

	<b>Report</b>	<b>Technology</b>
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Title: **TECHNICAL EVALUATION CRITERIA FOR THE SUPPLY OF SUBSTATION AND NETWORK EQUIPMENT LABELS USED WITHIN THE LIMLANGA CLUSTER**

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Area of Applicability: **Engineering**



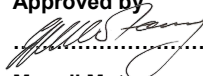
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PCM Reference: **240-44682850 - Provide Engineering During Project Sourcing**

SCOT Study Committee Number/Name: **N/A**

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## CONTROLLED DISCLOSURE

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## **1. INTRODUCTION**

This document establishes the standard technical evaluation criteria to be used when evaluating the submissions by prospective tenderer in response to formal Commercial Enquiries issued for various Eskom distribution systems equipment, hardware and fittings used on networks within Eskom Distribution.

This document details the technical strategy, method of evaluation and the evaluation criteria, which includes the Enquiry returnable necessary to conduct the desktop evaluation and the product sample evaluation where required.

## **2. SUPPORTING CLAUSES**

### **2.1 SCOPE**

The document contains the technical requirements and returnable for tenderers that wish to supply

#### **2.1.1 Purpose**

The aim of the document is to formalize the requirements that should be met by the tenderer of the product requested.

#### **2.1.2 Applicability**

This document shall apply in Eskom Holdings Limited Divisions LimLanga cluster.

### **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] Occupational Health and Safety Act and Regulations (OHS Act);
- [2] 240-114967625, Operating Regulations for High Voltage Systems (ORHVS);
- [3] ISO 9001, 2000 Quality Management Systems;
- [4] D-DT-8012, Marker Cable Route Concrete;
- [5] 0.54/404, Electrical equipment enamelled labels details;
- [6] 240-82737065: MV/LV Pole Numbering;
- [7] DDT-5050: MV/LV Line Labelling;
- [8] 0.54/5577, Electrical equipment enamelled labels text layout;
- [9] 240-120804300, The Standard For The labelling Of Electrical Equipment within Eskom Wires Network.
- [10] 240-75660336, The Standard for Design, Manufacturing and Installation of Eskom Wires Business Equipment Labels;
- [11] 240-89556857, Distribution Group's Specific Representation Of Operating Diagrams In The Field – Station Electric Diagrams;
- [12] 240-62629353, Specification For Panel Labelling Standard
- [13] 240-56362221, Standard For Safety Signs Used In DC Applications
- [14] 240-103414344: Eskom Corporate Identity Manual– Section5: Signage;
- [15] 0.54/404: Electrical equipment enamelled labels details;

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- [16] 0.54/5577: Electrical equipment enamelled labels text layout;  
[17] D-DT-5047: Substation name board – Sizes & Legend layout  
[18] D-DT-5047: Substation primary plant label – Sizes & Legend layout  
[19] D-DT-5047: Substation primary plant label – Vitreous Enamel/Fibreglass manufacturing details  
[20] D-DT-5047: Substation primary plant label – Chromadek / Chromaprep manufacturing details  
[21] D-DT-5050: Sub-transmission line label – HV Line Designation & Structure Identification Label  
[22] D-DT-5050: Sub-transmission line label – HV Line Crossing Label  
[23] D-DT-5050: Low voltage line label – LV Structure Identification Label (Optional to D-DT-3049)  
[24] D-DT\_3202: Sign, Danger;  
[25] Manufacturers manual.

### 2.2.2 Informative

- [1] [32-1034](#) - Eskom Procurement and Supply Chain Management Procedure  
[2] [240-48929482](#) - Tender Engineering Evaluation Procedure  
[3] [240-44682850](#) - Provide Engineering during Project Sourcing

## 2.3 DEFINITIONS

Definition	Description
Approved by	The accountability of the Approver of the document is equivalent to the specified role of Functional Responsible/Owner as identified in 240-53114186 and 32-6 for Documents and Records Management.
Functionality	The capability and capacity of a tenderer to provide goods or services in accordance with specifications as set out in the enquiry documents. Tenders evaluated on functionality must be carried out in accordance with 32-1034.
Procurement	Procurement is the process which creates, manages and fulfils contracts relating to the provision of goods, services and engineering and construction works or disposals, or any combination thereof.
Buyer's Guide	A list or catalogue of SAP numbers and associated material descriptions.
Desktop Evaluation	An evaluation of the documentation included in the tender returnable.
Mandatory Requirements	This are requirements that must be submitted by the tenderer, fail to provide any mandatory tender returnables as clearly specified in the tender enquiry, the tender submission will be deemed non-responsive.
Tenderer	A manufacturer or supplier who wishes to bid on the listed tender.

