

 <b>Eskom</b>	<b>Standard</b>	<b>Technology</b>
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Title: **TECHNICAL EVALUATION  
STANDARD FOR OUTDOOR  
CERAMIC STATION POST  
INSULATORS FOR SYSTEMS  
WITH NOMINAL VOLTAGES UP  
TO 765KV**

Unique Identifier: **240-79707491**

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Area of Applicability: **Engineering**


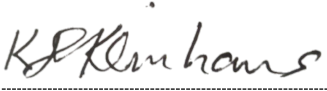

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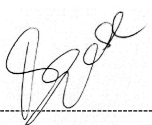
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## **1. Introduction**

The document is aimed at setting the standard technical evaluation criteria to be used when evaluating the tender submissions for outdoor ceramic station post insulators for systems with nominal voltages up to 765 kV, for Eskom. This document contains both the evaluation criteria used for desktop evaluation and factory evaluation and was compiled in accordance with [1].

## **2. Supporting clauses**

### **2.1 Scope**

This document covers the technical evaluation process and criteria for outdoor ceramic station post insulators for systems with nominal voltages up to 765 kV as covered under Eskom standard [2] within Eskom Transmission.

#### **2.1.1 Purpose**

The document addresses the standard documented technical evaluation criteria to be used when evaluating tender submission for outdoor ceramic station post insulators for systems with nominal voltages up to 765 kV, in line with the Eskom Transmission requirement.

#### **2.1.2 Applicability**

This document shall apply throughout Eskom Transmission Division.

## **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] 32-1034- Eskom procurement and supply chain management.
- [2] 240-56030435, Outdoor Ceramic Station Post Insulators for Systems With Nominal Voltages Up To 765kV specification
- [3] ISO 9001 Quality Management Systems.

### **2.2.2 Informative**

- [4] 32-9 Definition of Eskom documents .
- [5] 32-644 Eskom documentation management standard.
- [6] 474-65 Operating manual of the Steering Committee of Technologies (SCOT).
- [7] QM 58 Supplier contract quality requirements specification.

## **2.3 Definitions**

### **2.3.1 General**

Definition	Description
<b>Transmission Assessment Representative(s)</b>	The person(s) appointed by Eskom to perform evaluation of tender submission(s) in line with Eskom Transmission requirements.

Definition	Description
<b>Sliding Scale Points System</b>	Refers to allocating maximum points to the tenderers whose value in question is higher according to the most superior performance amongst others and proportionally deducting points from those tenderers who are lower than that reference value.

### 2.3.2 Disclosure classification

**Public domain:** published in any public forum without constraints (either enforced by law, or discretionary).

## 2.4 Abbreviations

Abbreviation	Description
<b>GA</b>	General Arrangement
<b>GM</b>	General Manager
<b>HV</b>	High Voltage
<b>n/a</b>	Not applicable
<b>OEM</b>	Original Equipment Manufacturer
<b>OU</b>	Operating Unit
<b>PDE</b>	Power Delivery Engineering
<b>PI</b>	Post Insulator
<b>QC</b>	Quality Control

## 2.5 Roles and responsibilities

The responsible specialist must ensure that this document is updated, renewed and current at all times.

## 2.6 Process for monitoring

Not Applicable

## 2.7 Related/supporting documents

Not Applicable

## 3. Technical tender evaluation procedure

The technical evaluation procedure is specific to each item type. The evaluation method has two main parts: desktop and factory assessment, which are related.

### 3.1 Desktop evaluation

This evaluation exercise is performed by the Eskom Transmission evaluating representatives. This part of the evaluation starts when submissions are opened for the first time. It begins at evaluation of the mandatory criteria (Level 1), then proceeds to the scoring – Level 2, and refers to relevant annex for each item required.

The Transmission assessment representatives will go through the details of the returnable submissions that are required and will ensure that Level 1 qualification criteria are met.

Submissions that pass Level 1 will be allocated 80 points within the framework of the Eskom scoring mechanism. Submissions that obtain a NO for any of the level 1 criterion will be scored 0 out of 80. Scoring in Level 2 consists of discretionary criteria and will be assessed out of 100 points and will be rationalized to a score out of 20 points. Thus, the full score attainable will be 100 points if all criteria are met in levels 1 and 2, and the threshold for acceptable tenderers is 80%.

