



**SUPPLY, REPAIRS AND REPLACEMENT
OF FAULTY EQUIPMENT
TO REINSTATE CCTV SYSTEM TO FULL
FUNCTIONALITY, INCLUDING TESTING
AND COMMISSIONING
AT DURBAN MAIN CENTRE, ROTATING
MACHINES DEPOT (RM), ELECTRICAL
LOCOMOTIVES DEPOT (ELD), COIL SHOP
AND WENTWORTH DEPOT.**

**311 SOLOMON MAHLANGU DRIVE,
ROSSBURGH.**

DOCUMENT No: PEMM_DBN_SPEC_060

Revision 0

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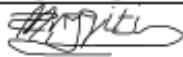
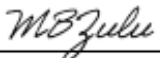

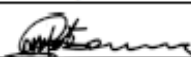

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Signature of Bidder/s: _____

Date: _____

Document Authorities

Department Affected	Durban Main Centre, RM Depot ELD and Coil Shop
Effective Date	September 2022
Responsible Person	Stanley Mchunu
Designation	Project Manager
Signature	 22.09.2022
Compiled by	Zolani Mngqithi
Designation	Engineering Technician
Signature	 21.09.2022
Reviewed by	Martin Zulu
Designation	Superintendent -Security Office
Signature	 22/09/2022
Reviewed by	Brendan Dixon
Designation	National Electronics Manager
Signature	 22/09/2022
Reviewed by	Angus Molosi Moeketsi Motsoeneng
Designation	ICT – System Administrator Manager
Signature	
Approved by	Lindo Ngcobo
Designation	Acting Plant Engineer Maintenance Manager
Signature	 27/09/2022

Signature of Bidder/s: _____ Date: _____

1. INTRODUCTION / SCOPE of Work

This specification is for the:

#	TASK	REQUIRED
1	Design	
2	Manufacture	
3	Configuration	✓
4	Integrate	✓
5	Supply	✓
6	Installation	✓
7	Documentation	✓
8	Testing	✓
9	Training	✓
10	Commissioning	✓

of the specified:

#	ITEM	REQUIRED
1	Supply, repairs and replacement of faulty equipment to reinstate CCTV system to full functionality, including testing and commissioning at Durban Main Centre, Rotating Machines Depot (RM), Electrical Locomotives Depot (ELD), Coil Shop and Wentworth Depot.	✓

2. SITE INSPECTION

- 2.1 All prospective contractors shall be required to undertake a compulsory site inspection to fully acquaint themselves with all aspects involved.
- 2.2 Arrangements to visit the site and confirmation of the date and time of the site inspection shall be made with Transnet Engineering Contract Manager.
- 2.3 The site inspection certificate shall be completed and countersigned by the Contract Manager on the day of the visit and must be submitted with the tender documents.

3. INFORMATION REQUIRED

- 3.1 Offers will not be considered unless full particulars and sufficient literature are provided at the tendering stage to enable Transnet Engineering Technical Officers the opportunity to assess each technical offer properly.
- 3.2 Prospective Contractors will complete the relevant questionnaire in full and must indicate whether their offer complies with each item of the specification
- 3.3 Should there be insufficient space for furnishing full details; contractors shall provide the additional details in their covering letter. The additional details shall be numbered in accordance with the applicable clause specified in the specification.
- 3.4 As prospective contractors are considered to be experts in their field, they are obliged to identify any shortcomings, such as omissions or sub-standard requirements, to the completeness of this specification. These must be brought to the attention of Transnet Engineering at tender stage with alternatives to address these shortcomings. However, each offer shall be quoted for separately.

