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Content

1. Introduction

The supplier qualification and audit programme is established to obtain and maintain confidence in the capability of suppliers of nuclear products (products and services classified to RD-0034 L1, L2 and L3) to consistently supply these products and services to the required codes, standards and specifications. The processes described in this manual thus link with the broader supplier management process owned by Nuclear Operating Unit.

These suppliers include material producers, manufacturers, suppliers of SSCs and service providers of services such as engineering, project management, and nuclear safety and quality management.

2. Supporting Clauses

2.1 Scope

This manual covers the requirements, process, roles and responsibilities for the qualification of suppliers to supply product and services to the required nuclear safety and quality levels, and the periodic audit/surveillance of their qualification status.

Supplier qualification and monitoring activities detailed in this manual are:

- Supplier Capability Assessments
- Supplier Audits/Surveillances (post contract award)
- Supplier Evaluations

2.1.1 Purpose

The purpose of this manual is to define the requirements, responsibilities and process of planning, performing, reporting and close-out of assessments, evaluations and audits of Suppliers Management Systems and the on-going reviews of their compliance to maintain their qualification status.

2.1.2 Applicability

Applicable to all supplier qualification and monitoring activities performed by, or on behalf of, NOU to enable Eskom to qualify and monitor nuclear suppliers.

2.1.3 Effective date

01 May 2021

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs

2.2.1 Normative

[1] 238-6: Document and Records Management Requirements
[2] 238-28: Safety Culture Management
[3] 238-83: Corrective Action Standard
[4] 238-122: Company Information Form
[5] 238-123: Supplier Audit Checklist
[6] 238-126: Supplier Assessment Application Form
[7] 238-130: Control of Nonconforming Product
[8] 238-219: Level 1 Supplier Safety Culture Enhancement (SCEP) Programme Requirements
[9] 240-151257110 (KGA-099): Supplier Assessment and Evaluation Guide
[10] ASME NQA-1: Quality Assurance Requirements for Nuclear Facility Applications
[11] IAEA Safety Standards -GSR Part 2: Leadership and Management for Safety
[12] ISO 9001: Quality Management Systems - Requirements
[13] KAA-831: Koeberg Operating Unit Nuclear Licensing Processes
[14] RD-0034: Quality and Safety Management Requirements for Nuclear Installations

2.2.2 Informative

[15] 238-8: Nuclear Safety and Quality Manual
[16] 238-25: KOU Nuclear Commercial IMS Manual
[17] 238-101: Quality and Safety Management Requirements for Nuclear Supplier Level 1
[18] 238-102: Quality Management Requirements for Nuclear Supplier Level 2
[19] 238-103: Supplier Quality programme requirements
[20] 240-112278820 (KAA 570): Supplier Quality Audit and Surveillance
[21] 240-89294359 (KSA-010): Nuclear Safety, Seismic, Environmental, Quality, Importance Classification and Safety Level Classification Standard
[22] 32-1034: Eskom Procurement and Supply Chain Management Procedure
[23] DSG-318-087: Quality Requirements for the procurement of assets, goods and services
[24] IAEA INSAG- Safety Series Guideline No 4: Safety Culture
[25] IAEA INSAG Safety Series Guideline No 13: Management of Operational Safety in Nuclear Power Plants
[26] INPO Traits of a healthy nuclear safety culture 12-012 Rev 1
[27] ISO 9000: Quality Management System – Fundamentals and Vocabulary
[28] KAA-639: The Vendor Qualification Process
[29] KAA-688: Corrective Action Process

[30] KAA-830: Process for Management of Quality Records

2.3 Definitions

Eskom uses the following definitions, which may not necessarily conform to definitions adopted elsewhere for national or international use.

2.3.1. **Approved Supplier:** Organisation or person that supplies a product. This definition also covers sub-suppliers. “Supplier” includes in principal designers and/or architect engineer. An approved supplier has been evaluated and approved by Eskom in accordance with its requirements.

2.3.2. **Assessments:** Measures to demonstrate at a level of confidence commensurate with the requirements of the purchaser and/or other involved parties, that the organization has the ability to supply a product in terms of a proposed contract and / or in terms of the stated scope of work.

2.3.3. **Audit:** Systematic, independent, and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

2.3.4. **Authorised Representative:** An organisation or person appointed by Eskom for the purpose of performing quality assurance or quality control monitoring and/or inspection services.

2.3.5. **Certification:** The act of determining, verifying, and attesting in writing to the qualifications of personnel, processes, procedures, or items in accordance with specified requirements. It gives rise e.g. to Certificates of Analysis, Conformance, etc.

2.3.6. **Compliance audit:** Performed to determine (by investigation, examination or evaluation of objective evidence) the level to which practice complies with established standards, processes, procedures, instructions, drawings and other applicable documents.

2.3.7. **Component:** A constituent part of the product, or sub-assembly of the product. The product may compromise multiple individual components.

2.3.8. **Equipment:** An all-inclusive term used in place of any of the following: Appurtenances, assemblies, components, instrumentation and control devices (including software), supporting structures, subassemblies, and subsystems. A synonym is the use of the term SSC (refer below).

2.3.9. **Integrated Management System:** A single, coherent management system in which all organisational processes are integrated to enable the organisation’s goals, strategies, plans and objectives to be achieved. The Integrated Management System shall integrate Nuclear Quality Management and Nuclear Safety Management which shall consider Nuclear Safety Culture aspects.

