

## **SECTION IV- CATEGORY 1-SCHEDULE OF REQUIREMENTS CCTV SYSTEMS**

### **A) SCHEDULE OF EQUIPMENT AND SITES TO BE MAINTAINED CATEGORY 1: CCTV**

#### a) Schedule of Equipment to be maintained Category 1: CCTV

The Schedule of Equipment has been prepared in general terms to identify the equipment covered by the Maintenance Agreement. Those items not identified but which are clearly required for the operation of the CCTV system shall be included within the Maintenance Agreement.

*These items should be listed here individually.*

#### A1 (a) Schedule of Equipment to be maintained Category 1: CCTV

<b>NO.</b>	<b>EQUIPMENT</b>
1	DVR and associated devices and accessories
2	NVR and associated devices and accessories
3	Video Encoders
4	External Cameras (IP and analogue
5	Internal cameras(IP and analogue
6	Power supplies, Adaptors,Ups and batteries–various types and ratings
7	Surge and Voltage protectors
8	Cables ,connectors and associated accessories
9	Video monitors
10	Conduits ,mini-trunkin and other cable duct lines
11	Video management PC's and associated Equipment /accessories.
12	Network Switches and associated network devices and accessories.
13	Video Balun
14	Network Media covertors
	List others if omitted.

**b) Schedule of Sites to be serviced and maintained.**

**NB:** All CCTV systems are managed or are intended to be managed via Existing GENETIC Unified Security Management Software. Bidders Must Demonstrate ability, authorization and certification on **GENETIC**.

A1 (b) Schedule of Sites to be serviced and maintained Category 1: CCTV

Item No.	Description	Location	Type of systems	Model	No of Cameras	Status
<b>Nairobi Region</b>						
1.	Stima Plaza	Parklands-Nairobi	Analoque and IP-based	ACTI(IP) TOPICA-(Analogue)		Working but with few faults/replacements as per the schedule of repairs of defects.
2.	Electricity house Nairobi	Harambee Avenue-Nairobi	IP-Based	ACTI		Working but with few faults/replacements as per the schedule of repairs of defects
3.	Isiolo Road bulk stores and workshop	Isiolo road-Nairobi	Analoque	HIK-Vision		Working but with few faults/replacements

						as per the schedule of repairs of defects
4.	Likoni Road	Likoni Road-Nairobi	Analogue	AEBEL		Working but with few faults/replacements as per the schedule of repairs of defects
5.	Jogoo Road Pay office	Jogoo road-Nairobi	Analogue	LILIN		Working but with few faults/replacements as per the schedule of repairs of defects
6.	Dandora S/S	Kangundo road-Nairobi	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects

7.	National Control Centre Juja	Dandora-Nairobi	IP	GENETIC Software		Working but with few faults/replacements as per the schedule of repairs of defects
8.	Nairobi North Substation/Ndenderu	Ndenderu	IP	Aricontvision /Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
<b>Rift Valley: Central and North Rift</b>						
9.	Lanet depot	Lanet-Nakuru	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
10.	Makutano	Nakuru-Eldoret Road	IP	Arecont Vision and Pelco		Working but with

						few faults/replacements as per the schedule of repairs of defects
11.	Suswa sub-station	Naivasha	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
12.	Chemosit	Eldoret	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
13.	KVDA banking hall	Eldoret		Arecont Vision and Pelco		Working but with few faults/replacements as per the

						schedule of repairs of defects
14.	Lessos Control Station	Eldoret	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
15.	Rivatex Sub Station	Eldoret	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
<b>Mt Kenya Region</b>						
16.	Nyeri Office	Nyeri Stima-Nyeri town	Analogue	Old Model		System needs overhaul as per the schedule of repairs of defects.
17.	Kiganjo Substation	Nyeri	IP	Aricont and pelco		Working but with

						few faults/replacements as per the schedule of repairs of defects
18.	Nanyuki Substation	Nanyuki	IP	Aricont and pelco		Working but with few faults/replacements as per the schedule of repairs of defects
19.	Meru office	Meru Town	Analogue			System needs overhaul as per the schedule of repairs of defects.
20.	Embu office	Embu town	Analogue			System needs overhaul as per the schedule of repairs of defects.

