

Title: **TENDER TECHNICAL  
EVALUATION STRATEGY FOR  
PROCUREMENT OF EMERGENCY  
RESTORATION SYSTEM**

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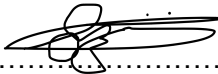
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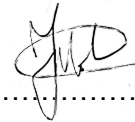
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## 1. Introduction

Eskom Holdings SOC Ltd Telecommunications (the Employer) requires a series of emergency restoration structures to improve repair times during emergencies. The structures are required for the 400 kV network. The strategy will be used to technically evaluate potential suppliers for the supply of 25 new emergency restoration structures for the grids. This will be done in accordance with **LES1419 - Emergency Restoration System Functional Specification**.

## 2. Supporting Clauses

### 2.1 Scope

This document describes how technical evaluation will be conducted for the tender returnable package for the supply of ERS.

#### 2.1.1 Purpose

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and 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 specification shall apply throughout Eskom Holdings Limited, its divisions, subsidiaries and entities wherein Eskom has a controlling interest.

## 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
- [2] ISO 9001 Quality Management Systems
- [3] 32-1034 Eskom Procurement Policy
- [4] LES1419 - Emergency Restoration System Functional Specification

### 2.2.2 Informative

- [5] None

## 2.3 Definitions

### 2.3.1 General

Definition	Description
<b>Contractor</b>	An independent structural inspection authority appointed by ESKOM for the purpose of the intended scope of work.
<b>ESKOM</b>	ESKOM Holdings Limited, its divisions and wholly owned subsidiaries.
<b>Employer</b>	Refers to Eskom Holdings State Owned Company
<b>Tender</b>	A tender refers to an open or closed competitive request for quotations/ prices against a clearly defined scope/ specification.

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### 2.3.2 Disclosure classification

**Controlled disclosure:** controlled disclosure to external parties (either enforced by law, or discretionary).

## 2.4 Abbreviations

Abbreviation	Description
(M)	Mandatory
CAH	Conductor attachment height
DOI	Declaration of interest
ECSA	Engineering Council of South Africa
EDC	ESKOM Documentation Centre
EDWL	Engineering design work lead
ERS	Emergency Restoration System
ESK	ESKOM wide document ID prefix
FEA	Finite Element Analysis
ID	Identification
LDE	Lead discipline engineer
LES	Line Engineering Services
NDA	Non-disclosure agreement
SME	Subject matter expert (within ESKOM)
SOW	Scope of Work
TER	Technical evaluation report
TET	Technical evaluation team

## 2.5 Roles and Responsibilities

- 1) The TET members together with the SME shall be responsible for conducting the evaluations in a controlled environment and compile a report with all the findings from the evaluation. Applicable manager(s) shall authorize the report compiled by the TET members.
- 2) SME shall present a team composition breakdown of the various engineering disciplines required to fairly evaluate the tender after the tender closing date.
- 3) The LDE with the guidance of the EDWL is responsible for arranging suitable dates and venue for conducting the evaluations.

## 2.6 Process for monitoring

A signed TER together with all the relevant commercial documents (NDA and DOI) shall be made available to the relevant parties within the business for safe keeping and audit trail purposes.

## 2.7 Related/Supporting Documents

240-53716769 - Tender Engineering Evaluation Procedure

240-53716726 - Tender Technical Evaluation Scoring Form

240-53716712 - Tender Technical Evaluation Results Form

## 3. Tender Technical Evaluation Strategy

### 3.1 TECHNICAL EVALUATION METHOD

The basic steps for a technical evaluation must be followed as per the Tender Technical Evaluation Procedure [1]

A two stage Technical Evaluation Strategy is set out.

**Stage 1:** Mandatory Technical Evaluation Criteria (gatekeepers) are 'must meet' criteria. These criteria are not weighted or point scored, but are assessed on a Yes/No basis to ascertain whether or not the criteria are met. An assessment of 'No' against any mandatory criterion will disqualify the tenderer and the tenderer will not be evaluated against Qualitative Criteria.

**Stage 2:** Qualitative Technical Evaluation Criteria are weighted evaluation criteria used to identify the highest technically ranked tenderer. The Qualitative Evaluation Criteria are weighted to reflect the relevant importance of each criterion.

The technical criteria and weighting is broken down as follows:

- a) Functional: 100%

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%.

The evaluation of the tender submission will be based on the tenderer's ability to meet the Engineering requirements.

