Failed to provide information.	Failed to provide information.	Failed to provide information.	
40	Poor	The organization chart is sketchy, the staffing plan is weak in important areas. There is no clarity in allocation of tasks and responsibilities.	The technical approach and/ or methodology is poor/ unlikely to satisfy project objectives or requirements. The tenderer has misunder- stood certain aspects of the scope of work and does not deal with the critical aspects of the project.	Key staff have limited experience of issues pertinent to the project.	
70	Satisfactory	The organizational chart is complete and detailed, the technical level and composition of the staffing arrangements are adequate.	The approach is generic and not tailored to address the specific project objectives and methodology. The approach does not adequately deal with the critical characteristics of the project. The quality plan, manner in which risk is to be managed, etc., is too generic.	Key staff have reasonable experience of issues pertinent to the project.	

 $^{^{\}rm a}$ $\,$ The threshold score, below which tenderers are eliminated from further consideration, should be between 60 % and 70 %.

Table A.6 (continued)

	Rating	Qualitative indicator or prompt for judgement		
Score ^a %		Example 1 (Proposed organization and staffing)	Example 2 (Approach paper)	Example 3 (Knowledge of issues pertinent to the project)
90	Good	Besides meeting the "satisfactory" rating, staff are well balanced, i.e. they show good coordination, complementary skills, clear and defined duties and responsibilities. Some members of the project team have worked together before on limited occasions.	The approach is specifically tailored to address the specific project objectives and methodology and is sufficiently flexible to accommodate changes that might occur during execution. The quality plan and approach to managing risk, etc., is specifically tailored to the critical characteristics of the project.	Key staff have extensive experience of issues pertinent to the project.
100	Very good	Besides meeting the "good" rating, the proposed team is well integrated and several members have worked together extensively in the past.	Besides meeting the "good" rating, the important issues are approached in an innovative and efficient way, indicating that the tenderer has outstanding knowledge of state-of-the-art approaches. The approach paper details ways to improve the project	Key staff have outstanding experience of issues pertinent to the project.
a The t			outcomes and the quality of the outputs.	

 $^{^{\}rm a}$ The threshold score, below which tenderers are eliminated from further consideration, should be between 60 % and 70 %.

A.3.3 Solicitation of tender offers

This subclause establishes the generic range of procurement methods. <u>Annex F</u> provides guidance on the usage of these standard methods.

The methods and procedures for procurements are generic in nature and are not specific to a category of procurement, i.e. services, goods or construction works. Some methods may, however, be more frequently used than others as they might be better suited to a particular category of contract.

The minimum time frames associated with a procedure are the absolute minimum that should be given to domestic tenderers and respondents. These time frames might need to be increased when soliciting tender offers and submissions of interest from international tenderers and respondents.

A.3.4 Framework agreements

Framework agreements, which are usually entered into following a negotiated, competitive selection or competitive negotiation procedure, 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. This may be achieved by issuing orders in terms of a framework contract during the term of the contract, i.e. an instruction to provide works, goods or services within a stated period of time for an agreed price.

Framework agreements do not bind an employer to make use of such agreements to meet needs. The market can be approached for goods, services and works whenever better value in terms of time, cost and quality may be obtained.

Price in the context of a framework agreement may be considered to be a sum of money for which something is purchased, the actual cost of acquiring something calculated according to some specific measure, or an estimate of what the transaction is worth. Accordingly, framework contracts contain prices for work to be executed over a term or cost parameters which enable prices to be determined

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once the scope of work has been determined. They may also contain a combination of prices and cost parameters.

Framework contracts need to contain terms which establish

- the rights and obligations of the contracting parties and the agreed procedures for the administration of the contract and the issuing of orders,
- the term of the agreement during which an order may be issued,
- the scope of work which may be included in an order to enable decisions to be made as to what is covered in the agreement and what needs to be procured outside of the agreement, and
- the basis by which contractors will be remunerated for work performed in terms of an order, if and when such an order is issued.

Orders that are issued

- may only cover goods, services and works work falling within the scope of work associated with the agreement,
- may not be issued after the expiry of the term of the agreement (see Figure A.3); and
- may be completed even if completion of the order is after the expiry of the term (see Figure A.3).

