

	Strategy	Engineering
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Title: **EAL Electrical Reticulation
System Upgrade Project Tender
Technical Evaluation Strategy &
Criteria**

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1. INTRODUCTION

This document stipulates the tender technical evaluation strategy and criteria for the refurbishment and upgrade of the Eskom Academy of Learning (EAL) Electrical Kiosks, Distribution Boards and Sub-Distribution Boards. The requirements include ensuring compliance to SANS 10142-1 (The Wiring of Premises - Part 1: Low-voltage Installations) and the Electrical Installation Regulation of the OHS Act, (Occupational Health and Safety Act, 1993 (Act 85 of 1993), Low Voltage Cabling, Earthing & Lightning protection, Civil and Structural requirements.

The EAL site comprises of 39 buildings, which require safe and efficient electrical supplies. EAL Main building, Leadership Development Centre (LDC), Finesse building, Workshops, Simulator Building, Administrative centre buildings, Accommodation buildings, Fire Protection Pump Station, and Water Treatment Plant. The Electrical Installation regulations have changed considerably since the time that the EAL site was constructed. As a result, the site does not comply with the SANS and OHS act. The vast majority of the EAL Kiosks require full replacement this is due to their hazardous conditions. The Eskom Academy of Learning Assessment report which is referenced in this specification covers in detail the current condition of the Electrical Network at EAL.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document covers the different aspects that will be evaluated and scored by the multi-disciplinary Technical Evaluation Team (TET) to complete the technical evaluation of the EAL Electrical Reticulation System Upgrade Project, specifically the Electrical Kiosks, Distribution Boards and Sub-Distribution Boards upgrade project enquiry. The team members are listed and appointed in this document along with their responsibilities. The document also describes the acceptable and unacceptable risks and qualifications and/or conditions.

Once the Technical Evaluation Strategy is authorised no changes will be made to the evaluation criteria without appropriate authorisation.

2.1.1 Purpose

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and Technical Evaluation Team (TET) member responsibilities for tender technical evaluation. The technical evaluation strategy serves as basis for the tender technical evaluation process.

2.1.2 Applicability

This document is applicable to the EAL Electrical Reticulation System Upgrade Project, specifically the Electrical Kiosks, Distribution Boards and Sub-Distribution Boards only.

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] 240-48929482: Tender Technical Evaluation Procedure

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- [2] 363-ERE-AABB-D00138-22: Eskom Academy of Learning Kiosks and Distribution Boards Refurbishment Project Functional Specification Rev 1
- [3] EAL Electrical Reticulation System Upgrade Project Functional Specification Rev 2
- [4] 240-143266511: Eskom Real Estate: MWP Electrical Plant Conditional Assessments Report Rev 1
- [5] User Requirements Specification (URS): 240-142922253
- [6] Required Operational Capability Report (ROC): 240-143295868
- [7] Engineering Work Request (EWR): 240-143328529
- [8] 32-1034: Eskom Procurement Policy
- [9] 32-1155: Eskom Standard Project Life Cycle Model Policy363-ERE-AABB-D00138-22: Eskom Academy of Learning Kiosks and Distribution Boards Refurbishment Project - Functional Specification

2.2.2 Informative

- [10] 240-53114002: Engineering Change Management Procedure
- [11] 240-53114026: Project Engineering Change Management Procedure
- [12] 240-53665024: Engineering Quality Manual
- [13] 240-53114186: Document and record Management Procedure
- [14] ISO 9001 Quality Management Systems.

2.3 DEFINITIONS

Definition	Description
Contractor/Tenderer	Refers to the corporation appointed to perform the engineering, procurement, and construction works required for the project.
Employer	Refers to Eskom Holdings State Owned Company
Eskom Plant Engineering	Refers to the Eskom Engineering team who will perform the reviews and provide technical assistance for the work performed by the appointed Contractor.
Specification	The document/s forming part of the contract in which the methods of executing the various items of work to be done is described, as well as the nature and quality of the materials to be supplied and it includes technical schedules and drawings attached thereto as well as all samples and patterns
The Client	The end user will be Eskom who will be represented by Eskom Properties throughout the duration of the Project.