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Definition	Description
Schedule A	Minimum requirements stipulated by the purchaser i.e. Eskom
Schedule B	Offered by the manufacture in response to purchasers requirements

### 2.3.1 Disclosure Classification

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

## 2.4 ABBREVIATIONS

Abbreviation	Description
ISO	International Standards Organisation
LOU	Limpopo Operating Unit
MOU	Mpumalanga Operating Unit
SANS	South African National Standards
SI	Standards Implementation (Department)

## 2.5 ROLES AND RESPONSIBILITIES

It is the responsibility of the procurement department to use the latest revision of this document before issuing this document to the market inquiry.

## 3. TECHNICAL TENDER REQUIREMENTS

### 3.1 TECHNICAL EVALUATION STRATEGY

The Technical Evaluation Team (as per 240-48929482) will evaluate the submissions.

The submissions shall be subjected to a progressive series of evaluation levels. Passing of each stage is a prerequisite for proceeding to the next evaluation stage.

The evaluation stages are as follows:

- Stage 1 Mandatory Requirements
- Stage 2 Functional Scoring Criteria
- Stage 3 Sample Evaluation Criteria (where applicable)

### 3.2 TENDER REQUIREMENTS

These requirements will be used to measure the tenderers ability to supply Eskom with what is required as stipulated in section 2.1 of this document in compliance with the specific requirements as stated in Eskom's Standards (240-75660336), Eskom's Buyer's Guide Documents, South African National Standards, International Standards listed under the normative references of this document.

**FOR THIS INQUIRY ONLY STAGES 1 AND 2 ARE APPLICABLE.**

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### 3.2.1 Stage 1: Mandatory Requirements

**Table 1: Mandatory Requirements**

Title	Requirement	Non - Compliance	Reference
Technical Schedules A&B	Technical schedules shall be filled, signed and submitted.	Failure to submit a completed and signed technical schedule.	Annex B
Deviation Schedule	The technical deviations sheet shall submit and signed. Where there is no deviation it shall be indicated as such in the deviation schedule.	Failure to submit a completed and signed deviation schedule form.	Annex C
Manufacturer Drawing ,Manual or Data Sheet	Manufacturer Drawing ,Manual or Data Sheet	Failure to submit a drawing and Manual which meets the requirements.	D-DT-5047 D-DT-5050
Type Test Report	Submission type test report. The type test report shall be from accredited test facility. The type test reports shall correspond to the manufacturer drawing.  List critical type test <ul style="list-style-type: none"> <li>Material and dimension verification test</li> </ul>	Failure to submit all listed test reports	Annex A

### 3.2.2 Stage 2: Functional Scoring Criteria

Only tenderers that passed stage 1 shall be evaluated at stage 2. The tenderer needs to obtain a **minimum weighted score of 90** in order to pass this stage.

The following weights shall apply:

**Table 2: Functional Score Distribution**

Description	Weight
Content of the Technical Schedule A&B	50%
Manual/Manufacturer Drawing	40%
Evaluation of Type Test Report	10%

#### 3.2.2.1 Functional Scoring Methodology

The following scoring methodology will be used to assess the tenderers submissions towards allocating scores for the functional criteria indicated in section 3.2.2.2 to 3.2.2.4.

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**Table 3: Functional Scoring Methodology**

<b>Submission Assessment</b>	<b>Score Allocation</b>
Compliant	100%
Compliant with associated qualifications	80%
Non-compliant with minimum risk	20%
Totally deficient or non-responsive or non-compliant	0%

### 3.2.2.2 Contents of the Technical Schedule A&B

<b>Item</b>	<b>Description</b>	<b>Weight</b>	<b>Score allocation as per Table 3.</b>
<b>1.</b>	Product information as per Clause 1 of the technical schedule A&B	10%	Compliant – 10% Compliant with associated qualifications – 8% Non-compliant with minimum risk – 2% Totally deficient or non-responsive or non-compliant – 0%
<b>2.</b>	Technical requirements as per Clause 2. of the technical schedule A&B	40%	Compliant – 40% Compliant with associated qualifications – 32% Non-compliant with minimum risk – 8% Totally deficient or non-responsive or non-compliant – 0%