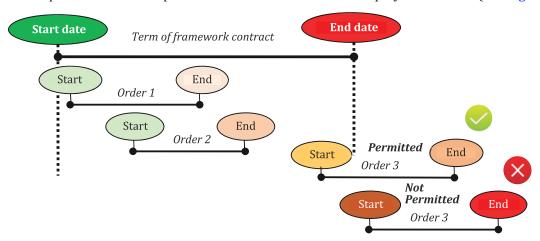


Figure A.3 — Timing of call offs in a framework agreement

Framework agreements should only be entered into with contractors who have the resources and the capability to carry out work that is likely to be instructed for a term usually not exceeding 3 to 4 years. Framework agreements can be entered into with a single or a limited number of contractors (typically not more than 3 but certainly not more than 5), based on the projected demand and geographic location for goods, services or works. The issuing of orders from framework agreements where a number of framework contractors have agreements covering the same scope of work may be made with and without requiring competition amongst such contractors. Competition amongst framework contractors for orders needs to take place where there is no justifiable reason for issuing an order to a particular framework contractor.

Framework agreements enable lessons learned in one order to be taken to the next order and enable a team to work together on an integrated approach over a period of time. It also enables performance, including that of promoting secondary objectives. to be improved upon over time.

NOTE 1 It becomes difficult to find justifiable reasons for issuing an order to a particular framework contractor when there are more than 3 framework contractors covering the same scope of work. As a result, competition amongst framework contractors may need to take place.

NOTE 2 Framework agreements have similarities with term service contracts, but are different in several important aspects. A term contract is a contract that enables the employer to order work over a fixed term at agreed rates. Such contracts have, at the time that they are entered into, a contract value. Those who administer such contracts are authorized to instruct the required work over the term against such contracts. A framework contract is different to a term contract in that it has no value at the time of its formation and more than one contract covering the same scope of work can be entered into. Framework contracts frequently have no fixed rates. Consequently the terms of the contract can have to be applied in order to arrive at a price. Those administering such contracts require authorization to issue an order for three basic reasons (see Annexes D and E):

- authority to incur the required expenditure;
- confirmation that the goods, services or works fall within the scope of the framework contract approved at the time that the framework contract was entered into; and
- where more than one framework agreement covers the same scope of work, the acceptability of the reasons for selecting a particular framework contractor.

A.3.5 Design competitions

Design competitions enable employers to award contracts on the basis of the quality offered. They can be designed to extract innovative designs, ideas and practices and to identify talented designers to participate in the development of the physical fabric of a construction works project. They may as such be used to:

- discover talent and skill which, but for a competition, would remain unknown;
- afford opportunities to professionals through a competitive process to undertake work which might not otherwise have been possible;
- enable young unknown talents to come to the fore and be noticed;
- obtain outstanding and unique design concepts and explorations, and
- promote the project through publicity and exhibitions.

Competition rules should be drafted to regulate the conducting of the competition. Such rules should as necessary

- a) describe the purpose of the design competition,
- b) establish the competition brief and evaluation criteria,
- c) establish admission and submission requirements,
- d) identify the language of the competition,
- e) indicate if prizes are to be awarded and if so what is the nature of the prize,
- f) describe how the anonymity of participants will be achieved in the process,
- g) address the marking and safeguarding of submissions,
- h) how communications with the competition administrator will take place,
- i) how additional information and clarifications will be handled,
- j) describe the actions and functions of the competition administrator and the jury,
- k) establish how the winners will be announced, and
- l) establish who holds the copyright and has ownership over the documents.

A.3.6 Tender process and procedures

Four standard evaluation methods are provided for, namely method 1 (financial offer), method 2 (financial offer and quality), method 3 (financial offer and preference) and method 4 (Financial offer, quality and preference). Weightings and points are allocated to the parameters that are scored in methods 2 to 4. The weighted scores for each of the parameters that are evaluated are added together. The tenderer with the highest score is considered to be the most competitive.

The tender procedures are compatible with those framed in ISO 10845-3. Comprehensive guidance on the application of these procedures is given in ISO 10845-3

A.3.7 Contract administration

Contract administration requirements are linked to the conditions of contract which contain procedures for the administration of a contract. Appropriate conditions of contract should be used in relation to the nature of the contract. ISO 10845-2 provides guidance on the selection of a standard form of contract for the provision of goods, services and construction works.

Data should be captured upon completion or termination of a contract as it informs future selections in the pursuit of best-value procurement.

Annex B

(informative)

Differences between categories of procurement

The procurement of general goods and services for consumption usually involves the direct acquisition of products which are standard, well-defined and readily scoped and specified. The process normally involves the production of a specification which then forms the requisition for goods and services. An immediate choice can be made in the terms of the cost of goods and services satisfying the specified requirements, which can be paid for upon delivery. In contrast, it is usually not possible to directly acquire construction works in the way that general goods and services are acquired. The delivery of construction works involves the procurement, programming and coordination of a network of suppliers of goods and services which are required to collectively deliver or alter construction works on a site. This network can include different companies specialising in design, manufacture, supply, assembly or construction.

