Eskom	Report	Technology

Title:	**HOT DIP GALVANISING of RAW STEEL for LIMLANGA PPM MECHANICAL and ANTI-CORROSION DEPARTMENT**	Unique Identifier:	**SI-LIM- 239**
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CONTROLLED DISCLOSURE

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1. INTRODUCTION

PPM Mechanical and Anti-corrosion workshop is responsible to provide and assist the Limlanga business in the availability of steel structures, assembly components, alterations to steelwork, replacement of stolen components and various other business-related steelwork that is manufactured at their workshop. Galvanizing is a cost-effective Anti-corrosion medium to protect the above mentioned against the elements of society / environment / nature / industrial pollution and ensure it will last for its intended life expectancy.

2. SUPPORTING CLAUSES

2.1 Scope

A Cost-effective Commercial process to be followed for the following Scope: Services for Hot dip Galvanizing of Raw Steel in accordance with SANS 121(2011) ISO 1461(2009).

The Hot Dip Galvanizing of Raw Steel – (Further referred to as Galvanizing in this document) will be done at an industrial premises external to Eskom.

2.1.1 Purpose

Purpose of the document is to provide Technical Clarity and guidance on the processes within Limlanga Cluster and the Procurement Technical Requirements for a Service Provider that has the capable, capacity and competency to do Hot Dip Galvanizing (HDG) of Raw Steel in accordance with SANS 121(2011) ISO 1461(2009 on an and as when required basis.

2.1.2 Applicability

The document is applicable within Limlanga Cluster and to be used by the Technical Evaluation Team (TET), Commercial, Safety, Environmental, Quality, SD&L, Contracts Management and Contract Establishment Departments to compile the relative requirements.

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. SANS 121(2011) ISO 1461(2009) - Hot Dip Galvanizing coatings on Fabricated Iron and Steel Articles – Specifications and Test Methods.

2.2.2 Informative

4. 240-75655504 Corrosion Protection Standard for new indoor and outdoor Eskom equipment, components, materials and structures manufactured.

2.3 DEFINITIONS

Definition	Description
Dip	Place an object that is normally in atmospheric conditions under the surface of a liquid for a short set period.
Galvanizer	The owner/manager of the Galvanizing Works that provide Hot Dip Galvanizing of Raw Steel.
Galvanization Works	Plant to Galvanize Raw Steel that have been cleaned, inspected, and then dipped into melted Zinc. Further inspection and repairs are carried out on final product after the dip to ensure compliance to set Standards.
Hot Dip Galvanizing	Formation of a coating of zinc and/or zinc iron alloys on iron and steel products by dipping prepared steel or cast iron in a zinc melt.
Marked	Eskom Unique indelible marking on all items to be send for Galvanizing.
Mean Coating Thickness	Average value of the local thicknesses.
Service Provider	Rendering the required stipulated service/services. This may also be the Galvanizer.
Renovation	Approved Repair to an uncoated portion of the Raw Steel with Zinc products after a galvanized Dip – As per Sans 121.
Eskom	Will be the Purchaser/Customer for the purpose of Hot Dip Galvanizing.

2.3.1 Disclosure Classification

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

2.4 ABBREVIATIONS

Abbreviation	Description
COF	Certificate of Fitness
HDG	Hot Dip Galvanizing
ISO	International Organization for Standardization
SANS	South African National Standards
SI	Standard Implementation
SMS	Specialized Maintenance and Support
SWL	Safe Working Load
SOW	Scope of Work
PPM	Power Plant Maintenance
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

The appointed TET will use this document to evaluate tenderers Technical returnable documents submitted. The TET team will be led by allocated Procurement Officer.

Procurement will compile the strategy together with the CFT members in conjunction with this document.

2.6 PROCESS FOR MONITORING

This Tender Technical Evaluation Criteria document will be revised as and when required due to change in Scope or tender requirement changes.

2.7 RELATED/SUPPORTING DOCUMENTS

As per Normative and Informative documents listed.

3. TENDER TECHNICAL EVALUATION STRATEGY

This section details the methodology to be applied by Eskom Limlanga Cluster in the evaluation of the “Technical” category of tender returnables.

3.1 Technical Evaluation Process

This section describes the process to be followed in the evaluation of service providers that offers to provide their services for hot deep galvanizing of raw steel.

3.1.1 Stage 1: Boardroom Evaluation

This stage will be categorized into two phases, namely Phase 1: Mandatory Requirement and Phase 2: Functional Requirements.

a. **Phase 1:** Mandatory Requirements - Full compliance is required, i.e., The tenderer needs to meet all the requirements to proceed to Phase 2.

b. **Phase 2:** Functional Requirements - The tenderer needs to obtain a minimum threshold score of **Eighty (80%) percent** to proceed to the next stage, i.e., Site Assessment & Verification. Tenderers who fail to meet this minimum threshold will not be evaluated further.