### 3.2.2.3 Manual/Manufacturer Drawing

<b>Item</b>	<b>Description</b>	<b>Weight</b>	<b>Score allocation as per Table 3.</b>
<b>1.</b>	Detail drawing of a substation Labels	40%	Compliant – 30% Compliant with associated qualifications – 24% Non-compliant with minimum risk – 6% Totally deficient or non-responsive or non-compliant – 0%
<b>2.</b>	Detail drawing of a network equipment Label.	40%	Compliant – 20% Compliant with associated qualifications – 16%

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			Non-compliant with minimum risk – 4% Totally deficient or non-responsive or non-compliant – 0%
<b>5.</b>	Warranty Details and Period	20%	Compliant – 10% Compliant with associated qualifications – 8% Non-compliant with minimum risk – 2% Totally deficient or non-responsive or non-compliant – 0%

**Note:** The final calculation for Manual/Manufacturer Drawing =  $\frac{\text{Total Score}}{100} * 40$

### 3.2.2.4 Evaluation of Type Test Report

Item	Description	Weight	Score allocation
<b>1.</b>	Tensile Type Test report accepted	5%	0 – No 5 - Yes
<b>2.</b>	Material and dimension verification test accepted	5%	0 – No 5 - Yes

## 4. REVISIONS

Date	Rev.	Compiler	Remarks
November 2021	1	DB Shabangu	First issue of Technical evaluation criteria document

## 5. DEVELOPMENT TEAM

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

- DB Shabangu
- Osie Oosthuizen

## 6. ACKNOWLEDGEMENTS

Stefan Terblanche

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ANNEX A: TEST REPORT SUMMARY

Item description: Labels for substation and network equipment				
Test	Report no.	Test facility	Comments	Submitted (Y/N)
Material and dimension verification test				
Tensile Test - Type Test				

NB: Tests shall be conducted by an accredited or competent person

SIGNATURES

Tenderer

Name (Print)

Sign

Date

## ANNEX B: TECHNICAL SCHEDULES A & B

Description	Title
Schedule 1	<b>TECHNICAL SCHEDULES A &amp; B – SUBSTATION AND NETWORK EQUIPMENT LABELLING</b>

1	2	3	4	5
Item	Description	Requirement	Schedule A	Schedule B
<b>1</b>	<b>Product Information</b>			
<b>1.1</b>	<b>• Purchasing details</b>			
1.1.1	Eskom SAP No /Type of Label	Choose one from list above or specify	Label to be specified xxxxxxxxxx	
1.1.2	Manufacturer	Manufacturer name	xxxxxxxxxx	
1.1.3	Manufacturer's Product Code	Specify Code	xxxxxxxxxx	
1.1.4	Manufacturer's Drawing number & Revision number	Specify No and Rev	xxxxxxxxxx	
1.1.5	Guarantees	a. Vinyl cast 7-10 years b. DK gloss clear lacquers (Dulux) for min of 10 years c. Vitreous enamel min 25 years	To be specified	
<b>2</b>	<b>• Legend Requirements</b>		<b>Yes</b>	<b>Yes/No</b>
	General	240-75660336	Clause 3.1	
	Substation Label Requirements	240-75660336	<b>Clause 3.2</b>	
	Substation Name Board	<b>240-75660336</b>	Clause 3.2.1	
	Distribution Equipment labels – Power Plant	<b>240-75660336</b>	Clause 3.2.3	
	Distribution Substation Safety Signs (OHS Act)	<b>240-75660336</b>	Clause 3.2.4	
	Distribution Substation Equipment Labels – Control Plant	<b>240-75660336</b>	Clause 3.2.5	
	Overhead Lines Label Requirements	<b>240-75660336</b>	Clause 3.3	
	Tower labels	240-75660336	Clause 3.3.1	
	Line Designation Labels	240-75660336	Clause 3.3.2	
	Line crossing labels	240-75660336	Clause 3.3.3	
	Colour (Refer to Annex B for colour code references)	240-75660336	Clause 3.3.4	
	MV structure identification labels	240-75660336	Clause 3.4	
	Legend	240-75660336	Clause 3.4.1	
	Substrate	240-75660336	Clause 3.4.2	
	LV structure identification labels	240-75660336	Clause 3.5	
	Legend	240-75660336	Clause 3.5.1	

