

## D Evaluation Criteria

### 2.2. Desktop Evaluation

This section defines the scoring method that will be used to award prospective supplier's a score based on their submitted schedule of compliance. Each requirement score will be credited by the tender issuing company considering the suppliers response and supporting material for evidence. The scoring method that will be used is shown in table 1 below.

**Table 1: Desktop evaluation scoring method for the schedule of compliance**

ASSESSMENT	DESCRIPTION	SCORE	%
Excellent	<ul style="list-style-type: none"><li>• satisfy technical requirement(s) with evidence from supporting material.</li><li>• There are no calculated technical risks in reaching the technical requirements.</li></ul>	5	100
Good	<ul style="list-style-type: none"><li>• satisfy the technical requirement(s) with risks that can be accepted</li><li>• presence of supporting material.</li></ul>	4	80
Limited	<ul style="list-style-type: none"><li>• satisfy technical requirement(s) in most aspects and fail in some.</li><li>• has unacceptable technical risks.</li></ul>	3	60
Inadequate	<ul style="list-style-type: none"><li>• fails to satisfy technical requirement(s) in most aspects and satisfy in some.</li><li>• has unacceptable technical risks.</li><li>• no supporting material for evidence provided</li></ul>	2	40
Not eligible	completely fails to satisfy the requirements	0	0

**Table 2: Qualitative evaluation - schedule of compliance**

Criteria	Section	% Weight	Weighted Score
Functional Requirement	B1	50	
Alarming and Communication	B2	40	
Replacement Filter Element	B3	10	
<b>Total</b>		<b>100</b>	

<b>B1</b>	<b>FUNCTIONAL REQUIREMENTS</b>
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ITEM NO	DESCRIPTION	UNIT	CRITERIA	SCORE
B1.1	Does the manufacturer comply with functional requirements stipulated in the specifications?	% compliance	>90%	5
			70-90%	4
			30-70%	2
			<30%	0
Functional Requirements  (maximum points: 5)			Score	
FUNCTIONAL REQUIREMENTS  (Section weight: 55%)			Weighted Score = (Score)*(50/5)	

B2	ALARMING AND COMMUNICATION			
ITEM NO	DESCRIPTION	UNIT	CRITERIA	SCORE
B2.1	Design shows the availability of signals for interrogation via communication interface and a display screen for their display	% compliance	>90%	5
			70-90%	4
			30-70%	2
			<30%	0
B2.2	Communication interface design comply with requirements required	% compliance	>90%	5
			70-90%	4

			30-70%	2
			<30%	0
B2.3	Manufacturer designs shows communication with the device to be possible via the media stipulated in the specification	% compliance	>90%	5
			70-90%	4
			30-70%	2
			<30%	0
Alarming and communication  (maximum points: 15)			Score	
ALARMING AND COMMUNICATION  (Section weight: 40 %)			Weighted Score = (Score)*(40/15)	

<b>B3</b>	<b>REPLACEMENT FILTER ELEMENTS</b>			
<b>ITEM NO</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>CRITERIA</b>	<b>SCORE</b>
B3.1	Are filter elements used in the design freely available in South Africa?	% compliance	Yes	5
			No	0
B3.2	Is the element of the filter cartridge system used in the design disposable?	% compliance	Yes	5
			No	0

<b>Replacement filter elements</b> <b>(maximum points: 10)</b>			Score	
<b>REPLACEMENT FILTER ELEMENTS</b> <b>(Section weight: 10%)</b>			Weighted Score = <b>(Score)*(10/10)</b>	

### 2.3. Physical Evaluation

A physical evaluation is conducted after a supplier has met the requirements of the desktop evaluation criteria. The criteria for the physical evaluation are point scored. An assessment of 'Yes' equates to 5 (five) score points. An assessment of 'No' equates to 0 (zero) score points. For the supplier's physical evaluation to be compliant it must score a minimum of 90 points. The criteria are:

EVALUATION ASPECT	YES/NO	SCORE
<b>ALARMING AND COMMUNICATION</b>		
<b>Available signals</b>		
Percentage of saturation of the cartridges		
Moisture in paper as percentage		
Water ppm value into the system		
Water ppm value out from the system		

Error code from a particular fault		
<b>Communication interface</b>		
Device provides data/statuses through IEC 61850 protocol?*		
Is remote access and integration possible with TCP/IP protocol using http(s) based web interface?*		
Is it possible to configure, diagnose and interrogate the system using a web interface?		
Downloading of files possible using FTP?		
<b>Communication medium</b>		
Multimode Fibre Ethernet port (100BaseFX) with Duplex LC connector?*		
Copper ethernet (100BaseTX) with RJ45 connector?*		
GPRS/GSM Modem (extra)?		
5GHz wireless (extra)?		
<b>LEDs</b>		
Green daylight LED for normal operation?		
Red daylight LED for indication of saturated filter cartridges?		
Blue daylight LED for problems detected with the system itself?		
<b>Local indication</b>		

Display screen displaying the minimum signals (see 4.1)?*		
<b>Relay outputs</b>		
2 potential free contact (alarm relays) for main cartridges saturated (N/O and closes when cartridges are 90% saturated)?		
2 potential free contact (alarm relays) for system fault (N/O and should close if any fault found in the system)?		
Relay has a make and carry current of 1A @ 250Vdc?*		
Relay can continuously carry 1A?*		
Relay break (Inductive L/R = 40ms) at 10W @ 250Vdc?*		
<b>Comment/s:</b>	<b>Total Score:</b>	
<b>SITE INSTALLATION REQUIREMENTS</b>		
Is welding done in the correct manner (i.e no welding is performed on the transformer tank)?		
Is the unit free standing and self-supported?*		
Is stainless steel brackets, fittings, pipes and fasteners used?		
Is the system effectively earthed to the substation earth-mat by means of one 3 mm x 50mm flat copper strip?*		
Are pipes adequately secured and mechanically protected to prevent any damage during normal maintenance activities?		

<b>Comment/s:</b>		<b>Total Score:</b>
<b>REPLACEMENT FILTER ELEMENTS</b>		
Are replacement filter elements supplied dry?*		
Moisture is not released back into the oil when filters are saturated?*		
Is waste oil limited to a maximum of 5litres per filter system?*		
<b>Comment/s:</b>		<b>Total Score:</b>
<b>CORROSION PROTECTION</b>		
Is there use of non-corrodible materials, by avoiding the contact of dissimilar metals?		
Are all fasteners made up of stainless steel?		
Is adequate lubrication applied to all threaded areas of bolts, studs and screws?		
<b>Comment/s:</b>		<b>Total Score:</b>
<b>ELECTRICAL CONNECTIONS AND TERMINATION BOXES</b>		

System electrical circuits withstand an applied voltage of 2kV for 60 seconds?*		
Are termination boxes with IP 56 rating provided for electrical connections?*		
Are terminal boxes mounted to allow cable entry from the bottom?		
All terminals of spring loaded type?*		
Are terminal boxes mounted correctly as specified in section 4.7d?		
Are the relay contacts cabled to the Marshalling Kiosk by means of steel wired armoured cabling that is heat, oil and UV resistant?		
Is two pole circuit breaker t used for isolation at the point of supply?		
Is the main isolator label with black lettering and permanently engraved?		
Do the cables used comply with Eskom cable specification 240-56227443?*		
<b>Comment/s:</b>	<b>Total Score:</b>	
<b>DOCUMENTATION AND PACKAGING</b>		
Are the original and fully detailed instructions for assembly, operation and maintenance of the system included with each system?		
Is the system securely packed and properly protected against damage and moisture ingress during shipping and storage?		



Is the standard test card bearing the manufacturer's serial number of the system included with each of the operating instruction manuals?		
Are the pipe openings suitably sealed?*		
<b>Comment/s:</b>		<b>Total Score:</b>