

E3460DXKZNOU:

The Manufacture, Test and Supply of Estimated Quantities of Wire Strands for Central East Cluster (KwaZulu Natal and Free State Operating Units) on an as and When Required Basis for a Period of Thirty-Six (36) Months

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- Content presented is a direct extract from the technical criteria associated specification sheets posted on the tender bulletin:
 - Refer to document: 240-171000554 - TECHNICAL EVALUATION CRITERIA FOR ZINC COATED STRANDED STEEL WIRE CONDUCTORS AND STAYS FOR DISTRIBUTION LINES
 - Product requirements are supported by drawings D-DT 3124 and D-DT 7036.
 - However, where necessary, some aspects have been further highlighted/emphasized in this presentation.

- The criteria governs the evaluation of manufacturers and suppliers intending to supply overhead zinc-coated stranded steel wire conductors.
- The evaluation includes a desktop assessment and a factory assessment for qualifying submissions.
- The evaluation applies per SAP number and uses product-specific schedules, test evidence, drawings.
- The technical criteria supplements, but does not replace, the zinc-coated stranded steel wire conductor standard 240-75883116.

- Items covered by the tender evaluation:

No.	Drawing	SAP Number	Description
1.	DDT7036	185944	WIRE STRAND,ST 3x4.00 1100MPA D7036
2.	DDT7036	401341	WIRE STRAND,ST 7x3.35 1100MPA D7036
3.	DDT7036	401339	WIRE STRAND,ST 19x2.65 1100MPA D7036
4.	DDT3124	163344	WIRE STRAND,ST 3x3.35 1100MPA 100m D3124
5.	DDT3124	401337	WIRE STRAND,ST 7x4.00 1100MPA 100m D3124
6.	DDT3124	163343	WIRE STRAND,ST 7x4.0 1100MPA 1500m D3124
7.	DDT3124	163345	WIRE STRAND,ST 3x3.35 1100MPA D3124
8.	DDT7036	595551	WIRE STRAND,ST 7x3.51 1290 MPA

- The evaluation strategy and supporting criteria described in the following sections will be used to evaluate qualifying bids.
- The technical evaluation process will follow a chronological order which will start with **Level 1**, namely **mandatory requirements**.
- If all Level 1 requirements have been satisfied then the evaluation will proceed to **Level 2**, which is the evaluation of the predefined **functional requirements**.
 - All **functional criteria will be scored**, and a **threshold** will be set for Level 2.
 - If the Level 2 threshold is met, then the qualifying bids will be processed further for selection.
- The mandatory evidence (see table 1) and the functional evidence (see table 2) must be submitted by the tender closing date.
- Level 3 will include a Factory Assessment and Verification.

LEVEL 1: MANDATORY CRITERIA AND RETURNABLE



- Table 1 stipulates the Mandatory Criteria and required returnable to be included in the tender submission.
- Level 1 is evaluated per SAP number.
- Failure to provide the stipulated evidence will result in the submission being disqualified and the evaluation will not proceed further.
- There will be no scoring linked to these requirements. A “Yes” or “No” result will be allocated.
- It is required that the tender submission achieve “Yes” allocation for all mandatory requirements listed on the table in order to proceed to the next part of the evaluation.
- If a “No” is allocated to one or more criteria then the submission will be considered non-responsive and will be disqualified.
- Technical Schedules A and B must be completed in full. Blank spaces and non-technical responses such as “N/A” or “Will be submitted later” are not acceptable.
- Deviations must be declared in the Deviation Schedule with supporting detail and motivation.
- If the Mandatory requirements are met, then the evidence will be used for scoring in the Functional Evaluation.

The following evidence (see Table 1) **must be submitted by the tender closing date.**

Failure to satisfy any gatekeeper requirement will result in disqualification from further technical evaluation.

Table 1: Zinc-coated stranded steel wire conductor contract returnable list and gatekeepers

Item	Criteria	Compliance [Yes or No]	Qualification Criteria
1.1	Is the Technical Schedule A&B completed correctly and submitted for each SAP number stated on the enquiry?		Mandatory requirement
1.2	Is the test report matrix completed, relevant and submitted for each SAP number stated on the enquiry?		Mandatory requirement
1.3	Proof submitted that all required Design/Type testing has been performed at an accredited test facility? OR At the factory and witnessed by an accredited person and supporting information supplied?		Mandatory requirement
1.4	Complete and approved (signed) Manufacturer Drawings submitted for each SAP number stated on the enquiry?		Mandatory requirement