Signature of Bidder/s: _____ Date: _____

4. TECHNICAL REQUIREMENTS

The following regulation and codes must be complied with:-

- **SANS 10142-1 : The wiring of premises Part 1: Low-voltage installations.**
- 4.1 Except where otherwise provided for in the specification, all equipment offered will comply with the requirements of the relevant standard specifications of the SABS, if published, otherwise with the relevant standard of the British Standards Institution in force at the time of tendering.
- 4.2 Where equipment offered complies with the recognized standards of the country of manufacture and not specifically with the standards required by this specification, such equipment will be considered at the discretion of Management. In this case, tenders shall state fully all respects in which the equipment departs from the standard laid down in this specification.
- 4.3 The successful tender will at the conclusion of the installation provide a document along the lines “that the installation complies with national/international requirements and that all selected /designed items are compliant with Act 85 of 1993 and SABS practices applicable to the installation. The equipment has been commissioned/ calibrated and employees as specified have been trained and found competent to operate the plant.”

5. SPECIFIC REQUIREMENTS

Any person with the intention of procuring the equipment or material shall ensure that the information below is complied with.

5.1 Scope of work

ITEM	This scope of work document covers the minimum requirements	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.1.1	This scope of work shall be read with Annexure 1 (Transnet Engineering Safety, Health and Environmental Management specification) and contractor management SOP 014. - Bidders shall include costs of Health, Safety and Environmental Management compliance.	
5.1.2	Supply, repair, configuration, testing and commissioning of CCTV camera system.	
5.1.3	- Provide 36 months maintenance service, as per annexure 2. -The equipment to be maintained is Bosch BVMS server, operator workstations, Sony 32” monitors, Bosch 720P fixed cameras, Bosch HSD cameras, Bosch 720P mini dome cameras, Bosch PTZ cameras, server room air conditioner, UPS (test UPS and advice on its condition), network switches, Bosch storage devices, cables, etc. - A successful bidder shall sign a service level agreement with Transnet Engineering. The service level agreement details the weekly, monthly, quarterly and annual work and any other work deemed necessary.	

Signature of Bidder/s: _____

Date: _____

ANNEXURE 2.

ITEM	This scope of work document covers the minimum requirements	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.2	Cameras & field equipment Outdoor Colour Fixed Cameras incl. Varifocal lenses, Outdoor housing, mounting bracket, Power Supply Unit. 246 cameras and 246 junction boxes.	
	Maintenance Activity	Frequency
5.2.1	Select camera, check image quality on monitor, adjust if necessary	Quarterly
5.2.2	Adjust varifocal lens - Field of view & focus.	Quarterly
5.2.3	Open housing, check & clean for dirt, insects, moisture.	Quarterly
5.2.3	Adjust Varifocal Lens – Field of view and focus.	Quarterly
5.2.4	Clean camera housing window, remove residue from housing.	Monthly
5.2.5	Check camera junction box - Door locks and seals and rubber grommets.	Quarterly
5.2.6	Check Power supply voltage - Adjust or replace if necessary.	Quarterly
5.2.7	Check exposed cabling & camera housing cabling glands for damage and repair if found to be defective.	Quarterly
5.2.8	Check camera housing bracket mounting screws and repair if found to be defective.	Quarterly

ITEM	This scope of work document covers the minimum requirements	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.3	Indoor Colour fixed cameras including. Lenses, housing, mounting bracket, power supply unit	
	Maintenance Activity	Frequency
5.3.1	Select camera, check image quality on monitor - Adjust if necessary.	Quarterly
5.3.2	Clean camera housing window, remove residue from the housing.	Quarterly
5.3.3	Open housing, check & clean for dirt, insects, moisture.	Annually
5.3.4	Adjust Varifocal Lens – Field of view and focus.	Quarterly
5.3.5	Check Power supply voltage - Adjust or replace if necessary.	Quarterly
5.3.6	Check camera junction box - Door locks and seals and rubber grommets.	Quarterly
5.3.7	Check exposed cabling & camera housing cabling glands and repair if found be to be defective.	Quarterly
5.3.8	Check camera housing bracket mounting screws and repair if Found to be defective.	Quarterly