2.3.1 Classification

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary).

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2.4 ABBREVIATIONS

Abbreviation	Description
AC	Alternating Current
DC	Direct current
CoE	Centre of Excellence
CoC	Certificate of Compliance
CV	Curriculum Vitae
DoL	Department of Labour
EAL	Eskom Academy of Learning
ECA	Electrical Contractors Association
ECBSA	Electrical Conformance Board of South Africa
EMaP	Engineering Management Plan
LPS	Low Pressure Services
OEM	Original Equipment Manufacturer
Qty	Quantity
SANS	South African National Standard
SACPCMP	South African Council for the Project and Construction Management Professions
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure

Compiler	The document compiler is responsible for ensuring that this document is up-to-date and that this document is not a duplication of an existing documentation, regarding the Document's objectives and content.
Functional Responsibility	The Functional Responsible Person shall determine if the document is fit for purpose before the document is submitted for authorisation.
Authoriser	The document authoriser is a duly delegated person with the responsibility to review the document for alignment to business strategy, policy, objectives and requirements. He/she shall authorise the release and application of the document.
Lead Discipline Engineers	Provide input to the technical tender evaluation strategy and associated engineering Activities

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2.6 PROCESS FOR MONITORING

The primary process for monitoring will be governed by Design Review Procedure (240-53113685), this entails assuring that the design achieves the requirements set out in this document. Any changes to this document will be performed as per Project Engineering Change Management Procedure (240-53114026).

2.7 RELATED/SUPPORTING DOCUMENTS

Please refer to Section 2.2.

3. TENDER TECHNICAL EVALUATION STRATEGY

3.1 TECHNICAL EVALUATION THRESHOLD

Mandatory Technical Evaluation Criteria (gatekeepers) are 'must meet' criteria. These criteria shall not be weighted or point scored, but shall be assessed on a Yes/No basis as to whether the criteria are met. An assessment of 'No' against any criterion shall technically disqualify the tenderer and shall not be further evaluated against Qualitative Criteria.

Qualitative Technical Evaluation Criteria are weighted evaluation criteria used to identify the highest technically ranked tenderer after determining that all the Mandatory Evaluation Criteria have been met. The Qualitative Evaluation Criteria are weighted to reflect the relevant importance of each criterion. The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%.

The following scoring method will be used:

Table 1: Scoring Method

SCORE	PERCENTAGE (%)	DESCRIPTION
5	100	COMPLIANT <ul style="list-style-type: none">• Meet the technical requirement(s) AND,• No foreseen technical risk(s) in meeting technical requirements
4	80	COMPLIANT WITH ASSOCIATED QUALIFICATIONS <ul style="list-style-type: none">• Meet the technical requirement(s) with,• Acceptable technical risks AND/OR;• Acceptable exceptions AND/OR;• Acceptable conditions
2	40	NON-COMPLIANT <ul style="list-style-type: none">• Does not meet the technical requirement(s) AND/OR• Unacceptable technical risk(s) AND/OR;• Unacceptable exceptions AND/OR;• Unacceptable conditions
0	0	TOTALLY DEFICIENT/NON-RESPONSIVE

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3.2 TET MEMBERS

Table 2: TET Members

TET number	TET Member Name	Designation
TET 1	Andrew Koenane	ERE Senior Engineer Electrical
TET 2	Andre van den Berg	ERE Senior Engineer C&I