The scoring method will be as follows:

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

The evaluation scores will be weighted as follows:

<b>Engineering (100%)</b>	
Functionality	100%
<b>TOTAL (100%)</b>	
<b>Overall minimum threshold for qualification (70%)</b>	

### 3.2 Technical Evaluation Threshold

The minimum weighted final score (threshold) required for a tender to be considered successful from a technical perspective is **70%**.

A weighted score-card approach is used to evaluate the technical compliance of the tenders against the technical specifications (as outlined within the scope of works). Tenderers need to have a weighted score of 70% overall or more to technically qualify for further evaluation.

The evaluation strategy for Safety, Health and Environmental as well as Quality is not included in this document as it does not form part of the Engineering scope.

The evaluation of the tender submission will be based on the tenderer's ability to meet the Engineering and Planning requirements.

### 3.3 TET Members

TET members will be appointed by the responsible Senior Manager in writing upon the closing date of the tender. Each TET member shall possess knowledge and expertise to evaluate the entire technical section of the tender i.e. must have enough experience in the installation of telecommunications towers from foundations to tower erection. A minimum of two TET members shall be assigned per each tender to ensure independent review and evaluation.

**Table 1: TET Members**

<b>TET number</b>	<b>TET Member Name</b>	<b>Designation</b>
TET 1		
TET 2		
TET 3		
TET 4		

### 3.4 Mandatory Technical Evaluation Criteria

The table below details the mandatory criterion to be applied when evaluating the tender. The tender will NOT be evaluated if any of the items listed on table 2 are not provided.

**Table 2: Mandatory Technical Evaluation Criteria**

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1	Contractor submits technical proposal which contains all items as per ERS functional specification (i.e. technical proposal).	<b><i>LES1419 - Emergency Restoration System Functional Specification.</i></b>	Objective Criteria
2	Contractor submits portfolio of evidence that clearly indicates their qualification, capacity and experience relating to ERS	<b><i>LES1419 - Emergency Restoration System Functional Specification.</i></b>	Objective Criteria
3	Contractor submits a DETAILED activity schedule that details all the activities involved when restoring a 400 kV powerline with the proposed system.	<b><i>LES1419 - Emergency Restoration System Functional Specification.</i></b>	Objective Criteria
4	Contractor submits a DETAILED Manual (including tools) that shows step by step process on how to use the proposed ERS. i.e. from unpacking of the material, structure setting out, foundation, assembly, erection, tower dressing, decommissioning, and the safe re-packing of the material.	<b><i>LES1419 - Emergency Restoration System Functional Specification.</i></b>	Objective Criteria

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5	A letter confirming available software package (compatible with both Windows OS and Android OS) to be used when determining the parameters of the ERS during structure failure. If not yet available, a letter of intent to comply to ESKOM software requirements should be made available	<b><i>LES1419 - Emergency Restoration System Functional Specification.</i></b>	Objective Criteria
6	Submit a detailed training schedule that will be followed when training ESKOM on the proposed ERS (Including the use of the software)	<b><i>LES1419 - Emergency Restoration System Functional Specification.</i></b>	Objective Criteria
7	Submit completed Schedule A, B, C & D of <b><i>LES1419 - Emergency Restoration System Functional Specification.</i></b> Appendix B shall also be fully completed to indicate compliance to ESKOM requirements.  <b><i>(No sections may be left blank.)</i></b>	<b><i>LES1419 - Emergency Restoration System Functional Specification.</i></b>	Objective Criteria

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### 3.5 Qualitative Technical Evaluation Criteria

The table below details the qualitative criterion to be applied when evaluating the tender. The minimum weighted final score (threshold) required for a tender to be considered successful from a technical perspective is **70%**.

**Table 3: Qualitative Technical Evaluation Criteria**

	Qualitative Technical Criteria Description (maximum marks per item= 5)	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)
1.	<p><b>Submit technical/functional details of the proposed ERS in line with the LES1419 - Emergency Restoration System Functional Specification provided.</b></p> <p><b>Compliant = 5</b></p> <ul style="list-style-type: none"> <li>• functional dimensions of <b>ALL</b> components forming ERS</li> <li>• Type of foundation system to be installed per soil type</li> <li>• material list for all components including strength,</li> <li>• electrical components should also be supplied with electrical parameters</li> <li>• technical drawings for all components</li> <li>•</li> </ul> <p><b>Compliant with associated qualifications = 4</b></p> <ul style="list-style-type: none"> <li>• missing not more than <u>20%</u> of items indicated under compliant above.</li> </ul> <p><b>Non-compliant = 2</b></p> <ul style="list-style-type: none"> <li>• missing <u>60%</u> of the items requested under compliant above</li> </ul> <p><b>Totally deficient or non-responsive = 0</b></p> <ul style="list-style-type: none"> <li>• very little of structured consideration to items listed under compliant above</li> </ul>	<p>Technical data sheet A2</p> <p>Technical drawings showing functional dimensions</p>	10

