



Technical Evaluation

National Planning Application & Engineering

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Strategy for Maintenance and
repair of Eskom
Telecommunication Steel
Lattice, Structures and Masts**

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Compiled by
Karabo Taunyane

**Senior Engineer: NPAE
Network Development
Senior Engineer**

Functional Responsibility
Bheki Nala

**Regional Manager: Eastern
Region**

Authorised by
T. Mahlangu

**Manager: NPAE Network
Development Manager**

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1. INTRODUCTION

This technical evaluation document will be used by Eskom Holding (the Employer) to technically evaluate potential contractors for strengthening, repair and or refurbishment for several telecommunications site located throughout South Africa's nine (9) provinces (i.e. Eastern Cape, Western Cape, Northern Cape, North West, Gauteng, Limpopo, Mpumalanga, Free State and KwaZulu Natal).

2. SUPPORTING CLAUSES

2.1 SCOPE

The document provides the tender technical evaluation strategy for *240 – 119380820: structural inspection, analysis strengthening, design and certification of telecommunication tower& mast infrastructure standard*

2.1.1 Purpose

This document outlines the criteria that will be used to evaluate the tenderers that will result from the Request for Proposal. This technical evaluation strategy defines the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and Technical Evaluation Team (TET) member responsibilities for tender technical evaluation. The technical evaluation strategy serves as a basis for the tender technical evaluation process.

2.1.2 Applicability

This document applies to the Eskom Holdings SOC Ltd Transmission Division, Telecommunications Department.

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] 240-138083932: Geotechnical Analysis Specification

2.2.2 Informative

- [5] 240-53113685: Design Review Procedure
- [5] 240-53114026: Project Engineering Change Management Procedure

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2.3 DEFINITIONS

Definition	Description
Tender	A tender refers to an open or closed competitive request for quotations/ prices against a clearly defined scope/ specification.
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
Client	The end user will be Eskom which consists of the various regions.

2.3.1 Classification

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

2.4 ABBREVIATIONS

Abbreviation	Description
CV	Curriculum Vitae
ECSA	Engineering Council of South Africa
FS	Field Services
KZN	Kwa Zulu Natal
LES	Line Engineering Services
NPAE	Network Planning Application and Engineering
OPS	Operations
SOC	State Owned Company
SOW	Scope of Work
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

None

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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 are broken down as follows:

- a) Civil/Structural Engineering: 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	COMPLIANT <ul style="list-style-type: none">• Meet 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 technical requirement(s) with;• Acceptable technical risk(s) AND/OR;• Acceptable exceptions AND/OR;• Acceptable conditions.
2	40	NON-COMPLIANT <ul style="list-style-type: none">• Does not meet technical requirement(s) AND/OR; Unacceptable technical risk(s) AND/OR;• Unacceptable exceptions AND/OR;• Unacceptable conditions.
0	0	TOTALLY DEFICIENT OR NON-RESPONSIVE

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The evaluation scores will be weighted as follows:

Engineering (100%)	
Civil/Structural Engineering	100%
TOTAL (100%)	
Overall minimum threshold for qualification (70%)	

3.2 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered 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

The full-time core technical evaluation team will consist of the following team members (in-line with the Tender Engineering Evaluation Procedure, 240-48929482) in Table 1.

Table 1: Core TET Members

TET number	TET Member Name	Designation
TET 1	Karabo Taunyane	Senior Engineer
TET 2	Mondli Shabalala	Senior Engineer
TET 3	Logan Moodley	Senior KZN Plant Technician

The part time/support team member shall be required to fill in a technical evaluation form, if their names are marked as mandatory (X), next to a criterion. The part time/ support team member may not be required to fill in a technical evaluation form, if their names are marked as optional (O) next to a criterion but shall assist the main members where necessary. These members may be as follows in Table 2.

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Table 2: Optional TET Members

TET number	TET Member Name	Designation
TET 4	Khulani Gasa	Senior Technician
TET 5	Ndangi Muthadi	Senior Engineer
TET 6	Sifiso Zikhali	Chief Engineer

The core members' and the optional members' responsibilities are described in Table 6.

3.4 MANDATORY 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.	Submission of a step-by-step method statement of how the tower strengthening as per SOW provided will be conducted i.e. <ul style="list-style-type: none">- Sand blasting- Member replacement- Tower coating and painting- Welding repair	240 – 119380820 structural inspection, analysis strengthening, design and certification of telecommunication tower& mast infrastructure standard.	Objective Criteria

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3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

During the tender evaluations, Table 4 will be used by the TET members to score each criterion on a scale of 0 to 5.