Signature of Bidder/s: _____

Date: _____

ITEM	This scope of work document covers the minimum requirements		DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.4	<u>Cameras & field equipment</u> Outdoor Colour PTZ Domes + Cameras incl. zoom lens, dome housing, Power Supply Unit.		
	Maintenance Activity	Frequency	
5.4.1	Use controller in control room to check if cameras are all functional and relay live information to the control room.	Weekly	
5.4.2	Select camera, check image quality on monitor – Adjust if necessary.	Monthly	
5.4.3	Clean camera dome bubble, remove residue from housing.	Monthly	
5.4.4	Check camera junction box-Door locks and seals and rubber grommets.	Quarterly	
5.4.5	Open dome housing, check & clean for dirt, insects, moisture.	Quarterly	
5.4.6	Check zoom lens – Field of view and focus.	Monthly	
5.4.7	Check Power supply voltage - Adjust or replace if necessary.	Quarterly	
5.4.8	Check cabling & camera dome housing cabling glands.	Quarterly	
5.4.9	Check camera housing bracket mounting screws.	Quarterly	

ITEM	This scope of work document covers the minimum requirements		DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.5	Indoor fixed colour dome camera incl. zoom lens, dome housing, power supply unit.		
	Maintenance Activity	Frequency	
5.5.1	Select camera, check image quality (contrast ,brightness) on monitor – Adjust if necessary	Quarterly	
5.5.2	Clean camera dome bubble, remove residue from housing	Monthly	
5.5.3	Open dome housing, check & clean for dirt, insects, moisture.	Annually	
5.5.4	Check zoom lens – Field of view & focus	Quarterly	
5.5.5	Check Power supply voltage - Adjust or replace if necessary	Quarterly	
5.5.6	Check cabling & camera housing cabling glands	Quarterly	
5.5.7	Check camera housing bracket mounting screws	Quarterly	

Signature of Bidder/s: _____ Date: _____

ITEM	This scope of work document covers the minimum requirements		DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.6	Control system		
	Maintenance Activity	Frequency	
5.6.1	Server	Select all camera inputs and verify correct Switching.	Quarterly
5.6.2		Select all NVR outputs and verify correct Switching.	Quarterly
5.6.3		Open rack and check all cooling fans.	Weekly
5.6.4		Test CPU network connection.	Quarterly
5.6.5		Check bottom gland plate for rodent ingress / clean.	Monthly
5.6.6		Measure all power supply voltages – adjust if necessary	Quarterly
5.6.7		Retrain the users on the CCTV system.	Quarterly
5.6.8		Log all test results	Quarterly

ITEM	This scope of work document covers the minimum requirements		DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.7	Digital Video Recorder Review PC and Software		
	Maintenance Activity	Frequency	
5.7.1	Test all camera inputs and verify software switching & recording. Check recordings and test playback recordings.		Monthly
5.7.2	Select DVR outputs and verify correct operation/ recording.		Monthly
5.7.3	Test PC network connections.		Quarterly
5.7.4	Measure PC power supply voltages – Adjust if necessary.		Quarterly
5.7.5	Log all test results.		Quarterly

ITEM	This scope of work document covers the minimum requirements		DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.8	Transmission hardware		
	Maintenance Activity	Frequency	
5.8.1	Check all cables and conduit are properly supported, undamaged and showing no signs of wear.		Quarterly
5.8.2	Check for sound physical fixings of all equipment including		Quarterly

Signature of Bidder/s: _____ Date: _____

	loosening or corrosion of supports and fixings including towers and brackets.		
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5.9 Call out Timeframes

Response times for Clients are as follows:

Item No.	Description	Preferred	Penalties for not responding on time
5.9.1	<u>Critical</u> (System failure to the extent that the system is no longer functional)	Maximum of 4 working hours response guaranteed.	R5000.00
5.9.2	<u>Major</u> (Major component failure i.e. Workstation or critical cameras)	Maximum of 8 working hours response guaranteed.	R3000.00
5.9.3	<u>Minor</u> (Minor component failure i.e. non-critical cameras)	Maximum of 24 working hours response guaranteed.	R1000.00

5.10 The successful contractor(s) to work hand in hand with the current service provider to ensure that the service and all passwords are handed over to ensure smooth transition.