2.3.10. **Objective Evidence:** Data supporting the existence or verification of something. Objective evidence may be obtained through observation, measurement, test or other means.

2.3.11. **Procurement Documents:** A set of documents specifying the necessary technical information and data, process and functional requirements, environmental conditions, loads, codes and

standards as well as the quality management measures for the products to be purchased. Procurement documents include design specifications.

2.3.12. **Product:** The term “product” in addition to the ISO 9000 definition shall be interpreted as also meaning commodities, items of plant, equipment, material, services, etc. It includes SSCs (Structure, System, Components), material, and services associated with SSCs. It is the result of a material or non-material process including services.

2.3.13. **Process Audit:** Is performed to determine whether the manufacturing, construction or test processes employed are adequately defined and controlled to successfully achieve the specified product.

2.3.14. **Qualified:** An approved person, item, procedure, document or process that has been demonstrated to meet the specified requirements for the intended purpose or nature of work.

2.3.15. **Safety Level 1:** Applies to products, SSCs and service of high importance to nuclear safety which has a direct influence on the Nuclear Safety Performance of the nuclear facility.

2.3.16. **Safety Level 2:** Applies to products, SSCs and service of importance to nuclear safety.

2.3.17. **Safety Level 3:** Applies to products SSCs and services that are not required to satisfy to the requirements of safety level 1 and level 2.

2.3.18. **Quality Control Plan:** A document specifying the work or production activities to be performed and inspected throughout the execution of the project inclusive of test methods, procedures and acceptance criteria. (This term is equivalent to QIP and ITP). Eskom will indicate on the QCP / ITP their quality inspection Hold and Witness Points. In turn, the QCP / ITP will also be submitted to the NNR (as applicable) for their review and acceptance and identification of their Hold and Witness Points.

Note: *The QCP is sometimes referred to as the ITP or quality inspection plan.*

2.3.19. **Quality Management System:** A management system to direct and control an organisation with regard to quality.

2.3.20. **Regulatory Body:** A person or persons representing a statutory body as required by law.

2.3.21. **Requirement:** The need or expectation that is stated, generally implied or obligatory. Requirements are generally specified in the purchase order and / or contract administration, but may not be limited thereto.

2.3.22. **Resources:** “Resources” includes personnel, infrastructure, the working environment, information and knowledge, and suppliers, as well as material and financial resources.

2.3.23. **Safety Culture:** Characteristics and attitudes of organisations and individuals, which ensure that, as an overriding priority, nuclear safety issues receive the attention warranted by their significance.

2.3.24. **Safety Culture Enhancement Programme:** Is the framework for the implementation of the Safety Culture principles and activities within an organization.

2.3.25. **Safety Management System:** The Safety Management System comprises those arrangements made by the organization for the management of safety in order to promote a strong safety culture and achieve a good safety performance with specific focus on nuclear safety being top priority.

2.3.26. **Special Process: A** process, the results of which are highly dependent on the control of the process or the skills of the operators, or both, and in which the specified quality cannot be readily determined by inspection or test of the product.

2.3.27. **Sub-supplier:** An organisation that provides a product to the main supplier and assumes some of the responsibilities of the supplier.

2.3.28. **Supplier:** A supplier is a registered organisation that supplies, or intends to supply a product to Eskom (whether directly, or indirectly). A supplier may be a company, corporation, firm, enterprise or institution, or part thereof, whether incorporated or not, public or private, that has its own functions and administration. A supplier may also operate/trade (but is not limited to) as a manufacturer, agent/distributor, consultant, joint venture, contractor, etc.

2.3.29. **Surveillance:** This is a focussed audit, review, assessment of a specific part of a process to gain specific insight into its conformance to requirements.

2.3.30. **Technical Specialist:** This term refers to a person responsible for and fulfilling the role concerned with the technical aspects and integrity of the product, service or process in respect of the specific contract (e.g. metallurgist, materials or welding engineer, SME etc.)

2.3.31. **Testing:** An element of verification for the determination of the capability of an item or SSC to meet specified requirements by subjecting the item / SSC to a set of physical, chemical, environmental, accidental or operating conditions.

2.3.32. **Third Party Organisation:** Is used in the context of a third party inspector or auditor that is neither client nor supplier.

2.3.33. **Witness point:** Predetermined stages or activities on a QCP / ITP beyond which work may proceed provided the Employer (Eskom) or the AIA or its Authorised Representative has been timeously notified as required and approval was obtained to proceed.

2.4 Abbreviations

Abbreviation	Description
AIA	Authorised Inspection Agency
ASL	Approved Supplier List
BA	Business Area
BU	Business Unit

DCC	Documentation Control Centre
IAEA	International Atomic Energy Corporation
IMS	Integrated Management System
INSAG	International Nuclear Safety Advisory Group
ISO	International Organisation for Standardisation
ITP	Inspection and Test Plan
NNR	National Nuclear Regulator
QCP	Quality Control Plan
L1	Safety Level 1
L2	Safety Level 2
L3	Safety Level 3
OE	Operating Experience
QM	Quality Management
QIP	Quality Inspection Plan
QMS	Quality Management System
RD	Requirement Document
SC	Safety Culture
SCEP	Safety Culture Enhancement Programme
SSC	Structures, Systems and Components (include items and equipment)
SME	Subject Matter Expert
SMS	Safety Management System
TRS	Technical Requirement Specification
VQM	Vendor Quality Management

2.5 Roles and Responsibilities

The Senior Manager Nuclear Commercial is responsible for the implementation of this manual.