There are many more risks to manage in construction procurement, due to unforeseen events during the delivery of the project. In addition, construction works requirements are often established from a perspective of desired performance, rather than a well-defined specification. A range of different combinations of goods and services with differing characteristics such as initial cost, reliability, lifecycle costs, and operating costs may satisfy the performance requirements. A construction product is usually delivered and paid for incrementally over a period.

<u>Table B.1</u> outlines the significant common differences between the procurement characteristics associated with the provision, alteration, refurbishment and rehabilitation of construction projects and those for general goods and services.

 $Table\ B.1-Significant\ differences\ commonly\ encountered\ between\ the\ procurement\ of\ general\ goods\ and\ services\ for\ consumption\ and\ the\ procurement\ of\ construction\ works$

Characteristic / consideration	General goods and services for consumption	Provision of construction works
Satisfying the business need	The business need is commonly achieved through the production of a specification, which then forms a requisition for goods or services	The business need is frequently satisfied though multiple contracts which need to be procured and managed in such a way that the anticipated benefits are progressively realised
Demand management	The demand is usually determined and managed through inventory/bin levels or the frequency of the required service	Demand is most often determined and managed through service life plans which are based on an assessment of current performance against desired levels of service or functionality and strategic infrastructure plans which provide a credible forecast of current demand and net demand for services or requirements for functionality over a period of time
		Demand also needs to be proactively managed through the planning, acquisition and contract management phases to prevent scope creep

Table B.1 (continued)

Characteristic / consideration	General goods and services for consumption	Provision of construction works
Risks	Risks are relatively low as they are typically linked to the ability of the contractor to timely supply the required goods or to provide the required service to the standard demanded by the employer within the tendered amount. The consequences of late delivery are usually low	Risks are high due to uncertainties at the start of a contract which include economic circumstances, human behaviour, natural events, weather, inherent site conditions, political circumstances, community unrest, technology and technical issues, management activities and controls and individual activity. Risks can also manifest in commercial and legal relationships and weak employers as well as in the difference between estimated quantities at tender stage and final quantities at the completion of the works and the manner in which contractors are compensated for risk events for which they are not responsible for
Interdependencies and interfaces between contracts	Interdependencies and inter- faces between contracts are rare as the procurement com- monly involves off the shelf products or readily available commodities or standard, well defined and scoped services	There are several interfaces and interdependencies between contracts as works (products) are developed or maintained on a site. A supply chain frequently needs to be contracted and mobilised to provide the necessary professional services, manufacture and supply materials, products, components and assemblies, provide the necessary equipment and labour to provide the works
Final contract price of contract	The final contract price typically equates to the quantum of goods or services which are consumed multiplied by the agreed rate	The final contract price in works contracts equates to the sum of the initial contract price for work which is known, the cost of changes in scope of contract (variations) to enhance quality performance or to address shortcomings which can impair performance, the amount of contract price adjustment for inflation provided for in the contract and the cost of risk events that materialise in the execution of a contract for which the contractor is not responsible
Budget, contract price and purchase order value	Contract price is commonly adjusted to fit the budget or the budget reduced to the contract amount when it is known. The purchase order (financial control) amount typically equals the contract price which in turn equals the budget	The budget needs to include contingences to fund changes in requirements established at the start of the contract to enhance quality or performance, or to address short-comings which can impair performance, and risk events for which the contractor is not responsible. The purchase order amount may also need to be adjusted to enable contingencies to be accessed. The budget, the amount due in terms of the contract and the purchase order amount are rarely the same (see Annex E)
Conditions of contract	Conditions of contract describe the rights and obligations of the parties and commonly lack agreed procedures for the administration or management of the contract Frequently a contract or a service level agreement is negotiated after the evaluation of tenders, based on the tender submission	Conditions of contract provide terms that collectively describe the rights and obligations of contracting parties and the agreed procedures for the administration of the contract A standard form of contract is used which provides fixed terms and conditions which are usually not varied. This is necessary to allocate risks to the parties and to provide the methodology by which adjustment to both the prices and the time for completion can be made for changes in the scope of work and for risk events for which the contractor is not at risk. This enables tenderers to price for such risk
Value for money (cost effectiveness)	Reducing the cost of resources, increasing output for a given input or minimising input for a given output while maintaining quality	The optimal use of resources or the effective, efficient, and economic use of resources to achieve intended project outcomes. It speaks to the cost effectiveness of the outputs of the procured resources in the delivery of project outcomes

There are also differences in the approach to sustainable procurement as construction works commonly incorporates materials (substances that can be incorporated into the works), products (item manufactured or processed for incorporation into the works), components (products manufactured

as distinct units to serve a specific function or functions) and assemblies (set of related components attached to each other) and involves a wide range construction operations, often with competing impacts (see $\underline{\text{Annex C}}$).