3.1.2 Stage 2: Site Assessment & Verification

The tenderer to obtain a minimum **of eighty (80%) percent** (including test and calibration certificates where applicable) to proceed to the next stage.

Tenderers that meet the minimum threshold of Stage 1 will undergo an on-site verification/evaluation before the final Technical Evaluation report is submitted to Procurement. Bath Galvanizer, Weigh Bridge, Tools & Equipment will be verified during this stage.

If any information provided during the desktop evaluation is found to be fraudulent and/or inaccurate during the verification process, Eskom reserves the right to disqualify the tenderer from the tender or rectify the desktop score accordingly.

3.1.3 Stage 3: Contractual Obligation

Full compliance is required before the tender can be awarded. Non-compliance at any stage shall lead to immediate disqualification.

3.2 TET Members

The evaluation exercise will be performed by the appointed Eskom Technical Evaluation Team (TET). TET members will be formally appointed by Standards Implementation Manager and must be available for the complete evaluation process. A minimum of three (3) TET members must be professionally registered. The Lead Evaluator will be regarded as the PREP (Professional Registered Engineering Practitioner).

No	TET Member	Designation	TET Evaluation Responsibilities	
			Desktop	Site
1	As appointed	SI Engineer/Technologist/Technician (Lead Evaluator)	X	X
2	As appointed	SI Engineer/Technologist/Technician	X	X
3	As appointed	AC Engineer/Technologist/Technician	X	X
4	As appointed	AC Engineer/Technologist/Technician	X	X
5	As appointed	M&O Engineer/Technologist/Technician	X	X
6	As appointed	M&O Engineer/Technologist/Technician	X	X

3.3 Technical Evaluation Report

The final report detailing the entire evaluation process as well as the overall results of those who passed and failed with the corresponding reasons will be compiled and handed over to Procurement. The following should be noted about the report:

a. This report and any actions that are listed or recommended as a result of this assessment, is by no means a confirmation or guarantee that any contract will be entered into by Eskom and the Tenderer.

b. Any liability for the said actions undertaken by the Tenderer is not transferable to Eskom in any way.

c. The TET has no authority or responsibility in the decision taken by Eskom with respect to contracting for a product or service.

d. Any statements, intentions and/or actions expressed by the TET during the assessment and post the assessment has no effect and does not constitute any liability to Eskom with regards to contract placement.

4. TECHNICAL REQUIREMENT

The requirements are divided into four (4) categories namely Mandatory Requirements, Functional Requirements, Site Assessments / Verification and Contractual Requirements and each is described on the sections below.

NB: The technical returnable must be contained in a separate technical file or as a section in a file labelled technical and indexed in a logical manner.

4.1 Mandatory Requirements

These are documents not required for functionality scoring. There will be no scoring linked to these requirements, the evaluator shall indicate with a **Yes / No** whether the requirement is met or not. Once the requirements are satisfied through an evaluation conducted by the evaluator, the technical evaluation for functionality evidence will proceed otherwise the submission will be deemed non-responsive and will not proceed to the next evaluation stage.

Table 1 below lists the mandatories that must be submitted by the tenderer. Please note that if any of the requested documentation is not submitted, the tender application shall be discarded / disqualified without requesting tenderer/s to submit outstanding documentation/s.

Table 1: Mandatory Requirements

Item No:	Requirement/s	Evidence Required	Evidence Notes	Submitted? (Yes/No)
1.	Valid Certification of: SANS 121 (2011) ISO 1461 (2009) Compliance	Quality assurance for the service of Galvanising will be obtained with valid written proof of certification by an accredited Organisation for SANS Requirements. This SANS Compliance Certification need to be made available when procurement is evaluated, and contract is established, and the service provider need to ensure Eskom will have the Authenticated Proof of validity for the duration of the contract.	Certificates must be certified by the commissioner of oaths and not older than six (6) months from tender closing date.	
2.	Bath at Galvaniser	Operational assurance for 6M Galvanising Bath that can accommodate double dip requirements fit for (more than) >3 Years is required.	The assurance can be in any format available in writing from the Galvaniser stipulating but not limited to matters such as, age, life expectancy, condition, minor /major deviation found on inspection, inspection certification etc.	
3.	Valid Weigh Bridge Certificate and Specifications / Limitations	Service Provider needs to provide Valid Weigh Bridge Calibration certification by an approved Authority in accordance with his ISO 9001 Quality Requirements. This Validation needs to be maintained throughout the contracted period, and any updates/recalibration needs to be submitted to Eskom. .	The certification needs to indicate the name of the calibrating authority, the minimum and maximum weights, reading intervals on the scale as well as the calibration intervals required.	