2.5.1 BA/ BU Manager

Each BA/BU manager is responsible for providing support with SME representatives for the technical portion of the supplier capability assessments, audits and surveillances where required. The assigned team members should include technical specialists from the relevant engineering or end-user group, as appropriate.

2.5.2 Procurement Quality Engineering (PQE) Manager

The PQE Manager is responsible for Nuclear Supplier Qualification and Monitoring function which includes:

- Managing the supplier capability assessment and compliance audits.
- Managing and maintain nuclear VQM database and the ASL.
- Managing the periodic re-evaluation to determine supplier performance and qualification status.

- Monitoring of supplier performance with respect to the implementation of the quality management requirements.

2.5.3 Eskom Lead Auditor

The Lead Auditor is responsible to:

- Lead and manage Supplier Capability Assessment and Supplier Audit activities.
- Identify and recommend audit team including technical support/SME personnel.
- Prepare the assessment/audit plan, objectives, agenda and criteria.
- Ensure that appropriate checklists are compiled, reviewed and accepted.
- Execute the supplier assessment/surveillance/audit plan.
- Report the outcome of the supplier assessment/surveillance/audit.
- Evaluate the Supplier's proposed corrective action plan.
- Follow-up and close out of the Supplier Assessment/Surveillance/Audit.

2.5.4 Technical Specialist or SME

The Technical Specialist or SME is responsible for:

- Clearly specifying and documenting in the checklist of all technical criteria relating to the product and services.
- Providing technical input and participation during supplier capability assessments, surveillances and audits.

2.6 Process for Monitoring

The implementation of this manual will be monitored by KOU Quality Assurance Department during periodic audits.

3 General Requirements

3.1 General

3.1.1. Suppliers shall be qualified against the requirements specified in procurement documents (e.g. TRS, quality management specifications, enquiry to tender or contract). This qualification takes into account the following aspects:

- Scope of Work
- Safety and Quality Management System

- Technical capability, competence and capacity
- Safety and quality classification of the product
- Selected codes and standards
- References and product related experience

3.1.2. The supplier qualification process shall be based on, and graded according to, the applicable safety and quality classification system. The following criteria (graded approach) shall apply to supplier qualification based on the following safety levels:

3.1.2.1 **Safety Level 1**

The supplier's Integrated Management System (IMS) is implemented to cover the following:

a. A Quality Management System (QMS) that is appropriate for the scope of work

b. A nuclear QM standard (e.g. ASME NQA-1, IAEA GSR Part 2, etc.), and

c. A Safety Management System (SMS) that considers applicable safety culture aspects in accordance with Safety Management Standard (238-28).

d. Safety Culture Enhancement Programme Requirements (238-219) and the international nuclear safety standard (The Management System for Facilities and Activities: IAEA GSR Part 2 or equivalent

e. An initial capability assessment shall be conducted at the supplier's premises if there is insufficient suitable information to approve the supplier for the required scope of work. The assessment is used to evaluate the comprehensiveness of the supplier's IMS, resources and the critical product realisation processes of all products.

***Note**: Eskom visits to sub-supplier facilities will be excluded from this assessment as the responsibility for sub-supplier assessment lies with the main supplier. Suppliers must provide evidence (e.g. quality management documentation submission, independent self-assessment reports, 3rd party audit reports or management system certification) to Eskom that their sub suppliers comply with Eskom and Regulatory requirements.*

f. A compliance audit of the supplier's IMS shall be conducted after a contract is awarded, and results evaluated to determine approval status for final inclusion onto the ASL

g. Re-evaluation of the supplier's IMS shall be conducted within three years. Where major changes have taken place and have impacted nuclear safety prior to the three-year interval has lapsed, a formal audit shall be performed.

3.1.2.2 **Safety Level 2**

The supplier's Quality Management System (QMS) is implemented to cover the following:

a. A certified QMS that is appropriate for the scope of work and is compliant with Eskom applicable quality requirements

b. An initial capability assessment shall be conducted at the supplier's premises if there is insufficient suitable information to approve the supplier for the required scope of work. The assessment is used to evaluate the comprehensiveness of the supplier's QMS, resources and the critical product realisation processes of all products.

Note 1: *Eskom visits to sub-supplier facilities will be excluded from this assessment as the responsibility for sub-supplier assessment lies with the main supplier. Suppliers must provide evidence (e.g. quality management documentation submission, independent self-assessment reports, 3rd party audit reports or management system certification) to Eskom that their sub suppliers comply with Eskom and Regulatory requirements.*

Note 2: *A supplier capability assessment visit to the supplier's premises may be waived provided that both the following can be demonstrated:*

- *Suitable information such as that supplier has a current ISO 9001 QMS certification and evidence of compliance with other applicable nuclear quality management programme for the scope of work approved by a recognized audit organisation, such as ASME (e.g. N-stamp, etc.), Nuclear Procurement Issues Committee (NUPIC) audit report, or a similar recognized international accreditation/approval and,*
- *The supplier has previous experience (in the last three years) in supplying identical or similar acceptable products or services*

c. A compliance audit of the supplier's QMS shall be conducted after a contract is awarded, and results evaluated to determine approval status for final inclusion onto the ASL.

d. Re-evaluation of the supplier's QMS shall be conducted within three years via desktop review. Where major changes have taken place and have impacted nuclear safety prior to the three-year interval has lapsed, a formal audit shall be performed.