Annex C

(informative)

Sustainable procurement in construction works contracts

C.1 General

Sustainability is the state of the global system, including environmental, social and economic aspects, in which the needs of the present are met without compromising the ability of future generations to meet their own needs (ISO 6707-3). Sustainable development, on the other hand, is development that meets the environmental, social and economic needs of the present without compromising the ability of future generations to meet their own needs (ISO 6707-3). It is rooted in the simple concept of providing a better quality of life for all, now and for generations to come. It is a way of looking at all resources that will lead to a higher quality of life for the current generation, without compromising that of future generations.

While the challenge of sustainable development is global, the strategies for addressing sustainability in construction works are local and differ in context and content from region to region. Such strategies need to reflect the context not only in the built environment, but also in the social environment which includes social equity, cultural issues, traditions, heritage issues, human health and comfort, social infrastructure and safe and healthy environments. It may in addition, particularly in developing countries, include poverty reduction, job creation, access to safe, affordable and healthy shelter and mitigation of loss of livelihoods. Given the disparities in standards of living between developed and developing nations, the approach in general to the social component is very different. This results in different development priorities between the developed nations and developing nations as indicated in Figure C.1. In nations with dual economies the priorities differ regionally and within communities, depending upon where the poor and the affluent live.

BROWN AGENDA GREEN AGENDA Ecosystemic well-being Human well being **Key concern** Forever Immediate Time frame Developed Local to global Local Scale nations Concerned about Future generations Low income groups Protect and work with Nature Manipulate and use Useless Services Provide more Affluence and Poverty and overconsumption underdevelopment

Developing nations

Figure C.1 — The "green" and "brown" agendas

Sustainable development changes the traditional linear economy of make, use and dispose into a circular economy in which resources are kept in use for as long as possible, extracting the maximum value from them whilst in use, and then recovering and regenerating products and materials at the end of each service life.

C.2 ISO 20400 approach to sustainable procurement

ISO 20400 defines sustainable procurement as "procurement that has the most positive environmental, social and economic impacts possible over the entire life cycle." ISO 20400 assists organizations in meeting their sustainability responsibilities by providing an understanding of what sustainable

procurement is and what the sustainability impacts and considerations are across the different aspects of procurement activity (policy, strategy, organization and process).

ISO 20400 suggests that:

- the main principles are accountability, transparency, ethical behaviour, full and fair opportunity, respect for stakeholders interests, respect for human rights, the rule of law and international norms of behaviour, innovative solutions, focus on needs, integration, analysis of all costs and continual improvement;
- the core subjects are organizational governance, human rights, labour practices, the environment, fair operating practices, consumer issues and community involvement and development; and
- the key considerations for sustainable procurement are managing risk (and opportunities), addressing adverse sustainability impacts through due diligence, setting priorities for sustainability issues, exercising influence and avoiding complicity.

ISO 20400 points out that the commitment of top management is critical to successful sustainable procurement. Without this formal commitment, individuals in procurement have no mandate to integrate sustainability into their procurement strategies or processes and sustainable procurement will remain an ad hoc activity without resources and recognition at an organizational level.

ISO 20400 defines procurement narrowly as the "activity of acquiring goods or services from suppliers" and as such focuses on general goods and services (see Annex B). Construction works involves the combination of many goods and services in the development of a product on a site. Procurement in a construction context focuses not only the acquisition process but also on the planning and contract management phases of the procurement process i.e. the upstream and downstream activities of the procurement process. What is planned needs to be delivered in the face of many risks which may manifest and several competing objectives and impacts (see Annex B).

C.3 Sustainable procurement in the context of construction works

C.3.1 Concepts

Value for money refers to a project that is well worth the money spent on it. It is the effective, efficient and economic use of resources, or the optimal use of resources to achieve intended outcomes (see Figure C.2). Value for money is the attainment of a desirable or satisfactory outcome in relation to a carefully considered budget. In the context of construction works projects, project outcomes are benchmarked against the client's value proposition, usually set at the outset of the project and perhaps modified at the start of construction or supply.

The client's business case, vision, values and project priorities collectively make up the client's value proposition for a project i.e. the promise of measurable benefits resulting from the project. A project that achieves the client value proposition effectively, efficiently and economically is a project that achieves value for money. Activities associated with the planning, designing, manufacturing/fabrication, construction/installation and commissioning need to translate the client's value proposition through a number of activities and influencing and controlling actions into project outcomes which impact on the three aspects of sustainability (economic, environmental and social) and result in a product as indicated in Figure C.3.

Governance, client leadership and procurement strategy and tactics (see <u>Table C.1</u>) typically have the greatest impact upon project outcomes. These are all within the control of the client.