## **3.2 Factory assessment**

This assessment will be done post contract award, upon placement of the first order, if required. The OEM will inform Eskom at least two months in advance of the date upon which the ordered units will be completed and ready for routine testing. Eskom will then send its representatives to do the factory evaluation and to witness the routine testing of the ordered units. Eskom reserves the right to waive the factory assessment where Eskom has assessed the OEM factory before.

This assessment is performed on the bases of assessing the supplier's capability with respect to a specific product or service.

If found not compliant, no purchase orders will be placed and if issues are not resolved within a specific period, Transmission then reserves the right to terminate the contract.

Any actions undertaken by the supplier as a consequence of this report is for the supplier's account. Any liability for the said actions undertaken by the supplier is not transferrable to Eskom in any way.

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

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

### **3.2.1 Scope**

Eskom will do factory assessments to assess the ability and readiness of the supplier for supplying/manufacturing of station post insulators for Eskom should the need arise.

Eskom assessment representative(s) will arrange a visit to the factory that has qualified for factory evaluation. At the factory, the Eskom assessment representative(s) will conduct the assessment through the use of checklists. The checklists are used to verify capability of the factory to supply the required product and compliance to the equipment specification and tender submission documents. At the end of this exercise, the Eskom assessment representative(s) will list all the deviations on the evaluation document. The representative will conduct formal discussions of the deviations in line with Eskom's requirements. Herein, the Tenderer and/or their OEM shall indicate whether they agree or disagree to meet Eskom requirements upon contract award. At the end, Eskom, the Tenderer and OEM representatives will sign the assessment document which continues to be used for concluding the Technical Evaluation report. Where the Tenderer and OEM agreed to meet Eskom requirements, all of these are documented for verification afterwards. This document also details the procedure to be followed when conducting a factory assessment for station post insulators.

### **3.2.2 Purpose**

Assessments are performed as part of the standard practice within Eskom to determine whether a supplier has the capability and capacity to manufacture station post insulators, from a business, technical and quality perspective. The assessment also confirms the supplier's compliance to the equipment specification and tender submission documents. This document is intended to formalise the factory assessment procedure followed for station post insulators.

### **3.2.3 Confidentiality**

All information reviewed, observed, recorded during and reported as a result of this assessment will be treated as, and remains highly confidential. The procurement team and the supplier team will be the only parties included in the distribution list.

### 3.2.4 Assessment Methodology

The assessment will follow a documented supplier capability and capacity assessment criteria as shown in Annex B. These criteria are intended to assess the technical capabilities of the supplier and the product offered for tender to ensure it meets the tender requirements. During the assessment the following areas are evaluated in detail:

- Manufacturing Methods
- Workshop Practices
- Design Practices and Application
- Testing Facility and Practices
- Raw material Procurement, Storage and Sub-contractor practices
- Site and Other Services
- Factory Performance (incl. on-time delivery and factory failure rate)

The factory will be scored according to the criteria outlined in the table below. The total score is out of 270, and the threshold for acceptable tenderers is 80%, or 216. The full criterion is listed in Annex B.

0	Total non-compliance to the agreed requirements
2	Major deviation to the agreed requirements
4	Minor deviation to the agreed requirements
6	No deviation to the agreed requirements / fully compliant

## 4. Authorization

This document has been seen and accepted by:

Name and surname	Designation
Bheki Ntshangase	Senior Manager- SE&D
Kevin Kleinhans	Chief Engineer- SE&D
Fernando Witbooi	Chief Technologist – SE&D

## 5. Revisions

Date	Rev	Compiler	Remarks
Oct 2023	5	K Kleinhans	Amendment to the Factory evaluation. Refer to bypass letter.
March 2020	4	K Kleinhans	Revised to adapt scoring criteria, and input acceptance levels for factory evaluations
Oct 2015	3	T Govender	Revised to incorporate changes in specification
June 2014	2	T Govender	Revised to incorporate and comply with latest procurement policy
May 2014	1	T Govender	New document required for latest specification

## **6. Development team**

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

- K Kleinhans

## **7. Acknowledgements**

The Insulation Care Group members are acknowledged for their input in compiling this document.