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	Substrate- Aluminium labels	240-75660336	Clause 3.5.2	
	Substrate – Chromadek / Chromaprep labels	240-75660336	Clause 3.5.3	
	Colour (Refer to Annex B for colour code references)	240-75660336	Clause 3.5.4	
	MV & LV operating equipment labels	240-75660336	Clause 3.6	
	Legend	240-75660336	Clause 3.6.1	
	Substrate – Vitreous enamel labels (horizontal laid out legend only)	240-75660336	Clause 3.6.2	
	Substrate – Fibreglass labels (horizontal laid out legend only)	240-75660336	Clause 3.6.3	
	Substrate – Chromadek / Chromaprep labels (horizontal and vertical laid out legend)	240-75660336	Clause 3.6.4	
	Cable designation labels	240-75660336	Clause 3.7	
	Legend	240-75660336	Clause 3.7.1	
	Substrate	240-75660336	Clause 3.7.2	
	Cable route markers	240-75660336	Clause 3.8	
	Legend	240-75660336	Clause 3.8.1	
	Concrete block	240-75660336	Clause 3.8.2	
	Quality Assurance	240-75660336	Clause 3.9	
	General	240-75660336	Clause 3.9.1	
	Records	240-75660336	Clause 3.9.2	
	Tests	240-75660336	Clause 4	
	Marking, labelling and packaging	240-75660336	Clause 5	
	Identification and marking	240-75660336	Clause 5.1	
	Packaging	240-75660336	Clause 5.2	
	Samples	240-75660336	Clause 6	
	Supply and Delivery	240-75660336	Clause 7	
<b>3</b>	<b>Tables</b>			
	Colours for Substation Name Boards	240-75660336	Table 1	
	Colour requirements for substation equipment and substation phasing discs labels	240-75660336	Table 2	
	Minimum height of legend text	240-75660336	Table 3	
	Thickness of substrate for vitreous enamel labels	240-75660336	Table 4	
	Substation safety signs (OHS Act)	240-75660336	Table 5	
<b>4</b>	<b>Annexures</b>			
	List of drawings	240-75660336	Annex A	
	List of colour references	240-75660336	Annex B	
	List of primary plant labels & sizes	240-75660336	Annex C	
	List of label substrate types	240-75660336	Annex D	
	Substation Name Board	240-75660336	Annex E	
	Example Of Labels Required	240-75660336	Annex F	
	Enamelled Labels Text Layout	240-75660336	Annex G	
	Enamelled Labels Details	240-75660336	Annex H	
	Substation Primary Plant Label – Sizes & Legend Layout	240-75660336	Annex I	
	Substation Primary Plant Label – Sizes & Legend Layout	240-75660336	Annex J	
	Substation Primary Plant Label – Fibreglass Manufacturing Details	240-75660336	Annex K	
	Substation Primary Plant Label – Chromadek / Chromaprep Manufacturing details	240-75660336	Annex L	
	Tower label for Transmission lines - Vertical configuration	240-75660336	Annex M	
	Tower label for Transmission lines - Horizontal configuration	240-75660336	Annex N	
	Line designation labels.	240-75660336	Annex O	

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		Line designation labels - Vitreous Enamel substrate.	240-75660336	Annex P	
		Sub-Transmission Line Label – HV Line Designation & Structure Identification Label	240-75660336	Annex Q	
		Line crossing labels.	240-75660336	Annex R	
		Sub-Transmission Line Label – HV Line Crossing Label	240-75660336	Annex S	
		Low Voltage Line Label – LV Structure Identification Label	240-75660336	Annex T	
<b>5.</b>	•	<b>DRAWINGS</b>			
		As per Annexure A	240-75660336	Yes	
<b>6</b>	•	<b>Test Reports</b>		<b>Required</b>	
		Has the relevant signed mandatory test schedule been submitted.	240-75660336 Clause 4	N/A	
<b>7</b>	•	<b>Product sample</b>		<b>Required</b>	
		A sample may be requested for material and dimension verification.	240-75660336 Clause 6	1 Sample submitted	

**Deviations to any of the stated requirements are to be captured on the Deviation Schedule. The ECSA registered person shall take responsibility of the deviations.**

**SUPPLIER SIGNATURES**

		<b>Name (Print)</b>		<b>Company name</b>	
		<b>Sign</b>		<b>Date</b>	

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**ANNEX C: DEVIATION SCHEDULE**

Any deviations from the stipulated specification shall be listed below with reasons for deviation. In addition, evidence shall be provided that the proposed deviation will at least be more cost-effective than that specified by Eskom. The deviation schedule is to be completed by all tenderers		
Item	Clause	Proposed deviation

**SIGNATURES**

**Supplier** \_\_\_\_\_  
Name (Print) Sign Date

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