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<p>2.</p>	<p><b>Submit a step by step USER MANUAL for the SAFE installation and decommissioning of proposed ERS in line with the LES1419 - Emergency Restoration System Functional Specification provided.</b></p> <p><b>Compliant = 5</b></p> <ul style="list-style-type: none"> <li>• <i>unpacking of the equipment</i></li> <li>• <i>setting out of foundations</i></li> <li>• <i>foundation installation for different soil types</i></li> <li>• <i>stay wire connections to foundation and tower</i></li> <li>• <i>tower dressing</i></li> <li>• <i>tower climbing</i></li> <li>• <i>accessing of running blocks during stringing</i></li> <li>• <i>decommissioning of tower</i></li> <li>• <i>packing of the equipment after use</i></li> <li>• <i>Detailed inventory/ part list</i></li> </ul> <p><b>Compliant with associated qualifications = 4</b></p> <ul style="list-style-type: none"> <li>• <i>missing not more than 20% of items indicated under compliant above.</i></li> </ul> <p><b>Non-compliant = 2</b></p> <ul style="list-style-type: none"> <li>• <i>missing 60% of the items requested under compliant above</i></li> </ul> <p><b>Totally deficient or non-responsive = 0</b></p> <ul style="list-style-type: none"> <li>• <i>very little of structured consideration to items listed under compliant above</i></li> </ul>	<p>Detailed user manual</p>	<p>20</p>
<p>3. (??)</p>	<p><b>Submit technical characteristics ( tower test results) of the ERS in line with the LES1419 - Emergency Restoration System Functional Specification provided.</b></p> <p><b>Compliant = 5</b></p> <ul style="list-style-type: none"> <li>• <i>Maximum suspension towers per set based on CAH = 18 m (lowest CAH)</i></li> <li>• <i>Maximum strain towers per set based on CAH = 18 m (lowest CAH)</i></li> <li>• <i>Maximum CAH that can be achieved with provided stay lengths and without</i></li> </ul>		<p>25</p>

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	<p><i>having bending issues</i></p> <ul style="list-style-type: none"> <li>• <i>Maximum angle of deviation suspension structure is designed for (if any)</i></li> <li>• <i>Maximum angle strain tower is designed</i></li> <li>• <i>Maximum weight and wind span of Quad Zebra with two 19/2.7 earthwire the tower is designed for (based on highest possible CAH)</i></li> <li>• <i>Maximum load each foundation system can handle before failure (KN)</i></li> <li>• <i>Climbing load limits on incline members and specification</i></li> <li>• <i>Breaking capacity for all hardware components</i></li> </ul> <p><b>Compliant with associated qualifications = 4</b></p> <ul style="list-style-type: none"> <li>• <i>missing not more than 20% of items indicated under compliant above.</i></li> </ul> <p><b>Non-compliant = 2</b></p> <ul style="list-style-type: none"> <li>• <i>missing 60% of the items requested under compliant above</i></li> </ul> <p><b>Totally deficient or non-responsive = 0</b></p> <p>very little of structured consideration to items listed under compliant above</p>		
4.	<p><b>Submit a detailed manufacturing QUALITY plan for the proposed ERS</b></p> <p><b>Compliant = 5</b></p> <ul style="list-style-type: none"> <li>• <i>detailed quality plan for the manufacturing of all the components required for the ERS</i></li> <li>• <i>list of all international standards followed when manufacturing the various components</i></li> </ul> <p><b>Compliant with associated qualifications = 4</b></p> <ul style="list-style-type: none"> <li>• <i>missing not more than 20% of items indicated under compliant above.</i></li> </ul> <p><b>Non-compliant = 2</b></p> <ul style="list-style-type: none"> <li>• <i>missing 60% of the items requested under compliant above</i></li> </ul> <p><b>Totally deficient or non-responsive = 0</b></p>	Quality plan and list of applicable standards	10