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3.3 MANADATORY TECHNICAL EVALUATION CRITERIA

Table 3: Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1.	Occupational Health and Safety Act, 1993 Electrical Installation Regulation Registration 6(4): Registration of Electrical Contractor. The tenderer must be registered with the Electrical Contractors Association (ECA) and/or Electrical Conformance Board of South Africa (ECBSA). The tenderer must possess Wireman's licence. Wiring Code: South African National Standards SANS10142-1. The contractor provides proof of registrations.	EAL Electrical Reticulation System Upgrade Project Functional Specification	Electrical Requirement to ensure all works conform to specific SANS regulations
2.	The detailed design in terms of this <i>Contract</i> is to be executed by a qualified professional for Electrical, who is a member of Engineering Council of South Africa (ECSA) or equivalent international acknowledgement. All work shall be executed and supervised by suitably qualified staff. Only "ACCREDITED PERSONS" shall be permitted to carry out and supervise work. Registered Electrician with Department of Labour (DoL). Registration certificate from the Department of Labour to be provided.	EAL Electrical Reticulation System Upgrade Project Functional Specification	Department of Labour is a legal requirement. Electrical Requirement to ensure all electrical designs, supervisions and installations are conducted by appropriate/qualified personnel

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 4: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1.	Criteria 2: Electrical Works		<Book, paragraph number etc.>	100	
2.1	Electrical Systems Installation Methodology Electrical Kiosks, Distribution & Sub-Distribution Boards preliminary design (High Level Based on information provided) including covers, components, wiring, cabling, circuits and components Lists		NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		20%
2.2	Earthing & Lightning Protection Method Statement, CV Earthing specialist CV's (min 5yrs). The Tenderer provides Methods Statement and the letter of intent from Earthing Specialist with certificate.		NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		10%
2.3	Metering kWh sub metering methodology		NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		10%
2.4	The Tenderer is to provide the following for the Kiosks, Distribution & Sub-Distribution Boards Equipment: Type Test Certificates		NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		10%
2.5	Kiosks, Distribution & Sub-Distribution Boards Circuits Schematics / (PRELIMS) and Equipment Lists		NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		10%
2.6	Kiosks, Distribution & Sub-Distribution Boards GA'S (PRELIMS)		NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		15%

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2.7	Cable Works Methodology Cable Designs (PRELIM CALCULATIONS) Cable Schedules (PRELIMS) Cable Routing Layouts (PRELIMS)	NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		5%
2.8	Company Relevant Experience -Company profile project specific and Key resources experience, CVs of key resources (>5 years' experience)	NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		5%
2.9	Provide a list of suppliers of the electrical equipment	NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		5%
2.10	Warranty and guarantee of the electrical equipment showing the exact period	NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		5%
2.11	Relevant Contactable Project References Three (3) Reference letters from Clients both signed and stamped on work of a similar nature completed in past seven (7) years Reference Letters from Clients to be signed and stamped (Referenced company stamp) by the referenced company. Reference letters for projects should not be older than seven (7) years. The references must be related to Electrical Upgrade Work. The letter should contain contact details of the client, project name, value (Original Value and Final Account Value) and duration (the original contract duration and the actual project execution duration)	NEC Part 3 & EAL Electrical Reticulation System Upgrade Project Functional Specification		5%
			TOTAL: 100	

3.5 TET MEMBER RESPONSIBILITIES

Table 5: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2
1	x	x
2	x	x
Qualitative Criteria Number	TET 1	TET 2
2.1 to 2.11	x	x

X – Mandatory

O - Optional

3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.6.1 Risks

Table 6: Acceptable Technical Risks

Risk	Description
1.	Failure to provide spares lists
2.	Alternative solutions with the same or better performance
3.	Marginally failing to meet the 70% threshold
4.	
5.	
6.	
7.	