3.1.2.3. **Safety Level 3**

a. A supplier capability assessment shall be conducted at the supplier's premises if there is insufficient suitable information to approve the supplier for the required scope of work. The assessment is to verify that a quality programme is implemented, appropriate to the scope of work, and compliant with Eskom requirements.

Note: *A visit to the Supplier's premises may be waived provided that one of the following can be demonstrated: The Supplier has a current ISO 9001: QMS certification in place or evidence of compliance with another equivalent quality programme for the scope of work the supplier has previous experience (in the last three years) in supplying identical or similar acceptable products or services.*

b. Re-evaluation of the Suppliers Quality Programme within three years shall be conducted.

3.1.3. The NNR shall be informed in accordance with KAA -831 to ascertain their level of involvement during the supplier qualification and /or audit processes for nuclear suppliers of Level 1 or Level 2 products. The NNR involvement on Eskom teams will be that of observer, in order to retain

their independence in overseeing the qualification process. This however does not preclude the NNR from conducting their independent reviews and audits.

3.1.4. If the NNR decides to participate in the supplier qualification process, the following information shall be made available to them:

a. Notification letter for the audit/assessment of the supplier inclusive of the audit/assessment plan;

b. The scope of work to be performed;

c. The supplier's QMS/IMS manual;

d. The contractual agreement between Eskom and the supplier.

3.1.5. All qualified nuclear suppliers (Level 1 and Level 2) shall be registered in a database where an up to date list of approved suppliers that shall include the following information:

a. Product to be delivered;

b. The name of the supplier of the product, and that of the sub-supplier of components;

c. Safety and quality classification of the product;

d. The selected codes and standards;

e. Status of qualification;

f. Restrictions/ conditions of qualifications where applicable

3.1.6. The ASL shall be maintained as documented information, and a list of the approved nuclear Level 1 suppliers will be submitted to the NNR whenever the list for Level 1 suppliers changes.

3.1.7. Non-conformances raised on the supplier's management system, or any other condition adverse to quality, shall be managed in accordance with the processes as required by 238-83 and 238-130.

3.1.8. Personnel leading Supplier Management System assessments or audits shall be qualified and authorised.

3.1.9. The following non-permanent records are to be retained as part of the supplier qualification file in accordance with 238-6 and KAA-830:

a. Supplier assessment and evaluation results;

b. Supplier audit/surveillance reports;

c. Supporting evidence of certification of the supplier's IMS/QMS, third party supplier audit report, etc. Supplier qualification requirements

4.1 Supplier capability assessment requirements

4.1.1. Supplier capability assessments shall determine whether the supplier has the applicable elements of a management system and capability to provide a product that meets the stated technical and quality requirements.

4.1.2. Supplier Capability Assessment shall be performed in accordance with Appendix 1 of this manual

4.1.3. Supplier capability assessments shall evaluate the technical equipment, facilities, resources and related experience in the realisation of the product

4.1.4. Technical specialists or SMEs carrying out this work shall be suitably qualified and understand the specific requirements of the relevant purchase order or contract scope.

4.1.5. Technical capability assessments shall be conducted using as a minimum the applicable criteria stated below:

a. Review of the suppliers manufacturing capability and capacity.

b. Review the supplier's certification of compliance to the relevant design and manufacturing codes and standards

c. Evaluate the supplier performance from market information/market acceptance and industry OE relating to the products or services concerned

d. Assess the degree of product knowledge, and the novelty that the product, manufacturing method or service represents to the supplier, and their understanding of customer/scope-specific technical criteria

e. Assess the measures employed to assure the quality of the product/service

f. Assess the staff training and turnover/residence time, and evidence of sound human performance practices, quality of workmanship

g. The results of the technical assessment shall be limited to conditional approval status, pending a supplier’s management system assessment within a twelve-month period

4.1.6. Technical capability assessment results shall be documented in supplier assessment capability report, and signed-off by the relevant SME.

4.2 Supplier evaluation

4.2.1. The assessment/audit results shall be evaluated to determine the approval status of the supplier in accordance with the following rating criteria:

- **Approval** (Total rating is given as 85% to 100%). The supplier meets the requirements of the appropriate codes, standard and or specification. No major deficiencies identified (i.e. criteria is “met”)

- **Conditional Approval** (Total rating is given as 70% to 84%). The supplier has minor deficiencies (i.e. has gaps and partially meets the criteria) against the appropriate part of the codes, standard and/or specification. These deficiencies are likely to affect the product, and as such additional quality assurance oversight of the products, SSCs and services supplied is required. Where the Suppliers gaps (minor deficiencies) are identified and directly impact the product, the gaps shall be supplemented in the following manner:
  - The Supplier shall be called upon to develop an action plan to address these gaps, with due dates for completion commensurate with their quality significance.
  - The level of monitoring will be increased to compensate for the gaps identified, including oversight activities such as witnessing the fabrication and assembly processes, non-destructive examinations, performance tests or final inspections. It may also include verification of the Supplier's design, procurement, calibration and material process and control methods.
  - Surveillance results should provide objective evidence that the Supplier's activities for the identified characteristics were observed and evaluated for acceptance.
  - Additional Eskom interventions shall be annotated on the Quality Control Plan (QCP) and focused on the critical characteristics of the product and the Management System gaps that may directly impact the product quality.