Item No.	Requirement	Compliance: Yes if complying or No if not complying
5.11	A bidder to be have ability of working on Bosch CCTV system and shall have PSIRA registration. All necessary certificates and proof of registration shall be attached.	
5.12	A bidder to have experience in working with Bosch CCTV system.	
5.13	A successful contractor shall be liable for any damage caused to our (Transnet Engineering), as a result of their action(s). Any damage caused by a contractor shall be rectified by a contractor at his / her own expense.	

5.14 Price structure (maintenance for 36 months)

	Activity	Charges
5.14.1	Labour – Normal (per hour)	R
5.14.2	Labour – Overtime (per hour)	R
5.14.3	Labour – Sunday/Public Holiday (per hour)	R
5.14.4	Travelling time	Same as labour rate
5.14.5	Vehicle Costs	R P/km
5.14.6	IT Labour – Normal (per hour)	R
5.14.7	IT Labour – Overtime (per hour)	R
5.14.8	IT Labour – Sunday/Public Holiday (per hour)	R

Note: All work to be completed in each respect by suitably qualified person

5.15 Operating Environment

- Dusty, very hot, water splashes and areas with smoke.
- All bays have automatic lighting, however cameras with night vision are required.
-

Signature of Bidder/s: _____ Date: _____

5.16 Markings

- Appropriate markings required by an applicable standard for equipment and installation required shall be indelible and only removable by deliberate intent.

5.17 Testing

- All angle viewing plus zooming in and all lighting condition tests shall be conducted.
- All other tests that are required by any applicable SABS standards including SANS 10222-5-2:2007/BS EN 50132-7:1997, MOD, Ed.1 (Electrical security installations Part 5-2: CCTV installations - Application guidelines) shall be performed to the satisfaction of the Plant engineer, risk Officials and security personnel.

5.18 Commissioning

- All the tests certificates referred to above and supply of all requirements referred to in the scope of work shall be supplied.
- Supply of all electrical certificates of compliance.
- Supply of all manuals including standard operating procedures, standard maintenance procedures for all equipment in three sets.
- Supply all wiring and cabling diagrams in three sets.
- Supply soft copies of the software used in three sets.

5.19 Maintenance

- The successful contractor shall provide maintenance service for 36 months.

5.20 Spares

- The successful tenderer shall supply Transnet Engineering with the specifications of all critical parts list for all equipment supplied and installed.

5.21 Warranty

- All new equipment supplied shall have a 3 year free swop-out warranty from date of purchase.

5.22 After-Sales Service

- All materials and equipment used shall be standard components, regularly manufactured and utilised and be available on short notice (Maximum of two weeks delivery) for replacement.

6. OTHER INFORMATION RELATED TO THE SCOPE

- 6.1 This specification states the minimum requirements relating to the work and in no way absolves the contractor From responsibility for sound ethical practice. Any omissions or sub-standard requirements of this specification must be brought to the attention of Transnet Engineering at tender stage and optional prices for addressing such omissions must be provided.
- 6.2 Any matter relating to this work, which requires a decision from Transnet Engineering shall be presented to the Project Manager in charge.
- 6.3 All offers shall be completed in every respect with this specification. Only completed / responsive tenders will be considered.
- 6.4 The Technical Officer reserves the right to have the proposal checked independently by a third party.
- 6.5 Tenders must allow for monthly progress and clarification meetings on site initially and after commissioning for defect meetings when required. A meeting will be held after issuing of the tender to establish the exact scope and magnitude of the contract. No tender will be considered unless it has this certificate signed by the Engineer or his representative.