Table 7: Unacceptable Technical Risks

Risk	Description
1.	No information on adherence to Eskom Standards provided. No Type test certificates
2.	No compliance to SANS 10142-1 (The Wiring of Premises - Part 1&2: Low-voltage Installations) and The Electrical Installation Regulation of the OHS Act, (Occupational Health and Safety Act, 1993 (Act 85 of 1993).
3.	No method statements
4.	Exclusions of scope specified in the employers' requirements and technical specification
5.	Unclear staff organogram. I.e., the staffing plan is weak not showing clarity in allocation of tasks and responsibilities
6.	Exclusion of a project specific schedule
7.	Exclusions of scope specified in the employers NEC contract

3.6.2 Exceptions / Conditions

Table 8: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	Compliance to Detailed Design
1.	Compliance to SANS 10142-1 (The Wiring of Premises - Part 1&2: Low-voltage Installations) and The Electrical Installation Regulation of the OHS Act, (Occupational Health and Safety Act, 1993 (Act 85 of 1993).
2.	
3.	
4.	
5.	
6.	

Table 9: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	Failure to meet plant performance requirements in terms of reliability and availability
2.	Failure to comply with Detailed Design and Eskom Specifications
3.	Failure to comply with SANS 10142-1 (The Wiring of Premises - Part 1&2: Low-voltage Installations) and The Electrical Installation Regulation of the OHS Act, (Occupational Health and Safety Act, 1993 (Act 85 of 1993).
4.	Existing Cable routes not known
5.	
6.	
7.	

Table 10: Scoring Criteria

Qualitative Technical Evaluation Criteria		Score [0,2,4,5]	Scoring Criteria
1.	Company Relevant Experience -Company profile project specific and Key resources experience, CVs of key resources (>5 years' experience)		<p>The evaluator to confirm if the tenderer has submitted Relevant Company Experience</p> <ol style="list-style-type: none"> 1. Company profile project specific and Key resources experience, CVs of key resources (>5 years' experience): Score 5 2. Company profile project specific and Key resources experience, CVs of key resources (>3 years' experience): Score 4 3. Company profile project specific and Key resources experience, CVs of key resources (>1 years' experience): Score 2 4. Company profile project specific and Key resources experience, CVs of key resources (>0 years' experience): Score 0
2.	<p>Relevant Contactable Project References</p> <p>Three (3) Reference letters from Clients both signed and stamped on work of a similar nature completed in past seven (7) years</p> <p>Reference Letters from Clients to be signed and stamped (Referenced company stamp) by the referenced company.</p> <p>Reference letters for projects should not be older than seven (7) years. The references must be related to Electrical Upgrade Work. The letter should contain contact details of the client, project name, value (Original Value and Final Account Value) and duration (the original contract duration and the actual project execution duration)</p>		<p>The evaluator to confirm if the tenderer has submitted references of the referenced company. The reference letter must be stamped by the previous client. The letter should contain contact details of the client, project name, value (Original Value and Final Account Value) and duration (the original contract duration and the actual project execution duration).</p> <ol style="list-style-type: none"> 1. no acceptable similar projects: Score 0 2. 1 acceptable similar projects: Score 2 3. 2 acceptable similar projects: Score 4 4. 3 or more acceptable similar projects: Score 5
3.	Earthing & Lightning Protection Method Statement, CV		<p>Earthing & Lightning Protection Method Statement, CV</p> <p>Earthing specialist CV's (min 5yrs).</p>



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Qualitative Technical Evaluation Criteria		Score [0,2,4,5]	Scoring Criteria
	Earthing specialist CV's (min 5yrs). The Tenderer provides Methods Statement and the letter of intent from Earthing Specialist with certificate.		1. no letter of intent, method statement and certificate: Score 0 2. valid letter of intent, method statement and certificate: Score 5

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Andrew Koenane	ERE Senior Engineer – Electrical CoE	
Andre van den Berg	ERE Senior Engineer C&I	

5. REVISIONS

Date	Rev.	Compiler	Remarks
December 2020	0.1	SA. Koenane	Draft for review
January 2021	1.0	SA. Koenane	Final document for Authorization
February 2021	1.1	SA. Koenane	Document Revised
March 2021	2.0	SA. Koenane	Final document for Authorization
August 2023	2	SA. Koenane	Re-issue

6. DEVELOPMENT TEAM

- Andrew Koenane

7. ACKNOWLEDGEMENTS

N/A

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