Item No:	Requirement/s	Evidence Required	Evidence Notes	Submitted? (Yes/No)
			Proof in writing for the use of the weigh bridge is required should it not be owned by the service provider	

4.2 Functional Requirements

This will be a desktop evaluation of the functional requirements ONLY. Objective or contractual requirements submitted will not influence the results of Stage 2 evaluation.

The tenderer needs to obtain a minimum threshold score of **eighty (80%) percent** to proceed to the next stage, i.e., Site Verification. The overall scoring methodology for functional requirements is stipulated in the **Table 2** below. The final score will be rounded to the nearest whole number.

Table 2: Scoring Methodology for Functional Requirements

Item	Description	Weight
Functional Requirements		
1	Training Requirements & Qualifications	50%
2	Company Work Related Experience	30%
3	Tool & Equipment	20%

4.2.1 Training Requirements & Qualifications

This section stipulates the Training Requirements & Qualifications requirements for steel galvanizing in Limlanga Cluster. The training requirements have been listed in **Table 3** below with the corresponding scoring methodologies.

Table 3: Training & Accreditations Requirements

No	Requirements	Evidence required	Evidence notes	Min Qty	Max Score
1.	Test Technician	Submit valid authorised letter from Galvanising company.	Authorised letter must affirm that the test technician will use the Galvanising thickness tester in	X1	25

No	Requirements	Evidence required	Evidence notes	Min Qty	Max Score
			accordance with the suppliers ISO 9001 requirements and will be able to issue certificate of compliance. Authorised letter must also be valid for the duration of the contract, dated and signed		
2.	Crane Operator	Submit valid crane operator certificate accredited by training authorities e.g., EWSETA, SETA. Will be accepted.	Certificates must be certified by the commissioner of oaths and not older than six (6) months from tender closing date. Certificate must be valid at tender closing date i.e., not expired.	X1	25
TOTAL POINTS					**50**

The final weighted score for Training will be calculated by the formula below:

$$Final\ Score = \frac{Tenderer\ Score}{Grand\ Total\ Points} \times 50\%$$

Notes: Certified copies submitted must not be older than six (6) months from the tender closing date.

Certificate must be valid at tender closing date.

Scoring Methodology for Training requirements Accreditations	Allocated Score (%)
All certificate requirements submitted and correct.	100
Certificates submitted but not certified.	80
Certificate submitted expired.	40
Certificates were not submitted.	0

4.2.2 Company Work Related Experience Requirements

This section assesses the experience of the service provider to enable Eskom Limlanga Cluster to identify the risk associated with using incompetent / inexperienced service provider for a critical task such as Steel Galvanising. The service provider is expected to demonstrate experience as depicted in **Table 4** below and will subsequently be allocated score.

Table 4: Work Related Experience Requirements

Item No	Requirements	Evidence	Qty	Max. Score
1	Previous Related Steel Galvanising experience.	The tenderers to attach the Completion Certificates / Handover Document/s for each completed project. (The completion certificate must include minimum requirements such as project name, high level scope of work, client name, service provider name, start	X2	30

Item No	Requirements	Evidence	Qty	Max. Score
		date, end date, task/project value and signature). It must also stipulate the completion date. High Level Scope of Work must demonstrate experience in the following: The experience may be as a subcontractor or main service provider. With Job Completion Certificates and the memorandum of understanding between the main service provider and the subcontractor. 15 score per each completed related to steel galvanizing.		
TOTAL				**30**

The final score for Related work experience will be calculated by the **formula** below**:**

$$Final\ Score = \frac{Tenderer\ Score}{Total\ Points} \times 30\%$$

Scoring Methodology for Work experience	Score (%)
Two or more projects covering relevant scope of work completed	30
Two or more projects completed (SoW not indicated)	20
One project (covering all SoW) completed	15
One project completed (SoW not indicated)	10
The company has not completed a single project	0

4.2.3 Tools and Equipment Requirements

This section stipulates requirements for Tools & Equipment for steel galvanizing service providers as listed in **Table 5** with its corresponding scoring methodology.

The evidence required on this table should be provided as per an Eskom template provided in **Annexure A**: Tools & Equipment List / Steel Galvanising list.