1.5	Product meets ESKOM requirements as stipulated in Technical Schedule. No deviations found or deviations identified during detailed evaluation are considered minor i.e., negligible impact on technical and economic performance for the full product life cycle and/or considered correctable before contract award.		Mandatory requirement
1.6	Submission of a letter confirming that all zinc coated stranded steel wire conductors of length exceeding 100 metres will be supplied on returnable hybrid (steel and wood) drums. OR Submission of Hybrid Conductor Drum Information (Drawing)		Mandatory requirement

LEVEL 2: FUNCTIONAL CRITERIA AND RETURNABLE



- The Functional Criteria and required returnable are stated in Table 2.
- Functional evaluation is conducted per SAP number after all Level 1 gatekeepers are passed.
- The returnable will be assessed and scores will be allocated accordingly.
- Negative marking will apply.
- Final scores shall be stated in percentage terms.
- The threshold for these criteria is set at 80%.
- Submissions failing to meet the stipulated threshold will be deemed non-compliant; the submission will be disqualified and not evaluated further.

Table 2: Functional (Scoring) Criteria and Returnable

No	Criteria	Weight [%]	Score
1	Proof of 10 years manufacturing experience	10	10 if > 10 years 5 if > 5 years 2 if < 5 years
2	Completeness and compliance of the evidence stated in the Schedule B column of the Technical A&B Schedules	10	0 – Not compliant 5 – Partially completed 10 – Completed and Fully Compliant
3	Detailed Drawings provided	20	0 – No drawing 10 – Partial itemised drawing 20 – Complete itemised drawing
4	Type tests certificates/reports are signed by an accredited institution/person.	10	0 – Not Acceptable 10 – Acceptable
5	Transport, Handling, Storage and Installation Guidelines provided.	10	0 – No information 5 – Partial Information 10 – Complete Information
6	Ability to perform sample tests and provide reports	5	0 – No information 5 – Acceptable Information

No	Criteria	Weight [%]	Score
7	Production capacity letter provided	5	0 – No information 5 – Acceptable Information
8	Allowance for manufacturing, inspections and witnessing of tests letter provided.	5	0 – No information 5 – Acceptable Information
9	Confirmation that offered product complies fully with IEC/SANS 182-5 requirements.	25	0 – No information 15 – Partial information 25 - Acceptable Information
	Total	100%	

TEMPLATES TO BE USED AS RETURNABLES



- Annex A: Zinc-Coated Stranded Steel Wire Conductor Test Matrix for all listed SAP numbers.
- Annex B: Product-specific Technical Schedules A and B. Complete Schedule B fully for each offered SAP item.
- Deviation Schedule: Declare every deviation from Schedule A and motivate any requested concession.

Annex A – Zinc Coated Stranded Steel Wire Conductor Test Matrix

Test Requirements (According to SANS 182-5; SANS 6282-1; SANS 6283; SANS 935; IEC 60888; IEC 61089)

D-DT	REV	SAP No.	Item Description	Accredited Test organisation/ person	Material grade certification	Dimensional and material verification	Visual Examination test	Resistance test	Short circuit test	Breaking strength test	Elongation at break test	Lapping test	Twisting test	Zinc Coating tests
D-DT7036	5	185944	STEEL WIRE STRAND, ST 3X4.00, 1100MPa D7036											
D-DT7036	5	401339	STEEL WIRE STRAND, ST 19X2.65, 1100MPa D7036											
D-DT7036	5	401341	STEEL WIRE STRAND, ST 7X3.35, 1100MPa D7036											
D-DT7036	5	595551	STEEL WIRE STRAND, 7X3.51, 1290MPa GRS D7036											
D-DT3124	8	163344	WIRE STRAND, ST 3x3.35 1100MPa 100m D3124											
D-DT3124	8	401337	WIRE STRAND, ST 7x4.00 1100MPa 100m D3124											
D-DT3124	8	163345	WIRE STRAND, ST 3x3.35 1100MPa 1500m D3124											
D-DT3124	8	163343	WIRE STRAND, ST 7x4.0 1100MPa 1500m D3124											