## Annex A – Technical evaluation criteria for initial evaluation- All Items

**Table A.1: Technical evaluation criteria for desktop exercise – All Items**

Specification Referred to	[2] 240-56030435, Outdoor Ceramic Station Post Insulators for Systems With Nominal Voltages Up To 765kV specification		
Voltage Class Referred to	All items, Annex B-S in [2]		
Level 1- Basic Compliance: Tender Deliverables and Mandatory Technical Requirements			
Activity	Clause in [2]	Compliance	Qualification Criteria
1.1.1 Is completed Schedule B submitted and correct?	Relevant technical schedule for each specific item must be completed.	Yes/No	Level 1
1.1.2 Are detailed Drawings, Outlines and requested documentation submitted together with drawing summary sheet (Annex U) and compliant?	3.1.6; Annex U per item	Yes/No	Level 1
1.1.3 Are all required summary sheets (Annex T), type and special test certificates and reports submitted and compliant?	3.2, 3.2.2, Annex T per item	Yes/No	Level 1
1.1.4 Has all general requirements been met i.e., material type, withstand levels, dimensional characteristics, shed profile, fixing arrangements and finish?	Annex B to S, per item	Yes/No	Level 1
1.1.5 Is all information supplied in English?	3.1.1	Yes/No	Level 1
2. Level 2 – Scoring/Rating (only submission that passes Level 1 gatekeepers)			
2.1 Level 2 task/measure – technical schedules – weight 40 points			
Activity	Clause in [2]	Weight	Score
2.1.1 S/P ratio	3.1.9.2	10	Sliding scale 0/10 if = 0.65 , 10 /10 if ≥1.0
2.1.2 Confirmation on mechanical strength of fixing arrangement and supplied fasteners	3.1.11	10	0 – Not Present 5 – Acceptable Information 10– Detailed Information
2.1.3 Customer reference list and confirmation of local technical support	3.1.2	10	0 – Not Present 5 – Acceptable Information 10– Detailed Information



2.1.4 Supplied Type tests certificates	3.2.5	10	10 if tests < 5 years 8 if tests = 6 years 6 if tests = 7 years 4 if tests = 8 years 2 if tests = 10 years 0 if tests > 10 years
<b>2.2 Level 2 task/measure – drawings – weight 30 points</b>			
<b>Activity</b>	<b>Clause in [2]</b>	<b>Weight</b>	<b>Score</b>
2.2.1 Drawing number	3.1.6	3	0 – Not Present 3 – Present
2.2.2 Revision number	3.1.6	2	0 – Not Present 2 – Present
2.2.3 Dimensions	3.1.6	3	0 – Not Present 3 – Present
2.2.4 Detailed description provided in 'Title Block'.	3.1.6	2	0 – Not Present 2 – Present
2.2.5 Approved and date drawings	3.1.6	2	0 – Not Present 2 – Present
2.2.6 Complete legend	3.1.6	2	0 – Not Present 2 – Present
2.2.7 End flange details	3.1.6	3	0 – Not Present 3 – Present
2.2.8 Mass in kilograms	3.1.6	2	0 – Not Present 2 – Present
2.2.9 Mechanical and electrical Properties	3.1.6	3	0 – Not Present 3 – Present
2.2.10 External insulation details	3.1.6	3	0 – Not Present 3 – Present
2.2.11 Drawing fields for Eskom order No., Eskom Contract No., Eskom Stock (SAP) No., Eskom Drawing No.	3.1.6	2	0 – Not Present 2 – Present
2.2.12 Dimensions and tolerance of all fasteners and associated components supplied	3.1.6	3	0 – Not Present 3 – Nameplate information as specified - values are based on test results

<b>2.3 Level 2 task/measure – installation information and manuals and requested information (operation and maintenance) – weight 30 points</b>			
<b>Activity</b>	<b>Clause in [2]</b>	<b>Weight</b>	<b>Score</b>
2.3.1 Transport and Packaging information (including that or fasteners and associated components)	3.1.14, 3.1.11	10	0 – Not Present 5 – Acceptable Information 10 – Detailed Information
2.3.2 Installation information	3.1.6	10	0 – Not Present 5 – Acceptable Information 10 – Detailed Information
2.3.3 Information on local technical support and level of support offered	3.1.2	10	0 – Not Present 5 – Acceptable Information 10 – Detailed Information

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**Annex B – Factory evaluation criteria**