Signature of Bidder/s: _____

Date: _____

7. HEALTH AND SAFETY REQUIREMENTS

- 7.1 All equipment and installation whether detailed in this specification or not shall comply with the requirements of the Occupational Health and Safety Act 85 of 1993 as amended and all other applicable legislation including specific set of regulations and local authority bylaws where applicable.

The sudden power losses must not have an adverse effect on equipment and shall not unduly delay return to operation after power is restored.

- 7.2 All the necessary safety equipment such as guards over rotating equipment shall be supplied and the equipment shall comply fully with all the requirements of the South African Occupational Health and Safety Act, Act 85 of 1993 and all other applicable legislation including specific set of regulations and local authority bylaws where applicable. At all times during the manufacture, assembly and testing of the equipment the contractor will be responsible for the safety of all persons on site and the equipment.

7.3 SHE SPECIFICATION

Prior to commencement of contract, the contractor shall be issued with a SHE specification in order to compile a SHE file in line with TE requirements.

Prior to establishing on site, it is an explicit requirement of this contract that all of the Contractor's personnel directly involved with this contract, including those of sub-contractors, attend a **Safety induction course**. Transnet will provide the course free of charge and attendance is compulsory for all personnel under the control of the Contractor who, during the duration of the contract, will be present on site whether on a full time or adhoc basis.

The contractor must allow for all additional charges because of these requirements as no claims for extras will be accepted in connection with the foregoing.

7.4 As part of the legislative and TE SHE requirements.

The successful contractor is required to conduct a Risk assessment to ascertain all potential risks associated with this project. The completed risk assessment is to be formally submitted to the Risk department via the project manager at least two weeks prior to the commencement of the actual project. A safety file and associated documents will be required from a successful tenderer and such will be communicated by the Risk department.

8. SPECIALIST SUB-CONTRACTORS

- 8.1 Only specialist sub-contractors who have previously successfully completed work of the type and extent specified in this document should be engaged.
The tenderer shall provide the technical officer with sufficient proof of having suitable experience regarding the design and manufacturing of similar equipment. To this end, complete and detailed reference list shall be submitted with the tender. Reference list shall include addresses as well as contact person who may be visited for inspection of the equipment during the adjudication period.
- 8.2 The tender shall submit a complete list of proposed sub-contractors and suppliers of major components with his tender.
- 8.3 The tenderer shall be prepared to commit themselves in writing to the technical officer with an adequate, experienced and stable project team for the duration of the contract.
- 8.4 Transnet Engineering will not consider any Tenderer's offer that, in the sole opinion of Transnet Engineering, does not have adequate experience in the design and manufacture of such equipment
- 8.5 Contractors shall do the installation simultaneously with other contractors on-site busy with other work and shall plan work that it integrates with other work performed.

Signature of Bidder/s: _____ Date: _____

9. MATERIAL AND WORKMANSHIP

- 9.1 The equipment shall be offered complete in all respects, including all standard components normally offered by manufactures, all of which shall be specified in detail.
- 9.2 The equipment, as made and supplied, shall be complete in every respect, of modern design, using the most advanced proven technology extensively supported by reputable local companies, and be built to good engineering and technological practices. Tenderers shall supply a list of all the main components proposed as well as the addresses of local the support companies.
- 9.3 All parts and components shall be adequately protected against damage and corrosion during shipping, transport and storage.

Should any of the items called for be standard equipment, then the words “Standard Equipment” shall appear against the item.

- 9.4 The cameras shall be stable and drain sufficient to prevent accumulation of water.
- 9.5 The equipment, as made and supplied, shall be complete in every respect, of modern design, using the most advanced proven technology extensively supported by reputable local companies and be built to good engineering practices.

10. GENERAL REQUIREMENTS

Operation will be in the following conditions:

Altitude	Sea level
Ambient temperature	0°C to 45°C
Relative humidity	50% to 100%
Atmosphere	Heavy saline

- 10.1 Tenderers shall indicate clause-by-clause either that they comply in every respect with the specific requirements, or if not, exactly how it differs.