Table 4: Qualitative Technical Evaluation Criteria

SCORE	PERCENTAGE	DESCRIPTION
5	100	COMPLIANT <ul style="list-style-type: none">• Meet 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 technical requirement(s) with;• Acceptable technical risk(s) AND/OR;• Acceptable exceptions AND/OR• Acceptable conditions.
2	40	NON-COMPLIANT <ul style="list-style-type: none">• Does not meet technical requirement(s) AND/OR;• Unacceptable technical risk(s) AND/OR;• Unacceptable exceptions AND/OR;• Unacceptable conditions.
0	0	TOTALLY DEFICIENT OR NON-RESPONSIVE

Note 1: The scoring table does not allow for scoring of 1 and 3.

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3.5.1 Qualitative Technical Criteria- Scoring Range

Table 5 below describes how the tenders will be evaluated and scored in terms of the scoring range of 0, 2, 4 and 5.

Table 5: Scoring Range for Qualitative Technical Criteria

Civil Engineering				
Criteria No	Qualitative Technical Criteria Description	Criteria Sub Weighting (%)	Range	Score
1.	Submit a method statement detailing how the sand blasting will be executed. List of all equipment to be used together with associated rating, the method that will be used to hoist the equipment to the workers safely, type of sand(grain) to be used, protection of surrounding equipment, preparation of wash down area, quality checks process, possible risks and mitigations. Climbing considerations and rescue plan if applicable to method statement	15	No method statement submitted or method statement is irrelevant to scope of work	0
			Method statement does not contain methodology of approach, missing the equipment list, type of sand (grain), climbing and or rescue plan OR reiterates scope of works.	2
			Method statement includes everything but does not describe how the surrounding equipment will be protected	4
			Method Statement details fully how sand blasting will be executed will be met, list of all equipment to be used together with associated rating, the method that will be used to hoist the equipment to the workers safely, type of sand (grain) to be used, protection of surrounding equipment, preparation of wash down area, quality checks process, possible risks and mitigations. Climbing considerations and rescue plan if applicable to method statement and provides comprehensive methodology of approach.	5

2.	Submit a method statement detailing how the tower members, platforms, cat ladder, antenna brackets, landing platforms and bolts. Provide details how the tower will be secured while replacing the member(s), cat ladder, landing platforms, bolts, antenna brackets. Provide list of all equipment to be used together with associated rating, how the members will be hoisted to desired locations safely, climbing of tower during the entire process, how old bolts and members will be removed and lowered safely to the ground, preparation done on surface after removing the member before installing new one, method of cutting members to size of site and how the galvanizing will be repaired, method used to correctly torque the nuts, method of storing and disposal of replaced members. possible risks and mitigations, Climbing	30	No method statement submitted or method statement is irrelevant to scope of work	0
			Missing not more than 20% of items indicated under full compliant requirements below	2
			Missing not more than 60% of items indicated under full compliant requirements below	4
			Method statement details how the tower members, platforms, cat ladder, antenna brackets, landing platforms and bolts. Provide details how the tower will be secured while replacing the member(s), cat ladder, landing platforms, bolts, antenna brackets. Provide list of all equipment to be used together with associated rating, how the members will be hoisted to desired locations safely, climbing of tower during the entire process, how old bolts and members will be removed and lowered safely to the ground, preparation done on surface after removing the member before installing new one, method of cutting members to size of site and how the galvanizing will be repaired, method used to correctly torque the nuts, method of storing and disposal of replaced members. possible risks and mitigations, Climbing	5
3.	Submit a method statement detailing on how welding will be done and tested on towers. List applicable Non Destructive Testing and provide the welding procedure.	15	No method statement submitted or method statement is irrelevant to scope of work	0
			Method statement submitted but did not provide relevant qualifications required for welding and non-destructive testing	2
			Method statement submitted and includes relevant qualifications required for welding, non-destructive testing and welding procedure but missing tools (welding machine type and rods)	4
			Method statement submitted and includes relevant qualifications required for welding S355JR material,	5

			non-destructive testing and welding procedure and tools to be used.	
4.	Provide a detailed tower coating and painting method statement. List of all equipment, data sheet/s of Contractor's proposed corrosion protection paint/s, cold galvanizing and red & white paint/s to be used together with associated rating, handling of paint (correct PPE), preparation before painting, paint application method, how paint will be hoisted to various sections of the tower, number of coatings to be applied and waiting period, protection of surrounding equipment from paint, possible risks and mitigations, Climbing considerations and rescue plan if applicable to method statement	15	No method statement submitted, or method statement is irrelevant to scope of work.	0
			Method statement submitted but did not provide data sheet/s for proposed paint.	2
			Provided all equipment, data sheets of Contractor's proposed corrosion protection paint, cold galvanizing and red & white paint/s to be used together with associated rating, handling of paint (correct PPE), preparation before painting, paint application method, how paint will be hoisted to various sections of the tower, number of coatings to be applied and waiting period, protection of surrounding equipment from paint, possible risks and mitigations. Climbing considerations and rescue plan not included.	4
			Provided all equipment, data sheets of Contractor's proposed corrosion protection paint, cold galvanizing and red & white paint/s to be used together with associated rating, handling of paint (correct PPE), preparation before painting, paint application method, how paint will be hoisted to various sections of the tower, number of coatings to be applied and waiting period, protection of surrounding equipment from paint, possible risks and mitigations, Climbing considerations and rescue plan if applicable to method statement.	5