21.	Kamburu Substation	Kamburu	Ip	Arecont Vision and Pelco		Working but with few faults as per the schedule of existing faults.
22.	Thika Office	Thika Town	Analoque			Working but with major faults/repl acements as per the schedule of repairs of defects
<b>Coast region</b>						
23.	Nyali Pay office	Nyali town	Analogue			Working but with few faults/repl acements as per the schedule of repairs of defects
24.	Rabai Substation		IP	Arecont Vision and Pelco		Working but with few faults/repl acements



						as per the schedule of repairs of defects
25.	Voi substation & stores	Voi	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
26.	Mariakani Substation	Mariakani-Mombasa	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
27.	Kiboko Substation	Kiboko-Makindu	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects

	<b>West Kenya Region</b>					
28.	Mamboleo substation	Kisumu	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
29.	Musaga substation	Kakamega	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
30.	Mumias substation	Mumias- Kisumu	IP	Arecont Vision and Pelco		Working but with few faults/replacements as per the schedule of repairs of defects
31	Kigati substation	Kisii	IP	Arecont Vision and Pelco		few faults/replacements

						as per the schedule of repairs of defects

## B) SCHEDULE OF MAINTENANCE ROUTINES CATEGORY 1: CCTV

This schedule has been prepared to indicate the minimum requirements for the preventative maintenance of the CCTV system. The Contractor shall be responsible for all of the maintenance necessary to ensure that the complete CCTV system as specified in this Maintenance Agreement achieves a constant high quality operation.

The schedule indicates the maintenance tasks required but does not state how they will be carried out. All maintenance activities will be completed in accordance with the equipment manufacturer's guidelines, recommendations and good working practices.

The following symbols are used:-

- M Monthly (calendar)  
 3M Quarterly (3 monthly)  
 6M Semi-annually (6 monthly)  
 Y Annually

In all instances where preventative maintenance work has identified the need to replace equipment, items or components, this work shall be carried out under the maintenance function as defined within the Contract.

### *B (a) Schedule of maintenance routines category 1: CCTV*

No	Code	Description	Service description	Frequency	Remarks
	<b>Cameras</b>				
	C1	<i>Camera External</i>	<ul style="list-style-type: none"> <li>• <i>Visual inspect, check weatherproof gasket for seal, rectify where necessary.</i></li> <li>• <i>Check internal of housing for moisture rectify where necessary.</i></li> <li>• <i>Check external joints, glands, make off and re-seal where necessary</i></li> <li>• <i>Clean housing glass. Replace where necessary.</i></li> </ul>	6months	
	C2	<i>Pan Tilt Mechanism</i>	<ul style="list-style-type: none"> <li>• <i>Check operation of pan tilt mechanism Reset limits where necessary.</i></li> <li>• <i>Check gearbox, bearings, etc. Adjust or replace where necessary</i></li> </ul>	3 months	

			<ul style="list-style-type: none"> <li>• Check pan tilt controller for ingress of moisture. Replace seal where necessary</li> <li>• Check pan tilt operation. Re-set to manufacturer's specification. Replace electronics where necessary</li> </ul>		
	C3	Camera Bracket	<p>Check bracket mounts/poles for corrosion or Mounts/Poles failure and damage to paint Rub down, repaint or replace where necessary</p> <p>Check operation of access door locks, lubricate as necessary</p> <p>Check securing of fixings and fastenings tighten/adjust as necessary</p>	3 months	
	C4	Camera Lens	<ul style="list-style-type: none"> <li>• Remove optical lens. Inspect for moisture seal failure. Rectify or replace where necessary</li> <li>• Clean optical lens with proprietary soft lens cloth and refit.</li> <li>• Check operation of iris and zoom.</li> <li>• Adjust where necessary</li> </ul>	3 months	
	C5	Camera Performance	<ul style="list-style-type: none"> <li>• Measure and record camera's performance.</li> <li>• Provide hard /soft copy of waveform trace</li> </ul>	3 months	
	C6	Telemetry Unit(where applicable)	<ul style="list-style-type: none"> <li>• Check all functions operate correctly</li> <li>• Recalibrate where necessary</li> <li>• Check video loop through</li> <li>• Check video loop through</li> <li>• Check data stream</li> <li>• Check button operation</li> <li>• Check BNC or other connections</li> <li>• Rectify or replace where necessary.</li> </ul>	3 months	
	C7	Cables and ducting	<ul style="list-style-type: none"> <li>• Check cable protection ducts, conduits, mini-trucking etc to ensure proper physical conditions.</li> </ul>	3 months	