Please complete Annexures A to indicate whether you Own / Hire (Column C) tools & equipment and the corresponding quantities (Column D). The list / register must be completed in full and signed by the tenderer.

a. Tools and equipment will be evaluated based on the tools register (Annexure A) submitted by the tenderers and it must be in the Eskom format provided (Annexure A).

b. The tenders shall indicate in the tools register/s if the tools are Owned/ Hired by the company. Where tools are hired the tenderer shall in addition submit an agreement / contract / letter from a bona- fide hiring company. The hiring letter must indicate the specific tools or equipment as well as the tenderer's company name indicating all the tools that are hired for points to be allocated.

c. Calibration and test certificates (where required / necessary) for tools and equipment are NOT

required at tendering stage but shall be required at Tender award stage.

Table 5: Tools & Equipment List Requirements

TOOL LIST / EQUIPMENT EVALUATION AND SCORING CRITERIA (Minimum requirements for Tender Purposes)					
No.	**ITEM**	**DESCRIPTION / PURPOSE**	**REQUIREMENTS (Owned / Hired)**	**Min Qty**	**Max Score**
1	Elcometer	Calibrated Galvanizing Tester to determine the minimum required thickness of the Zinc applied.	Owned	1	15
2	Measuring tape	Measure tools and equipment's	Owned	1	5
TOTAL					

The final weighted score for Tools and Equipment will be calculated by the formula below:

$$Final\ Score = \frac{Tenderer\ Score}{Grand\ Total\ Points} \times 20\%$$

Scoring Methodology for Tools and Equipment	Allocated Score
Eskom provided tools list / register signed and tools are owned by tenderer submitted.	5
Eskom provided tools list / register signed and tools that are hired by tenderer accompanied by an agreement / contract / letter from bona fide hiring company showing the type of tools & equipment to be rented / hired submitted.	4
Eskom provided tools list / register signed but the minimum quantity for a specific tool is not met.	2
Eskom provided tool list / register not signed / completed and / or all required evidence not submitted or nothing submitted.	0

4.3 Practical / Factory Assessment Requirements

The practical / factory requirements will include an on-site visit to the tenderers premises to verify and confirm all requirements submitted in Table 1; Mandatory (Item 2 and 3) and 4.2.3.

Tenderers that meet the minimum threshold of Stage 1 will undergo an on- practical / factory assessment before the final Technical Evaluation report is submitted to Procurement. Practical assessment of Bath Galvaniser, Weigh Bridge, Tools and Equipment will be verified during this stage. Tenderers to obtain a minimum of hundred percent (100%) percent to pass this stage.

If any information provided during the desktop evaluation is found to be fraudulent and / or inaccurate during the verification process, Eskom reserves the right to disqualify the tenderer from the tender or rectify the desktop score accordingly.

4.4 Contractual Requirements

These requirements shall be met prior to tender award as they have been identified as important for the scope of Steel Galvanizing. Although this will not form part of the desktop evaluation, these may be submitted during the tender stage. Compliance to these requirements needs to be met and verified prior to tender awarding stage (See **Table 6**)

There will be no scoring linked to these requirements. Only “Yes” or “No” answers will be allocated, and the required outcome is for the tenderer to have “Yes” for all Technical Contractual Requirements listed to achieve full compliance.

It should be noted that if any of these requirements takes significant time to achieve (if not in place) and submitted to Procurement, it will lead to unnecessary delays in a contract being awarded to those specific service provider/s.

Table 6: Technical Contractual Requirements

No.	Requirements	Evidence Required	Evidence Notes	Yes / No
1	PDE SCOT Website Access	Letter showing username and password	Contractors need to subscribe to the PDE Website to get the latest Eskom standards and drawings. Access outside Eskom - https://scot.eskom.co.za The confirmation of access Letter should be valid at the time it gets submitted.	

ANNEXURE A: TOOLS LIST / REGISTER FOR STEEL GALVINISING

TOOL LIST / EQUIPMENT EVALUATION AND SCORING CRITERIA (Minimum requirements for Tender Purposes)				
A	**B**	**C**	**D**	**E**
No.	**ITEM**	**Requirement (Owned / Hired)**	**Min Qty**	**Max Score**
1	Elecometer			
2	Measuring Tape			
TOTAL				

The final weighted score for Tools and Equipment will be calculated by the formula below:

$$Final\ Score = \frac{Tenderer\ Score}{Grand\ Total\ Points} \times 20\%$$

Scoring Methodology for Tools and Equipment	Allocated Score
Eskom provided tools list / register signed and tools are owned by tenderer submitted.	5
Eskom provided tools list / register signed and tools that are hired by tenderer accompanied by an agreement / contract / letter from bona fide hiring company showing the type of tools & equipment to be rented / hired submitted.	4
Eskom provided tools list / register signed but the minimum quantity for a specific tool is not met.	2
Eskom provided tool list / register not utilized / completed and / or all required evidence not submitted or nothing submitted.	0