Note 1: *Supplier technical and management system gap analysis may be used as a tool to assist the supplier who has difficulty in meeting the requirements contained in the enquiry.*

Note 2: *The supplier technical and management system gap analysis identifies the gaps of a supplier against the specified requirements contained in the enquiry.*

- **Non-Approval** (Total rating is given as less than 70%). The supplier has major deficiencies (i.e. criteria is "not met") against the appropriate part of the codes, standard/or specification that would result in products, SSCs and services with critical or major deficiencies being supplied even under supervision. The Supplier shall be called upon to develop a plan to address any gaps, prior to reassessment.

4.2.2. Eskom shall notify the supplier of the evaluation results, any gaps or deficiencies identified, and the supplier's approval status via a formal letter.

4.2.3. The effectiveness of the assessment of the suppliers shall be evaluated at intervals commensurate with the importance, complexity and quality of the product via supplier audits and surveillance activities.

4.2.4. If there is a significant change in the organisational structure, policy, management system or the supplier has not supplied against an order / contract for a period of three years and Eskom intends to place an order/contract on the supplier, then the supplier must be re-assessed.

4.2.5. If a supplier fails to maintain the required rating by not taking corrective action when requested, approval status shall be downgraded, and approval shall be withdrawn if the corrective actions are not taken in the time allocated in Eskom's notification.

4.2.6. The restrictions identified in the approval conditions shall be valid for one year and shall be recorded in the assessment report.

4.2.7. The supplier non-approval status data shall be retained in the VQM database for 5 years for history purposes.

4.2.8. Conditionally approved suppliers shall be re-assessed after one year.

4.3 Supplier compliance audit (Post contract award)

4.3.1. After the award of the contract to a supplier, arrangements shall be made to conduct a compliance audit for Level 1 and Level 2 works within 3 months of contract start date.

4.3.2. The compliance audit of the supplier's IMS/QMS shall focus on all products, SSC's and services, based on the supplier's scope of work. As a minimum the following shall be audited:

a. Management System

b. Management Responsibility

c. Resource Management

d. Process Realisation

e. Measurement, Analysis and Improvement

4.3.3. The audit of the nuclear safety culture shall focus on elements attributed to individual commitments:

- Commitment by management:

- A safety culture enhancement program is defined and implemented,
- A policy clearly defining management expectations is communicated to staff,
- Adequate resources are applied to allow success,
- Responsibilities are defined and staff acceptance confirmed,
- People are trained and qualified for the tasks they do,
- Performance is measured/reviewed against agreed to requirements,
- Good performance is rewarded,
- Identified non-conformances are corrected in a manner that will minimize the chances of recurrence,
- A process is established that ensures people have the right information at the
- right time,
- A process is established that ensures the right material, processes, and
- equipment is used and changes are controlled.

- Commitment by staff:

- Conservative decision-making is the norm – a questioning attitude and a rigorous and prudent approach is taken for work activities that could impact the quality of the product,
- Procedures are followed as written but work is stopped when a step is unclear or incorrect and the procedure is clarified or corrected before continuing with the work activity,
- Non-conformances can be identified by staff.

4.4 Supplier process audit

Supplier process audits are an observation of actual work activities required for the scope of work to provide assurance that new technology processes and/ or special processes are controlled and effectively implemented. The process is not intended to be hold points in the manufacturing or product realisation process.

4.4.1. Process audits (e.g. receipt inspection, special processes such as welding /fabrication/ with a particular focus on any critical product realisation aspects), shall be performed as part of the oversight monitoring process. These audits require the participation of relevant selected and authorised technical specialist(s) and SMEs, to determine whether facilities, processes and available resources are adequate and appropriate to fulfil the specified manufacturing requirements. These audits should take place prior to manufacture of the specific product where possible.

4.4.2. Process audits shall be performed for manufacture of new SSC, new technology processes and/ or selected special processes, which shall be qualified before they are applied in operation/production.

4.4.3. The focus of process audits will be on new technology processes and/or special processes where the results are highly dependent on the control of the process or the skill of the operator (or both) and where the specified quality cannot readily be determined by inspection or test of the completed item. The audits shall include processes that produce products that are new and where there is limited experience in their application.

4.4.4. All personnel involved in process audits shall be nominated to do so by the respective line manager.

4.5 Supplier surveillances

4.5.1. Surveillances shall be performed to evaluate specific elements of a supplier's management programme rather than the entire programme, e.g., Design and Development and associated Documentation Control.

4.5.2. Surveillances may be used to follow-up and verify effectiveness of corrective actions completed or when there is doubt with the effectiveness of an aspect of a supplier's management programme, manufacturing capability, or where the scope of supplier is performed under a restriction or condition, e.g., performing welding or non-destructive examination of a specific item where the activities are controlled by approved procedures using suitably qualified personnel and there is no requirement for a comprehensive quality management system.

4.5.3. Surveillances shall be planned, scheduled and be conducted following the audit process defined in this manual except that formal notification and pre- and post-meetings may not be required.