No:	Technical Questions	Score	Criteria	Evidence and comments
<b>1</b>	<b>Work Systems</b>	<b>30</b>		
1.1	Works procedures and instructions: a. What work procedures are in place? b. What ISO standards are used		<i>If both in place and documents are traceable then = 6 Both in place, but non-traceable documents = 4 If either 'a' or 'b' are omitted = 2 None = 0</i>	
1.2	Continuous improvement and International compliance: Do they comply with IEC 60099 and other associated IEC/IEEE specs fully, and are persons of the OEM on the latest CIGRE working groups regarding Post Insulators?		<i>They comply with IEC 60273 and other associated IEC/IEEE specs fully, and are on latest CIGRE working groups regarding Post Insulators = 6 They comply fully to IEC60273 and other associated IEC/IEEE specs fully = 4 Partial compliance to IEC60273 and other associated IEC/IEEE specs = 2 Non-compliance to IEC/IEEE specs = 0</i>	
1.3	Quality control plans and systems (PQPs) (choose one of each)		<i>QCP's and PQP's in place and traceable = 6 QCP's and PQP's in place = 4 Some QCP's and PQP's in place = 2 None in place = 0</i>	
1.4	Inspections, audits and reviews (choose one of each)		<i>All inspections, audits and reviews in place, up to date and traceable = 6 All inspections, audits and reviews in place = 4 Some inspections, audits and reviews in place = 2 None in place = 0</i>	
1.5	Staff training and accreditation systems and controls What training do they offer their staff? Who are they accredited with? (choose minimum 2 random staff members)		<i>Staff trained and accredited, and traceable = 6 Staff trained and traceable = 4 Staff trained = 2 Staff not trained = 0</i>	

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No:	Technical Questions	Score	Criteria	Evidence and comments
<b>2</b>	<b>Operation – Manufacturing methods</b>	<b>78</b>		
2.1	Which base material is used, and how is it checked?		<i>All base material quality checked, handled, stored and catalogued correctly, and is traceable = 6</i> <i>All base material quality checked, stored and catalogued correctly = 4</i> <i>Some of the above checks not done = 2</i> <i>No tracing of base material, or stored incorrectly = 0</i>	
2.2	Are porcelain manufactured in-house? If not, how is the intake and use of porcelain handled? What are the checks done on this porcelain?		<i>All porcelain quality checked, handled, stored and catalogued correctly, and is traceable = 6</i> <i>All porcelain quality checked, stored and catalogued correctly = 4</i> <i>Some of the above checks not done = 2</i> <i>No tracing of porcelain, or stored incorrectly = 0</i>	
2.3	If corona rings used, and how is it checked?		<i>All corona rings quality checked, handled, stored and catalogued correctly, and is traceable = 6</i> <i>All corona rings quality checked, stored and catalogued correctly = 4</i> <i>Some of the above checks not done = 2</i> <i>No tracing of corona rings, or stored incorrectly = 0</i>	
2.4	Which metallic parts are used, and how is it checked?		<i>All metallic parts quality checked, handled, stored and catalogued correctly, and is traceable = 6</i> <i>All metallic parts quality checked, stored and catalogued correctly = 4</i> <i>Some of the above checks not done = 2</i> <i>No tracing of metallic parts, or stored incorrectly = 0</i>	
2.5	Is the test bay area closed off?		<i>Yes = 6</i> <i>Partially closed off = 3</i> <i>No = 0</i>	

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No:	Technical Questions	Score	Criteria	Evidence and comments
2.6	What is the quality and availability of test reports?		<i>Test certificate has all relevant data, easy to read and understand, signed off by authorised personnel and is traceable = 6</i> <i>Test certificate has all relevant data, easy to read and understand, signed off by authorised personnel = 4</i> <i>Test certificate has relevant data, not signed off by authorised personnel = 2</i> <i>Test certificates do not display all relevant criteria = 0</i>	
2.7	Clean conditions in workshop		<i>Clean-room environment (dust-free, static-free) = 6</i> <i>Workshop is clean overall = 4</i> <i>Workshop is fairly clean = 2</i> <i>Workshop not clean = 0</i>	
2.8	What is the supplier's estimate of current capacity limit?		<i>Can meet on time delivery for our unit = 6</i> <i>Some potential delays for the production of our unit = 3</i> <i>Major delays anticipated = 0</i>	
2.9	Are there any bottlenecks in the manufacturing process? (e.g., test bay, moulding, baking, etc.)		<i>Can meet on time delivery for our units = 6</i> <i>Some potential delays for the production of our unit = 3</i> <i>Major delays anticipated = 0</i>	
2.10	Does the supplier intend to make use of a substitute factory if capacity increase is required? If so, has it been evaluated for this project?		<i>Yes, fully accredited = 6</i> <i>Yes, not accredited yet = 0</i>	
2.11	How has the supplier expedited orders if required?		<i>Adequate process to fast-track orders, and is traceable = 6</i> <i>Adequate process to fast-track orders = 4</i> <i>Process exists, but needs improvement = 2</i> <i>No process = 0</i>	

