

 Eskom	Report	Technology
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Title: **TECHNICAL EVALUATION
CRITERIA FOR VIDEO
MANAGEMENT SYSTEM (VMS)
FOR CCTV SYSTEMS FOR
ESKOM SITES**

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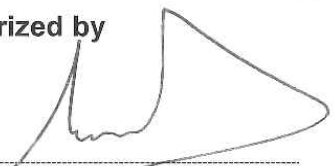
Functional Responsibility



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1. Introduction

This document provides an overview of Eskom's technical evaluation criteria to be used when evaluating the tender submissions for the design, development, manufacture, testing, supply, installation and commissioning of Video Management System (VMS) for CCTV Systems in Eskom. This document contains both the evaluation criteria used for desktop evaluation and practical evaluation.

2. Supporting clauses

2.1 Scope

This document contains the technical evaluation criteria and associated documents relating to a commercial enquiry for the technical evaluation, testing and acceptance of Video Management Systems (VMS) for CCTV Systems within Eskom Holdings SOC (Ltd).

2.1.1 Purpose

This document contains the technical evaluation criteria and associated documents relating to a commercial enquiry for the technical evaluation, testing and acceptance of Video Management Systems (VMS) for CCTV Systems within Eskom Holdings SOC (Ltd).

2.1.2 Applicability

This document shall apply throughout Eskom Holdings Limited Divisions.

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] ISO 9001, Quality Management Systems
- [2] 240-48929482 Tender Technical Evaluation Procedure
- [3] 240-91190304 Specification for CCTV Surveillance with Intruder Detection
- [4] 240-83684419 – PTM&C Technology Development

2.2.2 Informative

None

2.3 Definitions

2.3.1 General

Definition	Description
Digital Video Recorder (DVR)	Device with the primary function of recording video footage from CCTV cameras. May also include a number of other features. The terms 'DVR' and 'NVR' are often used interchangeably since both devices perform the same function.
Network Video Recorder (NVR)	A Digital Video Recorder which is connected to a network rather than directly to cameras. The terms 'DVR' and 'NVR' are often used interchangeably since both devices perform the same function.

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Definition	Description
Tender	A tender refers to an open or closed competitive request for quotations / prices against a clearly defined scope / specification.
Video Management System	Software used to connect to multiple DVRs or NVRs and view the footage from the attached cameras.

2.3.2 Disclosure classification

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

2.4 Abbreviations

Abbreviation	Description
CCTV	Closed Circuit Television
CoE	Centre of Excellence
DVR	Digital Video Recorder
NVR	Network Video Recorder
OEM	Original Equipment Manufacturer
PTM&C	Protection, Telecommunications, Metering and Control
TET	Technical Evaluation Team
VMS	Video Management System

2.5 Roles and responsibilities

The relevant COE will use this document to evaluate tenders for Video Management Systems (VMS) for CCTV Systems.

2.6 Process for monitoring

Not applicable

2.7 Related/supporting documents

Not applicable

3. Tender Technical Evaluation Strategy

This section details the methodology to be employed by Eskom in scoring the “Technical” category of the tender evaluation. This evaluation exercise is performed by the appointed Eskom Technical Evaluation Team (TET).

3.1 Technical Evaluation Threshold

The minimum weighted final score (threshold) required for a tender to be deemed compliant is 70% for both the Desktop Evaluation (A) and the Practical Evaluation(B), refer to Table 1 below.

3.2 Technical Evaluation process

The evaluation process has two main parts; desktop assessment and practical/factory evaluation, which are related and carry weightings of 60% and 40%, respectively. The overall weighting for the technical evaluation is shown in Table 1 below:

Table 1: Technical evaluation – overall

Criteria Number	Technical Criteria Description	Criteria Weighting (%)	Criteria Sub Weighting (%)
A	Level 1 - Desktop Evaluation	60	
A1	Technical Schedules A&B		100
Minimum Level 1 Score to proceed to Level 2 = 70%			
B	Level 2 - Practical Evaluation	40	
B1	Functionality test / demo		100
Minimum Level 2 Score to be deemed compliant = 70%			

- 1) The tenderer must first pass the desktop paper evaluation (Level 1) in order for Eskom to proceed with the practical evaluation of the tenderer's equipment (Level 2).
- 2) If tenderer passes the desktop evaluation (Level 1) but the presented/proposed equipment fails the practical evaluation during factory evaluation (Level 2), such supplier's equipment will be declared as not compliant to Eskom requirements.