11. DEFINITIONS AND ABBREVIATIONS

CLIENT	Transnet Engineering
TECHNICAL OFFICER	Project Manager, Transnet Engineering Durban
CONTRACTOR	Contractor appointed under this specification document
SABS	South African Bureau of Standards
BS	British Standard Specification
FEM	Federation of European Mechanical Handling Standard
ISO	International Organisation for Standardisation

12. GENERAL

- 12.1 The successful tenderer will be subjected to a workshop inspection by Transnet Engineering, to ensure that the facilities are to the satisfaction of the Transnet Engineering in terms of the quality control and equipment capabilities for manufacturing such type of equipment.
- 12.2 The tenderers shall guarantee that the rating and size etc. of the equipment offered, will be adequate to perform the duties required.

13. SITE ESTABLISHMENT

- 13.1 The contractor shall be solely responsible for safety of his staff and for providing security to safeguard his works and material on site, until such a time.

Signature of Bidder/s: _____ Date: _____

13.2 The contractor shall be required to attend site meetings when convened by the Project Leader controlling the contract.

13.3 The contractor will be responsible for any damages caused by his staff to the building and civil works on site.

14 PENALTY CLAUSES

14.1 Due to the criticality of this project, penalties will be levied for late deliveries.

Signature of Bidder/s: _____

Date: _____

15. SCHEDULE OF PRICES:

All prices exclude Vat and additional items listed (with prices) shall be clearly labelled as optional or essential.

Item no.	(Durban Main Centre)	Unit	Qty	Price
15.1.1	BVMS Software Maintenance SMA Licence for MBV-BPRO,1 Year	Ea	3	
15.1.2	BVMS Software Maintenance SMA Licence for MBV-XCHANPRO,1 Year	Ea	2142	
15.1.3	BVMS Software Maintenance SMA license for MBV-XWSTPRO, 1 year.	Ea	14	
15.1.4	BVMS Software Maintenance SMA license for MBV-XKBDPRO, 1 year.	Ea	3	
15.1.5	DIVAR IP all-in-one 7000 Management appliance, 3U 16X12TB 3rd gen.	Ea	6	
15.1.6	Standard Application Server.	Ea	1	
15.1.7	Workstation Z4G4, RTXA2000 GPU.	Ea	4	
15.1.8	Keyboard, USB CCTV oriented.	Ea	2	
15.1.9	10 way PDU with Surge.	Ea	5	
15.1.10	48P PoE 1440W MANAGED NETWORK SWITCH Netgear.	Ea	3	
15.1.11	Hdmi Cable Lead 30m.	Ea	2	
15.1.12	Wireless Keyboard / Mouse with Rechargeable batteries and spare set.	Ea	2	
15.1.13	Samsung - 24" LED Monitor with IPS panel and Borderless Design.	Ea	4	
15.1.14	10 KVA UPS Online 4Hrs Runtime.	Ea	1	
15.1.15	3 KVA UPS Online 4Hrs Runtime.	Ea	3	
15.1.16	24P PoE 720W Managed Network Switch Netgear.	Ea	2	
15.1.17	Clearline Gigabit 24 Port Lightning & Surge Protector (POE).	Ea	3	
15.1.18	Linkbasic 19-inch Rack Mount Brush Panel.	Ea	6	
15.1.19	Cage Nuts.	Ea	300	
15.1.20	8-Port USB HDMI/Audio KVM Switch ATEN.	Ea	1	
15.1.21	Cat6e Patch Leads 2m.	Ea	6	
15.1.22	Ubiquiti Grounded Ethernet Surge Protector ETH-SP-G2 Cat6e Patch Leads 2m.	Ea	32	
15.1.23	Dedicated Plug tops.	Ea	60	
15.1.24	4way fan tray.	Ea	20	
15.1.25	Rack netting 42U.	Ea	3	
15.1.26	Supply, replacement of existing 6 off (1200 SERIES IP VIDEO STORAGE SYSTEM 8X 4TB HARDDRIVES) configuration, testing and commissioning.	Ea	1	
15.1.27	Small Materials allowance.	Sum	3	
15.1.28	Small Materials allowance	Sum	1	
15.1.29	Installation	Sum	1	
15.1.30	Labelling	Sum	1	
15.1.31	As Build Drawings	Sum	1	
15.1.32	Health and safety File	Sum	1	
15.1.33	Commissioning	Sum	1	
15.1.34	Project Management	Sum	1	
15.1.35	Training	PMnth	1	
15.1.36	3 Year Maintenance SLA	Ea	36	
	Sub - total			