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5.	<p>Contractor must display relevant experience in conducting telecommunications or transmission tower repairs.</p> <p>A list of verifiable references must be provided.</p> <p>(At least 3 completed tower refurbishment, construction or repair within the last 5 years).</p>	10	Experience not relevant and/or no information is submitted. Contractor completed 1 project in the last 5 years.	0
			Experience related to sand blasting and painting only, and Contractor completed less than 2 projects in the last 5 years.	2
			<p>Experience relate and covers the following:</p> <ul style="list-style-type: none"> - Member replacement - Sand blasting & painting - Foundation repair <p>With 2 or more than three projects completed in the past 5 years.</p>	4
			<p>Experience relate and covers the following:</p> <ul style="list-style-type: none"> - Member replacement - Sand blasting & painting - Welding repair - Foundation repair - Tower dismantling <p>With three or more than three projects completed in the past 5 years.</p>	5
6.	<p>Provide details of the trained and certified staff and climbers by providing the job profiles. See below how the scores will be awarded (full marks = 5): -</p> <ul style="list-style-type: none"> - Contract manager = 2 - Site agent = 1 - Site foreman = 2 	10	Details provided not relevant or not submitted.	0
			Provided Site Foreman & Climbers details only	2
			Provided details of Climbers, Contracts Manager and Site Agent Details only	4
			Provided details of Climbers, Welder, Contracts Manager and Site Agent Details	5

	The qualifications and experience of the key staff identified in the proposed organizational chart and CVs of these personnel.			
7.	Submit a method statement detailing how the tower will be dismantled when it has been commissioned. . Provide details how the tower will be secured and stabilised while removing the members, cat ladder, landing platforms, bolts, antenna brackets. Provide list of all equipment to be used together with associated rating, how the members will be hoisted to desired locations safely, climbing of tower during the entire process, how old bolts and members will be removed and lowered safely to the ground, method of storing and disposal of all removed materials. possible risks and mitigations. Method statement to also indicate foundation removal and ground rehabilitation after foundation removal, tools to be used are to be highlighted as well as safety consideration when performing exaction work	5	No method statement submitted or method statement is irrelevant to scope of work	0
			Method statement does not contain methodology of approach, missing the equipment list, climbing and or rescue plan OR reiterates scope of works.	2
			Method statement includes everything but does not describe how the surrounding equipment will be protected	4
			Method Statement details fully the: <ul style="list-style-type: none"> - Tower stability considerations. - Removal procedure. - Equipment required for task. - Storage and disposal of removed materials. - Foundation removal and ground rehabilitation procedure. 	5

3.6 TET MEMBER RESPONSIBILITIES

Key: X = Mandatory; O = Optional

Table 6: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4 (O)	TET 5 (O)
1	X	X	X	X	X
2	X	X	X	X	X
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4 (O)	TET 5 (O)
1	X	X	X	X	X
2	X	X	X	X	X
3	X	X	X	X	X
4	X	X	X	X	X
5	X	X	X	X	X
6	X	X	X	X	X

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.7.1 Risks

Table 7: Acceptable Technical Risks

Risk	Description
1.	N/A

Table 8: Unacceptable Technical Risks

Risk	Description
1.	Tenderers technical submission does not address entire scope required
2.	Tenderer does not meet mandatory requirements

3.7.2 Exceptions / Conditions

Table 9: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	N/A

Table 10: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	Tenderers technical submission does not address entire scope required

Risk	Description
2.	N/A

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Unathi Dyantyi	Ops & FS Manager, KZN	
Logan Moodley	Ops & FS Technician, KZN	
Mondli Shabalala	NPAE Regional Engineering Head, KZN	
Mfundiso Hina	Ops & FS Group Manager	
Bheki Nala	NPAE Group Manager	

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5. REVISIONS

Date	Rev.	Compiler	Remarks
01 December 2021	0.1	K. Radebe	Draft document for review
October 2022	1	K Taunyane	Final draft for authorisation

6. DEVELOPMENT TEAM

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

- Koos Radebe
- Karabo Taunyane

7. ACKNOWLEDGEMENTS

- N/A

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