TEMPLATES TO BE USED AS RETURNABLES

Item no.	Description	Schedule A: Eskom's Minimum Requirements	Schedule B: Equipment Guarantees and Particulars
1	Eskom standard and specifications referred to: [1] 240-75883116- Zinc-Coated Earth Conductor, Guy and Stay Wire for Distribution Lines [2] SANS 182-5 [3] SANS 61089 [4] IEC 60888		
2	General		
2.1	Steel Wire type	3/4.00	
2.2	Drawing Reference	D-DT 7036	
2.3	SAP No.	185944	
3	Purchasing Details		
3.1	Supplier's name		
3.2	Original Equipment Manufacture (OEM)		
3.3	Manufacture product type designation/code/model/serial number		
3.4	Compliance with IEC 182-5	Test Certificates	
3.5	Required Life Expectancy	30 years	
3.6	Markings	Trademark, Date of manufacture and Mechanical failing Load	
4	Site Operating Temperature		
4.1	Maximum ambient temperature	50 °C	
4.2	Minimum ambient temperature	-10 °C	
4.3	Maximum daily average	35 °C	
4.4	Maximum daily variation	35 °C	
4.5	Altitude above sea level	1800m	
5	TECHNICAL REQUIREMENTS		
5.1	Mechanical Requirements		
5.1.1	Material	Zinc Coated Steel	
5.1.2	Steel grade	1100 MPa	
5.1.3	Strand configuration number/diameter	3/4.00	
5.1.4	Individual strand diameter	4mm	
5.1.5	Number of strands	3	
5.1.6	Nominal overall diameter	8.79mm	
5.1.7	Total steel cross section area	37.70mm ²	
5.1.8	Ultimate Tensile Strength	41.157kN	
5.1.9	Steel wire mass	306kg/km	
5.1.10	Lay direction	Opposite directions of lay whereas the outermost layer shall have a right-hand lay	

5.1.11	Lay ratio	12<->18	
5.1.12	Zinc coating in accordance with specification	Yes	
5.1.13	Zinc coating mass per unit area	Grade I	
5.1.14	Greasing (case 4)	No	
5.1.15	Drum length	1500m	
5.1.16	Drum type	Hybrid Drum	
5.2	Electrical Requirements		
5.2.1	Continuous operating temperature	Ambient temperature	
5.2.2	Maximum temperature under short-circuit condition	≥ 200 °C	
5.2.3	One second Short-Circuit Current Rating Withstand	≥8kA	
5.2.4	Three seconds Short-Circuit Current Rating Withstand	≥4.69kA	
6	Test Requirements (According to SANS 182-5; SANS 6282-1; SANS 6283; SANS 935; IEC 60888; IEC 61089)		
6.1	Test authority (approved person/organisation)	SABS/CSIR	
6.2	Material grade certification	Required	
6.3	Dimensional and material verification	Sample test	
6.4	Visual Examination test	Sample test	
6.5	Resistance test	Sample test	
6.6	Short circuit test	Type test	
6.7	Breaking strength test	Sample test	
6.8	Elongation at break test	Sample test	
6.9	Lapping test	Sample test	
6.10	Twisting test	Sample test	
6.11	Zinc Coating tests	Sample test	
7	Comments and Deviations:		

TEMPLATES TO BE USED AS RETURNABLES

Unique Identifier: KZN15SIF-008	Document Type: Form	Revision: 1	Effective Date: 01 Jan 2016
Deviation Schedule			

Product Description:			
Eskom SAP number:		Product Code (Item code):	
Latest Specification Applicable (i.e. Eskom D-DT # & Rev #):			

This deviation schedule is to be completed by all potential suppliers or manufacturers whether or not a deviation exists from Eskom requirements. All deviations offered which does not conform to the latest specification applicable shall be listed below with reasons for the deviation. Please indicate clearly.		
Clause	Proposed Deviation	Reason

Product Manufacturer:		Deviation Exists:		Yes		No
Supplier to Eskom:		Supplier Representative:				
Supplier Representative Signature:		Date:				

Note: All fields are mandatory and must be completed accordingly.

- The TET will conduct the technical evaluation on all valid bids received.
- The results of the technical evaluation will be consolidated into a technical report that will be issued to Procurement after the evaluation has been concluded.
- The report will state all compliant bids that qualify for further consideration in the procurement process.
- The report will also provide details related to the findings that resulted in bids being deemed non-compliant.
- The report will also include approved concessions or deviations that were considered during the evaluation process.

- A factory assessment and sample inspection shall be conducted by the Eskom Evaluation team to validate the evidence submitted throughout the tender process.
- Assessment areas include manufacturing methods, product conformance, workshop practices, design practices, testing facilities and calibration. Refer to Annex C.
- Type tests must be performed at an accredited laboratory; sample testing evidence and capability are assessed.
- Hybrid drum capability, packaging, markings, handling and long-term storage requirements are reviewed.
- The need for a Factory Assessment and Verification shall be determined by the TET once the functional evaluation has been concluded.
- If it is determined that the Factory Assessment and Verification is not required, then the Bidder's evaluation will be concluded at this point.
- Where a factory assessment is conducted, the tenderer must achieve a minimum score of 80%.
- If the Factory Assessment and Verification identifies a deviation from the Bidder's tender submission that is not rectifiable within an acceptable timeline, then the submission will be disqualified.



Conclusion