			<ul style="list-style-type: none"> <li>• Check all cables for damage, continuity, etc. Replace where necessary</li> </ul>		
	C8	Connections	<p>Check all connections, plugs for damage continuity, moisture ingress</p> <p>Check BNC,RG 45 and other connectors. Replace where necessary</p>	3 months	
	D1	DVR /NVR performance/functionality	<ul style="list-style-type: none"> <li>• Check all functions operate correctly(Recording, time, playbacks, Event logs,voltages,resolution,software,drives,streaming,network,data base,etc</li> <li>• Check all control functions</li> <li>• Reconfigure to right performance specifications/factory resets where necessary.</li> </ul>	3 months	
	D2	DVR/NVR /Video Encoder Storage and recording status	<ul style="list-style-type: none"> <li>• Check and service recording drives and hardisks</li> <li>• Check capacity and advice or rectify storage capacity issues.</li> </ul>	3 months	
	D3	DVR/NVR /Video encoder Connections and buttons	<ul style="list-style-type: none"> <li>• Check BNC/RG 45 and other connections.</li> <li>• Check button operation including remote buttons.</li> <li>• Check Network connectivity and communication.</li> <li>• Cleaning and blowing as per</li> <li>• Rectify where necessary.</li> </ul>	3 months	
	D4	DVR/NVR /Video encoder moveable parts	<p>Check all moveable parts e.g. drives, control knobs, Fans, Motors and others) of DVR or NVR and provide necessary service to the parts according to IEE standards.</p>	6 months	
	M1	Monitors	<ul style="list-style-type: none"> <li>• Check video signal for level.</li> <li>• Check BNC/RJ and other connections. Remake or</li> <li>• Inspect display tube. Replace where necessary</li> <li>• Check condition of cables.</li> <li>• Inspect display tube.</li> <li>• Adjust, rectify or Replace where necessary</li> </ul>	3 months	

			<ul style="list-style-type: none"> <li>• Perform any factory resets if need be.</li> </ul>		
	PC1	Control System and PC	<p>Clean PC. Clean filters to PC fans. Check security of cable connections Check hard disks Software checks and upgrades. Check antivirus and malware protection.</p>	3 months	
	E1	Electrical Power Supplies	<ul style="list-style-type: none"> <li>• Check all input and output parameters (Voltage, current, power, frequency etc.) and ensure its within accepted nominal values as per IEE standards.</li> <li>• Check all surge/overvoltage protection units to ensure correct functionality.</li> <li>• Check operation of Fuses and circuit breakers</li> <li>• Check for ingress of moisture at distribution boards, plugs and sockets</li> <li>• Check all cables for damage, continuity, etc</li> <li>• Check earthing connections</li> <li>• Fixed wiring inspection and test to BS 7671 standards.-(after 2 years)</li> <li>• Rectify where necessary.</li> </ul>	3 months	
		All CCTV equipment	<ul style="list-style-type: none"> <li>• Clean or blow to prevent dust, dirt or any form of corrosion.</li> <li>• Cleaning material and process shall be as per IEE standards of cleaning electrical equipment and in accordance with safety regulations.</li> </ul>	3 months	

B(a) Schedule of Service and Maintenance Routines category 1:CCTV

**C. Schedule of Repair of Defects.**

Site Visit to all sites by contractor shall be mandatory.

## C (a) Existing Faults) Category 1: CCTV

Item No.	Description	Location	Nature of Fault	Proposed Remedy
<b>Nairobi Region</b>				
1.	Stima Plaza	Parklands-Nairobi	<ul style="list-style-type: none"> <li>-Distributed power sources and supplies.</li> <li>-Overloaded power supplies.</li> <li>-Faulty Outdoor Cable</li> <li>-Faulty 2no Cameras.</li> <li>-replacement of hard disks</li> </ul>	<ul style="list-style-type: none"> <li>-Cable management in the control room.</li> <li>-Re-cable faulty outdoor camera using outdoor cable.</li> <li>-Centralize power supply for all analog cameras to the control room.</li> <li>-Replace faulty 2no cameras.</li> <li>-Cable, supply and install 4no indoor 5Mpx dome cameras at the server room.</li> <li>-Allow for integration of the system to the existing GENETIC platform/server at NCC taking note of all necessary licensing as well as configuration of new 6no client users.</li> <li>-Install 2no Managed switch: 24-Port Cisco Catalyst WS-C3560X-24T-</li> <li>-Replace 10no 4TB hard disks for the video server storage.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets.</li> <li>- Configure all UPS to allow monitoring over the network.</li> <li>-Supply and Fit 1no Media converter as per specs provided.</li> </ul>
2.	Electricity house Nairobi	Harambee Avenue-Nairobi	<ul style="list-style-type: none"> <li>-3no IP Faulty Cameras</li> <li>-8no Faulty hard disk. 4T each.</li> </ul>	<ul style="list-style-type: none"> <li>-Allow for installation of Ethernet to Fiber media convertor as well as liaise with KPLC for provision and configuration of fiber optic cable network to allow interlink of the system to Stima Plaza Control room</li> </ul>