4.6 Supplier audit programme, schedule and planning

4.6.1. A Supplier Audit Programme and Schedule shall be established. Supplier audits are necessary to provide the assurance that the supplier's management system and planned arrangements are being implemented

4.6.2. Unless the supplier performance is not effective and satisfactory, the audit cycle shall be every three (3) years where there is a contract in place.

4.6.3. The audit and assessment plans shall identify the following:

a) The supplier to be audited,
b) Physical location,
c) Audit scope,
d) Audit team,
e) Audit criteria (refer to Audit compliance above),
f) Checklists and/or written procedures,
g) Agenda and activities to be audited.

4.6.4. The supplier to be audited shall submit the following latest documents as applicable:

a) Structure of the organization, including internal and external interfaces (organizational structure with indication of responsibilities).
b) Description of the business processes.
c) Management system manuals, procedures and specifications
d) Management Review status reports (IMS/SC or QMS)

4.6.5. For L1/L2 products, the NNR shall be informed of the supplier audit process. The following information shall be made available to the NNR:

a) The products to be delivered or scope of work to be performed;
b) IMS/QMS manuals, documentation describing facilities and production processes;
c) The contractual quality agreements and the interface arrangements;
d) The product related deliverables already provided by the supplier to Eskom and a list of those scheduled for future delivery shall be submitted.

4.7 Supplier audit execution

4.7.1 Supplier Audits shall be performed in accordance with Appendix 2 of this manual

4.7.2 An internal pre-audit meeting may be held by the Lead Auditor with the audit team to ensure that all information required for the audit is adequate at least one week prior to start of the audit.

4.7.3 The supplier audit commences with an opening meeting in which the roles and responsibilities of each participant are clearly specified. The objective of the opening meeting is to confirm the audit purpose, scope, process and agenda.

4.7.4 The Lead Auditor and Audit Team shall obtain objective evidence during the conduct of audit for all elements selected against contractual specified requirements; specifications, standards and legislation as applicable. Objective evidence obtained shall be examined to the extent necessary to determine the effectiveness of the supplier management system and processes as appropriate.

4.7.5 Where non-conformances to requirements, or other specific concerns, are identified, these shall be raised, documented, and reported to management of the supplier being audited during the audit feedback meetings, and will be included in the audit report.

4.7.6 The audit feedback shall be presented at the exit meeting through the summary of the findings and conclusions.

4.7.7 Supplier audits may be suspended by the Lead Auditor in cases where there is lack of cooperation and commitment from the audited organisation

4.8 Supplier audit reporting

4.8.1 The audit reports shall describe the purpose and scope of the audit and identify the auditors, SMEs and persons contacted, contain an executive summary and the audit results with sufficient detail to enable corrective action to be taken by the supplier.

4.8.2 Audit non-conformances shall be documented as Corrective Action Requests and included in the audit report.

4.8.3 The conclusion in achieving the audit objectives and the audit results shall be presented at the audit exit meeting, and an audit report reflecting this will be issued within 30 working days.

4.8.4 Audit follow-up activities shall be undertaken to verify that all necessary corrective actions have been implemented in accordance with an agreed schedule, and are effective.

4.8.5 The audit report shall be retained as a non-permanent record and kept for a minimum of 5 years.

4.9 Supplier audit response to audit findings

4.9.1 Should there be a request for a Proposed Corrective Action Plan, the audited Supplier shall be required to identify and determine the type and extent of actions required to correct the non-conformance and eliminate the cause.

4.9.2 The audited supplier shall notify Eskom in writing of any action taken or planned, within 30 working days on receipt of the audit report.

4.9.3 The supplier’s response shall be evaluated for acceptance

4.9.4 Each identified audit finding shall be tracked until closed out

4.9.5 Completed supplier corrective action reports shall be retained as non-permanent records and kept for a minimum of 5 years.

5 Records management

All documented information retained to demonstrate objective evidence of the process outcomes for the qualification of suppliers is classified as non-permanent records and is retained for a minimum of 5 years.

The following documented information is retained as records:

a) Supplier Capability Assessment Report

b) Supplier Surveillance Reports

c) Supplier Audit Reports

6 Acceptance

This document has been seen and accepted by:

Name	Designation
Hans Lensink	Senior Manager Nuclear Fuel
Luren Chetty	NPM Quality Manager

7 Revisions

Date	Rev.	Compiler	Remarks
April 2021	3	S Brown	Full Review
September 2017	2	PS Xotyeni	Full Review to accommodate Nuclear New Build Programme
June 2011	1	H Zakarian	Document reworked to provide greater emphasis on the technical/manufacturing capability assessment and audit of suppliers.
January 2011	0	H Zakarian	New document for nuclear supplier qualification process

8 Development Team

The following people were involved in the development of this document:

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9 Acknowledgements

Not Applicable

Appendix 1: Process flow matrix - Qualification of suppliers

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decisión C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	**NUCLEAR ENGINEERING**	**BA/BU USER**	**PROCUREMENT QUALITY ENGINEERING (POE)**	**COMMERCIAL**	**NNR**	NOTES & REFERENCES
Activities	1	2	3	4	5	
SUPPLIER QUALIFICATION						
1. Identify product / service Group for which suppliers are needed.	[S]	**[R]**	[S]			
2. Identify supplier/s to provide service/product	[S]	**[R]**	[S]			
3. Request for a supplier assessment for inclusion on the Approved Suppliers List.	[S]	**[R]**	[S]	[S]	(I)	The Business Area shall complete a Supplier Assessment Application form when there is a need to use a potential supplier that is not registered on the ASL. Refer to 238-126.
4. Ensure there is sufficient and suitable information to approve the supplier.			**[R]**	[S]		Company Information form must be completed by the potential supplier. Refer to 238-122.
5. Arrange for a supplier capability assessment to be conducted	[S]	(S)	**[R]**		(I)	Supplier Capability Assessment Report as per 240-151257110.
6. Arrange to conduct an assessment of the suppliers facility and processes and arrange for technical support	[S]	(S)	**[R]**		(I)	Other technical or SME resources may include appropriate personnel from Projects, Maintenance or Engineering.
7. Perform the supplier assessment.	[S]	(S)	**[R]**		(I)	Assessments can be performed on-site, remotely or as a combination. The use of these methods should be suitably balanced with consideration of associated risks and opportunities.
8. Compile and issue the assessment report.	[S]	(S)	**[R]**		(I)	Supplier Capability Assessment Report must be completed. Refer to 240-151257110.

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decisión C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	**NUCLEAR ENGINEERING**	**BA/BU USER**	**PROCUREMENT QUALITY ENGINEERING (POE)**	**COMMERCIAL**	**NNR**	NOTES & REFERENCES
Activities	1	2	3	4	5	
SUPPLIER QUALIFICATION						
9. Perform a supplier evaluation for provisional inclusion onto the ASL to establish quality level and rating.		[I]	**[R]**	[I]	(I)	Supplier performance monitoring must integrate line user/customer feedback, and engage with suppliers. This includes Business Area user complaints, non-conformances, receipt inspections, discrepancies, etc. In addition this will provide input to the supplier qualification programme and will result in additional audits or surveillances as appropriate to nature and gravity of the feedback, and may result in a downgrading of the supplier's approval rating.
10. Inform the supplier of approval status, taking note of any corrective action required.	(I)	[I]	**[R]**	[S]	(I)	Supplier Approval Notification Letter must be completed. Refer to 240-151257110.
11. Update the (computerised) Approved Supplier List with a detailed description of the scope of supply.	(I)	(I)	**[R]**	(I)	(I)	See requirements in section 4.4 and 4.5 above.
12. Update the supplier's file.			**[R]**			– Evaluation results – Assessment report – Supporting evidence

Appendix 2: Process flow matrix - Supplier Audit

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decision C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	LEAD AUDITOR	PROCUREMENT QUALITY ENGINEERING MANAGER	SUPPLIER	BA / BU MANAGER	DCC	SENIOR MANAGER (NUCLEAR QUALITY)	TECHNICAL SPECIALISTS	NNR	TEAM MEMBERS	NOTES & REFERENCES
ACTIVITIES	1	2	3	4	5	6	7	8	9	
[A] SCHEDULING										
1. Identify the need for supplier audits based on requirements.	[S]	**[R]**								RD 0034; Approved Supplier List; Compliance Audit; Process Audit; Management requests.
2. Establish priority for supplier audits based on available information.	[S]	**[R]**		(S)		(S)				Importance to safety and quality. Project and commercial schedules.
3. Produce supplier audit schedule, issue and update accordingly.	[C]	**[R]**		[C]		[C]		(I)		Supplier's audits to be performed once every three years.
[B] PLANNING										
1. Select the audit team leader.	[S]	**[R]**								
2. Select audit team.	**[R]**	[S]					[I]	(I)	[I]	The team leader may include

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decision C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	LEAD AUDITOR	PROCUREMENT QUALITY ENGINEERING MANAGER	SUPPLIER	BA / BU MANAGER	DCC	SENIOR MANAGER (NUCLEAR QUALITY)	TECHNICAL SPECIALISTS	NNR	TEAM MEMBERS	NOTES & REFERENCES
ACTIVITIES	1	2	3	4	5	6	7	8	9	
3. Identify the audit purpose and scope	**[R]**		(S)	[C]			(S)			
4. If necessary, arrange supplier pre-audit meeting / visit to discuss scope, timetable, queries and any other particular Eskom requirements.	**[R]**	[C]	[I]				(S)	(I)	[S]	The notification letter includes proposed dates, purpose, scope, team members and agenda.
5. Issue notification letter confirming the proposed audit details (agenda/audit plan) at least 14 working days before the start of the audit.	**[R]**	[C]	[I]	[I]	[S]		(I)	(I)	[I]	This may be reduced if the audit is required to be done urgently.
[C] PREPARATION										
1. Arrange a meeting with the audit team to: a) Explain the purpose and scope. (b) Assign specific audit responsibilities	**[R]**						(I)		[I]	This is done in the week preceding the audit. Establish audit plan