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	<i>very little of structured consideration to items listed under compliant above</i>		
5.	<p><b>Submit machinery and tool list to be part of the ERS in line with the LES1419 - Emergency Restoration System Functional Specification provided.</b></p> <p><b>Compliant = 5</b></p> <ul style="list-style-type: none"> <li>• <i>list of all hydraulic equipment and ratings</i></li> <li>• <i>list of all manual tools and sizes</i></li> <li>• <i>list of conductors, earthwire and OPGW clamping tools and sizes</i> <ul style="list-style-type: none"> <li>• <i>detailed service and maintenance schedule for all the machinery and tools (including all load bearing equipment) involved in the construction of the ERS</i></li> </ul> </li> </ul> <p><b>Compliant with associated qualifications = 4</b></p> <ul style="list-style-type: none"> <li>• <i>missing not more than 20% of items indicated under compliant above.</i></li> </ul> <p><b>Non-compliant = 2</b></p> <ul style="list-style-type: none"> <li>• <i>missing 60% of the items requested under compliant above</i></li> </ul> <p><b>Totally deficient or non-responsive = 0</b></p> <ul style="list-style-type: none"> <li>- <i>very little of structured consideration to items listed under compliant above</i></li> </ul>	Tool list	10
6.	<p><b>Submit a detailed storage and transportation of components proposal in line the LES1419 - Emergency Restoration System Functional Specification provided.</b></p> <p><b>Compliant = 5</b></p>	Quality plan and list of applicable standards	10

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	<ul style="list-style-type: none"> <li>• Schematic diagram showing storage parameters</li> <li>• Diagram showing how components are stored</li> <li>• Corrosion mitigation procedure for container and content while not in use</li> <li>• How subcomponents will be transported to tower positions</li> </ul> <p><b>Compliant with associated qualifications = 4</b></p> <ul style="list-style-type: none"> <li>• missing not more than <u>20%</u> of items indicated under compliant above.</li> </ul> <p><b>Non-compliant = 2</b></p> <ul style="list-style-type: none"> <li>• missing <u>60%</u> of the items requested under compliant above</li> </ul> <p><b>Totally deficient or non-responsive = 0</b></p> <ul style="list-style-type: none"> <li>• very little of structured consideration to items listed under compliant above</li> </ul>		
7.	<p><b>Submit a detailed training schedule that will be followed to train ESKOM on ERS in line the LES1419 - Emergency Restoration System Functional Specification provided.</b></p> <p><b>Compliant = 5</b></p> <ul style="list-style-type: none"> <li>• Training for ESKOM personnel on theory part of ERS: boardroom/ classroom</li> <li>• Training for LES designers to use ERS software: boardroom/ classroom</li> <li>• Training for ESKOM personnel on practical part of ERS: unpacking and tower installation</li> <li>• Training for ESKOM personnel on practical part of ERS: tower decommissioning and packing</li> </ul> <p><b>Compliant with associated qualifications = 4</b></p> <ul style="list-style-type: none"> <li>• missing not more than <u>20%</u> of items indicated under compliant above.</li> </ul> <p><b>Non-compliant = 2</b></p> <ul style="list-style-type: none"> <li>• missing <u>60%</u> of the items requested under compliant above</li> </ul> <p><b>Totally deficient or non-responsive = 0</b></p> <p>very little of structured consideration to items listed under compliant above</p>	Training Schedule	15

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### 3.6 TET Member Responsibilities

All the TET members shall have the knowledge and the expertise to evaluate all the qualitative and mandatory criterions.

**Table 4: TET Member Responsibilities**

Mandatory Criteria Number	TET 1	TET 2	TET 3
1			
2			
3			
4			
5			
6			
7			
Qualitative Criteria Number	TET 1	TET 2	TET 3
1			
2			
3			
4			
5			
6			
7			

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### 3.7 Foreseen Acceptable / Unacceptable Qualifications

#### 3.7.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1)	None

Table 6: Unacceptable Technical Risks

Risk	Description
1)	Failure to comply to <b>LES1419 - Emergency Restoration System Functional Specification</b> provided.

#### 3.7.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions

Risk	Description
1)	None

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
1)	Failure to comply to <b>LES1419 - Emergency Restoration System Functional Specification</b> provided.

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#### 4. Authorization

This document has been seen and accepted by:

Name and surname	Designation
Faith Mokhonoana	Senior manager
Sibonelo Nzama	Middle Manager

#### 5. Revisions

Date	Rev	Compiler	Remarks
Nov 2021	1	N Muthadi	First issue

#### 6. Development team

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

- Sibonelo Nzama
- Sifiso Zikhali
- Tiny Salaze
- Lebo Sithole
- Ndangi Muthadi
- Bertie Jacobs

#### 7. Acknowledgements

Not applicable