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No:	Technical Questions	Score	Criteria	Evidence and comments
2.12	Plant Capacity: can the factory provide all the equipment, and to Eskom's specification		<i>Aligns completely to Eskom specifications = 6</i> <i>Partially aligns to Eskom specifications = 3</i> <i>Doesn't align to Eskom specifications = 0</i>	
2.13	What are factory failure rates for the last 5 years and how is daily limit managed if exceeded?		<i>Less than 1%, and traceable = 6</i> <i>Less than 1% = 4</i> <i>Between 1-2% = 2</i> <i>Greater than 2% = 0</i>	
<b>3</b>	<b>Technical Infrastructure</b>	<b>18</b>		
3.1	What manufacturing equipment/tools does the supplier have, who manufactures this equipment, what is the capacity of this equipment?		<i>Equipment/tools bought from accredited and known manufacturers, and traceable = 6</i> <i>Equipment/tools bought from accredited and known manufacturers = 4</i> <i>Some equipment/tools bought from accredited and known manufacturers = 2</i> <i>Equipment/tools bought from unrecognised manufacturers = 0</i>	
3.2	How are supervisors and workers trained on handling equipment?		<i>Certificate or accreditation, and traceable = 6</i> <i>Certificate or accreditation = 4</i> <i>Some workers accredited, certified = 2</i> <i>No certificate or accreditation = 0</i>	
3.3	What is the maintenance operating model for the production line?		<i>Complete maintenance records, and traceable = 6</i> <i>Complete maintenance records = 4</i> <i>Incomplete maintenance records, procedures = 2</i> <i>Limited/no maintenance records = 0</i>	

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No:	Technical Questions	Score	Criteria	Evidence and comments
<b>4</b>	<b>Design Practices and Application</b>	<b>72</b>		
4.1	Please describe your design criteria basis and guidelines – Electrical, Mechanical		<i>Clear tools and software for designs = 6</i> <i>Have tools (software) available, however no clear philosophy on how tools are employed = 4</i> <i>Have tools only = 2</i> <i>No philosophy = 0</i>	
4.2	What is the design team's composition/structure, numbers, experience levels?		<i>Chief engineer has &gt;10 years' experience in design, CVs, certifications are current = 6</i> <i>Chief engineer has 5-10 experience in design, CVs and/or certifications are not current = 3</i> <i>No CVs, certifications = 0</i>	
4.3	Please provide design process flowchart / systems for similar products		<i>Up to date flowchart = 6</i> <i>Flowchart not current = 3</i> <i>No flowchart = 0</i>	
4.4	How do you ensure internal design verification/ validation as part of your design process?		<i>Authorised person checks and signs off design = 6</i> <i>No checks, self-release = 0</i>	
4.5	What is the process to deal with design change requests (concession), internal or external?		<i>Formalised design review process that includes customer, internal personnel and design expert, plan and schedule = 6</i> <i>No formalised design review process = 0</i>	
4.6	Following final design approval, how is the final design linked to the manufacturing process?		<i>Approved inspection and test plans includes hold points to verify execution of design = 6</i> <i>No monitoring system = 0</i>	