Signature of Bidder/s: _____ Date: _____

Item no.	(RM, ELD and COIL SHOP Depots)	Unit	Qty	Price
16.1.1	Dinion IP 7000 NBN-733V-P+ 720P lens	Ea	9	
16.1.2	PTZ cameras VGS-7220-EPC 4+ Auto dome	Ea	8	
16.1.3	DIVAR IP all-in-one 7000 Management appliance, 3U 16X12TB 3rd gen	Ea	1	
16.1.4	DIVAR IP License Plus base for DIP AIO 6000-7000	Ea	1	
16.1.5	BVMS Software Maintenance SMA license for MBV-BPLU-DIP, 1 year	Ea	1	
16.1.6	DIVAR IP Expansion License Camera/decoder expansion	Ea	29	
16.1.7	BVMS Software Maintenance SMA license for MBV-XCHANPLU, 1 year	Ea	29	
16.1.8	Workstation Z4G4, RTX4000 GPU	Ea	2	
16.1.9	Keyboard, USB CCTVoriented	Ea	1	
16.1.10	BOSCH UHO-HGS-11 Security Outdoor Housing Camera	Ea	9	
16.1.11	PTZ Pendant Mount Bracket	Ea	5	
16.1.12	PTZ Pole Mount Bracket	Ea	3	
16.1.13	POE 60W Midspans	Ea	8	
16.1.14	CCTV Transmission HDMI Cable Gold Plated Connectors 5M	Ea	3	
16.1.15	Samsung - 24" LED Monitor with IPS panel and Borderless Design	Ea	2	
16.1.16	Samsung - 32" UHD Monitor	Ea	1	
16.1.17	Wireless Keyboard / Mouse with Rechargeable batteries and spare set	Ea	2	
16.1.18	Wall Mount Bracket Pan tilt	Ea	2	
16.1.19	Linkbasic 42U 1M Deep Cabinet 4 Fans & 3 Shelves	Ea	1	
16.1.20	1 KVA UPS Online	Ea	6	
16.1.21	3 KVA UPS Online	Ea	4	
16.1.22	10 way PDU with Surge	Ea	2	
16.1.23	6 way PDU with Surge	Ea	6	
16.1.24	Ubiquiti Grounded Ethernet Surge Protector ETH-SP-G2	Ea	32	
16.1.25	Cat6e STP Cable	m	1600	
16.1.26	Linkbasic RJ45 Cat6 Shielded FTP Modular Plug	Ea	140	
16.1.27	Linkbasic Grey Boots for RJ45-6FTP	Ea	140	
16.1.28	Dedicated Plug tops	Ea	40	
16.1.29	Linkbasic 19-inch Rack Mount Brush Panel	Ea	10	
16.1.30	Linkbasic 19-inch Rack Mount 1U Blank Panel	Ea	10	
16.1.31	Dell EMC Switch N1124P-ON L2 24 ports RJ45 1GbE 12 ports PoE	Ea	6	
16.1.32	1.0mm 3 Core Cabtryre	Ea	100	
16.1.33	48 Port Fibre Patch Panel fully Populated LCSMDPLX	Ea	1	
16.1.34	Brush Panel	Ea	1	
16.1.35	Patch Leads LCSMDPLX	Ea	22	
16.1.36	Unjacketed Pigtails LCSMDPLX	Ea	38	
16.1.37	Splicing, Preparation and OTDR	Ea	41	
16.1.38	48V 120mm Fans	Ea	5	
16.1.39	12V 20Ah Batteries	Ea	30	
16.1.40	48V 100Ah Battery Protector	Ea	5	
16.1.41	48V 1000W Meanwell Battery Charger	Ea	1	
16.1.42	Small Materials allowance	Sum	1	
16.1.43	Installation	Sum	1	
16.1.44	Labelling	Sum	1	
16.1.45	As built Drawings	Sum	1	
16.1.46	Health and safety File	Sum	1	