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decision C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	LEAD AUDITOR	PROCUREMENT QUALITY ENGINEERING MANAGER	SUPPLIER	BA / BU MANAGER	DCC	SENIOR MANAGER (NUCLEAR QUALITY)	TECHNICAL SPECIALISTS	NNR	TEAM MEMBERS	NOTES & REFERENCES
ACTIVITIES	1	2	3	4	5	6	7	8	9	
2. Determine the appropriate reference documentation and review necessary to adequately audit the supplier	**[R]**						(S)		[S]	
3. Prepare the checklists.							(S)		[R]	Refer to 238-123
4. Approve the checklists.	**[A]**						(S)		[R]	Refer to 238-123
5. Make travel accommodation and access arrangements for all team members, as applicable.	**[R]**	[A]					(S)		[S]	
[D] CONDUCT										
1.Conduct the Opening Meeting.	**[R]**		[I]				(S)		[S]	
2. Conduct the audit using the appropriate methods	**[R]**		[S]				(S)		[S]	
3. Arrange meetings with the audit team to discuss findings	**[R]**						(S)		[S]	
4. Formulate nonconformities and observations and discuss with audit team.	**[A]**		[I]				(C)	(I)	[R]	

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decision C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	LEAD AUDITOR	PROCUREMENT QUALITY ENGINEERING MANAGER	SUPPLIER	BA / BU MANAGER	DCC	SENIOR MANAGER (NUCLEAR QUALITY)	TECHNICAL SPECIALISTS	NNR	TEAM MEMBERS	NOTES & REFERENCES
ACTIVITIES	1	2	3	4	5	6	7	8	9	
5. Categorise nonconformities, audit criteria and overall audit.	**[R]**		[I]				(C)	(C)	[C]	
6. Conduct the Closing Meeting.	**[R]**	(I)	[I]				(I)	(I)	[S]	The principal members and management of the supplier should be present for this meeting.
7. Provide supplier with Non-conformances and Observations at the closing meeting	**[R]**	(I)	[I]				(I)	(I)	(S)	
[E] REPORTING ON THE AUDIT ACTIVITY										
1. Prepare and circulate the draft report for review.	**[R]**						(S)		[S]	
2. Collate and include review comments and finalise report.	**[R]**						(I)		[I]	
3. Issue final report with cover letter.	[C]	**[R]**	[S]	[I]	[S]		(I)	(I)	[S]	Distribute the final report within 30 working days of the closing meeting or last day of the review.

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decision C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	**LEAD AUDITOR**	**PROCUREMENT QUALITY ENGINEERING MANAGER**	**SUPPLIER**	**BA / BU MANAGER**	**DCC**	**SENIOR MANAGER (NUCLEAR QUALITY)**	**TECHNICAL SPECIALISTS**	**NNR**	**TEAM MEMBERS**	**NOTES & REFERENCES**
ACTIVITIES	1	2	3	4	5	6	7	8	9	
[F] ADMINISTRATION OF NONCONFORMITY REPORT AND OBSERVATIONS										
1. Ensure that the relevant databases are updated with the non-conformances and observations.	**[R]**			(I)			(S)		[S]	Update VQM to include final approval status
2. Follow up on observations during the next supplier audit.	**[R]**		[I]				(S)		(S)	
3. Review supplier response to non-conformances.	**[R]**		[S]				(S)		(S)	
4. Is non-conformance disposition acceptable ?	**N/Y**									If Yes: Go to step F6
5. Negotiate acceptable disposition with supplier.	**[R]**		[C]							
6. Ensure that the relevant databases are updated with the required disposition information.	**[R]**									

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decision C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	LEAD AUDITOR	PROCUREMENT QUALITY ENGINEERING MANAGER	SUPPLIER	BA / BU MANAGER	DCC	SENIOR MANAGER (NUCLEAR QUALITY)	TECHNICAL SPECIALISTS	NNR	TEAM MEMBERS	NOTES & REFERENCES
ACTIVITIES	1	2	3	4	5	6	7	8	9	
[G] FOLLOW-UP AND CLOSE OUT OF NON-CONFORMITIES										
1. Schedule, follow up and evaluate completion and effectiveness of agreed Corrective Actions.	**[R]**		[C]				(S)		(S)	
2. Have the corrective actions been effectively implemented?	**Y/N**									If No: Lead auditor requests the supplier to extend the corrective action due date and go back to step **[G] 1.**
3. Close out the corrective action and the relevant databases accordingly.	**[R]**		[I]						(S)	
4. Have the corrective actions been resolved satisfactory	**Y/N**									If Yes: Go to step **[G]** 3 for closure
5. Escalate to Senior Management for resolution	**[R]**		[I]	[I]		[I]	(I)	(I)	[I]	Consider recommending stop work until corrective actions are resolved satisfactorily.

R – Responsible A – Approve F – File • – Outside Matrix Scope Y/N or N/Y – Decision C – Concur I – Informed S – Service [ ] – Mandatory Requirement ( ) – As Appropriate/Required Flow Path: Main Flow Secondary Flow	**LEAD AUDITOR**	**PROCUREMENT QUALITY ENGINEERING MANAGER**	**SUPPLIER**	**BA / BU MANAGER**	**DCC**	**SENIOR MANAGER (NUCLEAR QUALITY)**	**TECHNICAL SPECIALISTS**	**NNR**	**TEAM MEMBERS**	**NOTES & REFERENCES**
ACTIVITIES	1	2	3	4	5	6	7	8	9	
[H] RECORDS										
1. File all supporting evidence in hard copy in files and an electronic version on the relevant databases.	**[R]**	(I)					(S)		(S)	
2. On final closure of all Corrective actions, process the Audit Record Package.	**[R]**	(I)			(S)		(I)		(S)	