3.2.1 Level 1 – Desktop Evaluation

Table 2: Weight allocations for desktop evaluations

Technical subcategory number	Level 1 Evaluation Subcategory name	Weight (%)
A1	Technical Schedules A&B	60
Minimum Level 1 Score to proceed to Level 2 = 70%		

This section shall comprise scoring of the technical A&B Schedule. The A&B Schedules use a default weight of 1 for each scored item. Critical items are assigned higher weights. For example, a weight of 3 indicates that the item will count the same as three items with weight 1. Each item will be assigned a score by the Eskom evaluation team based upon the tendered response and cross-checked with the supporting documents provided. The scoring method is depicted in Table 3 below:

Table 3: Scoring of items in technical schedule A&B

Score	%	Definition
5	100	COMPLIANT <ul style="list-style-type: none"> • Meet technical requirement(s) AND; • Cross-checked with the supporting documents provided AND • No foreseen technical risk(s) in meeting technical requirements.
4	80	COMPLIANT WITH ASSOCIATED QUALIFICATIONS <ul style="list-style-type: none"> • Meet technical requirement(s) with; • Acceptable technical risk(s) AND/OR; • Acceptable exceptions AND/OR; • Acceptable conditions.

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Score	%	Definition
2	40	NON-COMPLIANT <ul style="list-style-type: none"> Does not meet technical requirement(s) AND/OR; Unacceptable technical risk(s) AND/OR; Unacceptable exceptions AND/OR; Unacceptable conditions. No supporting documents provided
0	0	TOTALLY DEFICIENT OR NON-RESPONSIVE

3.2.1.1 Schedule A&B scoring

The score for each item will be multiplied by its weight to obtain the total score per item. All scores for the A&B Schedules will be tallied and a percentage shall be calculated based on the maximum possible score. The weighting for subcategories of the technical schedules is shown in Table 4 below:

Table 4: Qualitative technical evaluation – Technical Schedules A&B

Spec clause	Qualitative Technical Criteria Description	Criteria Sub Weighting (%)	Criteria Weighting (%)
3.5.7	Documentation		2
3.6	Installation		3
3.7.1.2	Eskom Local OT Security Server		2
3.7.1.3	Local Security Control Centre		2
3.7.1.4	National Security Control Centre		2
3.7.3	Warrantee and Certification		3
3.7.4.1	Environmental conditions		2
3.7.5	General Electrical Requirements		4
3.7.6	Cable routes in control plant / equipment rooms:		2
3.7.10	Communication		5
3.7.12	Time Synchronisation		3
3.11	Video Management System (VMS)		70
3.11.2	Location and Architecture	5	
3.11.3	Network and Connections	5	
3.11.4	Features	10	
3.11.5	Network Security	10	
3.11.6	Video Recording and Streaming	10	
3.11.7	Event Management	10	
3.11.8	Usability	5	
3.11.9	Hardware	5	
3.11.10	Training and Support	5	
3.15	Maintenance	5	
Total			100

3.2.2 Level 2 Evaluation - Practical evaluation

During this evaluation the tenderer shall demonstrate that the offered equipment fully meets the functional and technical requirements. The tenderer shall use the offered equipment/system to demonstrate how Eskom's requirements are met.

This portion will be assessed at the local agent or tenderer facilities. If any portion of the services are sub contracted this must be evaluated at the subcontractor's facilities. This section shall be scored by the technical evaluation team following a visit to each Supplier's local offices. Only those suppliers that have passed the Desktop evaluation shall be visited. Suppliers shall be advised of their qualification for the visit, and on the exact date of the visit within a week prior to the demonstration. Scoring of Practical evaluation sub-sections shall be assigned by the Eskom Technical evaluation team as detailed in Table 5 below.

Table 5: Practical evaluation Scoring Criteria

Scoring	Percentage	Score
Fully compliant/ Above Average	100%	5
Acceptable/ Average	80%	4
Below Average	40%	2
Unacceptable/ Unusable	0%	0

3.2.2.1 Functionality test / demo

During the functionality test / demo phase, the tenderer shall demonstrate how the different functional and technical requirements have been incorporated in the system design. The test system shall be configured so as to represent the communication architecture envisaged for the complete solution. These tests need not be carried out on site. They may be carried out on equipment already installed on a 3rd party site by the tenderer or setup for demonstration purposes.

The functionality test comprise of sections below.

Table 6: Functionality Test Items

Number	Demonstration	Criteria Sub Weighting (%)	Criteria Weighting (%)
1	Incident Operations		30
2	Recording		25
3	Infrastructure and Connections		25
4	Video Quality		10
5	General Usability		10

4. Authorization

Name and surname	Designation
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5. Revisions

Date	Rev	Compiler	Remarks
Aug 2018	1	R Moshoeshoe	First issue

6. Development team

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

- Thomas Jacobs
- Sandi Ndamase

7. Acknowledgements

Not applicable.