Signature of Bidder/s: _____ Date: _____

16. TENDER EVALUATION CRITERIA

The following criteria will be used to award the tender. Should there be a criteria over and above the listed below, that will be used, such criteria will be specifically stated.

No.	<u>Pre-Qualification Criteria</u> TECHNICAL DESCRIPTION (The technical evaluation will be used as a threshold. All bidders who do not meet the minimum threshold of 90 points will not proceed to the final stage of evaluation.)	Weightings
16.1	<p>The methodology, standards and working procedures that will be used in the execution of this contract (detailed written Process and Project Plan to be supplied by bidder):</p> <ul style="list-style-type: none"> Submitted methodology that will be used in the execution of this contract is provided. = 5 points No submitted methodology. = 0 <p><u>Lead time</u></p> <ul style="list-style-type: none"> Lead time less than 60 working to commence and complete the repair work. = 15 points Lead time more than 60 working but less than 70 working days = 10 points Lead time of more than 70 working days but less than 80 working days. = 5 points Lead time of more than 80 working days = 0 	20 points
16.2	<p>Ability to work on Bosch CCTV system and PSIRA registration.</p> <ul style="list-style-type: none"> Submitted certified copies of valid certificate of approval/registration/affiliation with Bosch. = 20 points Submitted certified copies of certificates of PSIRA Registration = 20 points If the abovementioned requirements are not met/submitted = 0 	40 points
16.3	<p>Adherence to TE specification.</p> <ul style="list-style-type: none"> Full adherence to specification = 25 points Non adherence to specification = 0 	25 points
16.4	<p>Specific knowledge relating to projects of this nature:</p> <ul style="list-style-type: none"> Previous experience of design, supply, installation, configuration, maintenance of CCTV camera system (only completed projects) in the past 10 years, with contactable references. Submit reference/testimonial letters with logo/emblem of previous client(s). 3 Reference/testimonial letters of successful execution of design, supply, installation, configuration and maintenance of CCTV camera system = 15 points 2 Reference/testimonial letters of successful execution of design, supply, installation, configuration and maintenance of CCTV camera system = 10 points 1 Reference/testimonial letter of successful execution of design, supply, installation, configuration and maintenance of CCTV camera system = 5 points Zero /No Reference/testimonial letters of successful execution of design, supply, installation, configuration and maintenance of CCTV camera system = 0 	15 points

Total Weighting:

100 points

Minimum qualifying score required:

90 points

Signature of Bidder/s: _____

Date: _____

17.COMPLIANCE TO THE SPECIFICATION VERIFICATION

ITS IS MANDATORY FOR ALL THE SUPPLIERS/BIDDERS TO COMPLETE THIS FORM. AN INCOMPLETE FORM WILL RESULT IN DISQUALIFICATION.

No.	Heading/Subsection	Comply			Comments
		Yes	NO	N/A	
1.	Introduction				
2.	Site inspection				
4.	Technical requirements				
5.1	Scope of works				
5.2 – 5.14	Compliance tables				
7.	Health and safety requirements				
14.	Penalty Clauses				

Signature of Bidder/s: _____

Date: _____