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No:	Technical Questions	Score	Criteria	Evidence and comments
4.7	What engineering tools are used for the relevant designs? What is the staff's level of experience with these tools?		<i>Tools are certified and up to date, calibration, software updates – must be of the latest version, user accreditation must be current = 6</i> <i>Some certification of tools, software, user has accreditation but not of latest value = 3</i> <i>No certified tools = 0</i>	
4.8	How do you ensure continuous development of staff with respect to design systems and philosophy? (i.e., software and manually)		<i>Training programme for all involved staff, individual development plans for staff, adequate and up to date learning = 6</i> <i>Training programme exists, process not adequate = 3</i> <i>No continuous development = 0</i>	
4.9	How does the system flag excursions outside internal design rules?		<i>Flags excursions, calibration is current = 6</i> <i>Flags some but not all = 3</i> <i>No excursions flagged, not calibrated properly = 0</i>	
4.10	As design technology backup, who are your technology partners?		<i>Partners aligned with Eskom-approved partners = 6</i> <i>Partners not aligned with Eskom-approved partners = 3</i> <i>None = 0</i>	
4.11	How do you support/co-ordinate the use of academic/research institutions for technology support, if any?		<i>Clear functional role and responsibilities, collaboration with universities (i.e., sponsorship of students) = 6</i> <i>No = 0</i>	
4.12	How do you support/co-ordinate external partners for component manufacturers, if any?		<i>Clear functional role and responsibilities, collaboration with manufacturers = 6</i> <i>No = 0</i>	

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No:	Technical Questions	Score	Criteria	Evidence and comments
<b>5</b>	<b>Testing Facility and Practices</b>	<b>48</b>		
5.1	Please provide proof of calibration of all test equipment		<i>Calibrated within date, done by accredited person, and traceable = 6</i> <i>Calibrated within date, done by accredited person = 4</i> <i>Calibrated within date = 2</i> <i>Not calibrated = 0</i>	
5.2	Test capabilities		<i>Fully capable of performing type, acceptance and routing tests, and is traceable = 6</i> <i>Fully capable of performing acceptance and routing tests, and is traceable = 4</i> <i>Capable of performing acceptance and routing tests = 2</i> <i>Cannot perform any tests = 0</i>	
5.3	Electrical Characteristics		<i>Within IEC60273, and traceable = 6</i> <i>Not within IEC60273 = 0</i>	
5.4	Mechanical Characteristics		<i>Within IEC60273, and traceable = 6</i> <i>Not within IEC60273 = 0</i>	
5.5	Dimensional Characteristics		<i>Within IEC60273, and traceable = 6</i> <i>Not within IEC60273 = 0</i>	
5.6	Fixing arrangements		<i>Within IEC60273, and traceable (or N/A) = 6</i> <i>Not within IEC60273 = 0</i>	
5.7	RIV tests		<i>Within IEC60437, and traceable = 6</i> <i>Not within IEC60437 = 0</i>	

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**TECHNICAL EVALUATION STANDARD FOR OUTDOOR CERAMIC STATION POST  
INSULATORS FOR SYSTEMS WITH NOMINAL VOLTAGES UP TO 765KV**
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No:	Technical Questions	Score	Criteria	Evidence and comments
5.8	Reports, timeousness, quality thereof		<i>All test reports produced immediately, checked by accredited person, and is traceable = 6</i> <i>All test reports produced immediately, and is traceable = 4</i> <i>Test reports produced = 2</i> <i>No test report available = 0</i>	
<b>6</b>	<b>Research and Development capabilities</b>	<b>24</b>		
6.1	Do you own your R&D? If not, who are R&D partners?		<i>Accredited and validation should be current = 6</i> <i>Not accredited and validation is not current = 0</i>	
6.2	How is R&D triggered in your organisation?		<i>Clear triggers for R&amp;D – optimising for performance or cost, continuous improvement (i.e., new Line-to-ground clearance requirements), and traceable = 6</i> <i>Clear triggers for R&amp;D – optimising for performance or cost, continuous improvement = 4</i> <i>R&amp;D supported, but no clear mandate = 2</i> <i>No support or mandate for R&amp;D = 0</i>	
6.3	What initiatives are you pursuing to introduce the new IEC60273?		<i>Pursuing newest technology actively = 6</i> <i>No research into the new IEC60273 = 0</i>	
6.4	Do you outsource your designs? How much of your designs are outsourced? What controls are in place		<i>Do not outsource = 6</i> <i>Outsource, accredited and validation should be current, controls should be in place = 3</i> <i>Outsource but not accredited and validation, no clear controls = 0</i>	

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