				<ul style="list-style-type: none"> <li>-Replace 3no Faulty IP Cameras.</li> <li>-Recable and replace 2no 5MPx Camera in the server room and reposition 2no to adequately cover the server room.</li> <li>-Replace 8no Faulty hard disk.4T each.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets.</li> <li>- Configure all UPS to allow monitoring over the network.</li> <li>-Integrate Existing system to GENETIC at NCC.</li> </ul>
3.	Isiolo Road bulk stores and workshop	Isiolo road-Nairobi	11no indoor faulty cameras at the workshop and faulty 2no outdoor PTZ Cameras. Design communication network ridding on the existing network to link system to Stima plaza	<ul style="list-style-type: none"> <li>Replace 11no faulty cameras at the workshop with IP and 2no PTZ Cameras.</li> <li>-Replace 2no 32-Channel DVR channel with 32-channel Hybrid Dvr to accommodate new replacement cameras.</li> <li>-Allow for installation of Ethernet to Fiber media convertor as well as liaise with KPLC for provision and configuration of fiber optic cable network to allow interlink of the system to Stima Plaza Control room.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets.</li> <li>-Replace all UPS batteries 16no, 7AH, and 12V.</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
4.	Likoni Road	Likoni Road-Nairobi	NONE	<ul style="list-style-type: none"> <li>-Allow for installation of Ethernet to Fiber media convertor as well as liaise with KPLC for provision and configuration of fiber optic</li> </ul>

				<p>cable network to allow interlink of the system to Stima Plaza Control room.</p> <ul style="list-style-type: none"> <li>-Identify and Label all connections to the CCTV equipment/cabinets.</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
5.	Jogoo Road Pay office	Jogoo road-Nairobi	-Faulty DVR	<ul style="list-style-type: none"> <li>-Replace faulty DVR with 16-Channel Hybrid DVR</li> <li>-Allow for installation of Ethernet to Fiber media convertor as well as liaise with KPLC for provision and configuration of fiber optic cable network to allow interlink of the system to Stima Plaza Control room.</li> <li>-Provide 1.5kva UPS.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
6.	Dandora S/S	Kangundo road-Nairobi	2no Faulty Aricontvision camera offline	<ul style="list-style-type: none"> <li>-Replace 2no faulty cameras with 20Mpx Aricontvision, 180 Omni as per specs given</li> <li>-Replace all 6no, 7AH UPS batteries.</li> <li>-Replace 1no PTZ lens cover.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
7.	National Control Centre Juja	Dandora-Nairobi	Upgrade of Out of date Genetic Software Version -Maintain and support or servers and workstations and monitors	<p>Upgrade software to latest version, service and support as per the Schedule.</p> <ul style="list-style-type: none"> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>

				-Supply and install 100no IP Camera licenses as detailed in Bill of Quantities.
8	Nairobi North Substation/Ndenderu	Ndenderu	1no cameras offline(Aricontvision 180)	-Replace 1no 20mpx Aricontvision 180 Omni Camera- -Replace all 6no, 7AH UPS batteries. -Identify and Label all connections to the CCTV equipment/cabinets. - Configure all UPS to allow monitoring over the network.
	<b>Rift Valley: Central and North Rift</b>			
8.	Lanet depot	Lanet-Nakuru	-7no cameras for old control room not Linked due to FOX Network Link Problems. -1no Faulty PTZ -1No Faulty gate bullet camera.	-Replace 1no entrance PTZ on mast. -Remount 2no PTZ (Pole yard and Mast) -Replace 1no Bullet Gate Camera -Replace all 12no, 7AH UPS batteries. -Identify and Label all connections to the CCTV equipment/cabinets. -Trace and restore FOX network Link in liaison with KPLC ICT for the old control room cabinet. - Configure all UPS to allow monitoring over the network.
9.	Makutano substation	Nakuru-Eldoret Road	3no Faulty Cameras.	-Replace 1no Relay Room Dome camera. -Repair 1no Gate bullet camera. -Repair 1no Gate PTZ Camera. -Replace all 6no, 7AH UPS batteries. -Identify and Label all connections to the CCTV equipment/cabinets.

				- Configure all UPS to allow monitoring over the network.
10.	Suswa sub-station	Naivasha	12 cameras offline	-Re-cable and Re-install 8no Cameras uninstalled for old building expansion and maintenance. -Replace 2no 5Mpx dome cameras –new relay room and control room. -Repair 2no PTZ camera -Replace all 6no, 7AH UPS batteries. -Identify and Label all connections to the CCTV equipment/cabinets. - Configure all UPS to allow monitoring over the network.
11.	Chemosit substation	Kericho	8 cameras offline	-Replace 1no Gate PTZ Camera -Replace 2no Bullet cameras(Gate and Backyard) -Repair 1no 180 Deg Omni Camera(overseeing substation) -Replace all 6no, 7AH UPS batteries. -Identify and Label all connections to the CCTV equipment/cabinets - Configure all UPS to allow monitoring over the network.
12.	KVDA banking hall	Eldoret	Old analog system with DVR without password	-Replace DVR with 32-Channel Hybrid DVR. -Replace power supply unit with 1.5KVA UPS. -Identify and Label all connections to the CCTV equipment/cabinets - Configure all UPS to allow monitoring over the network.

13.	Lessos Control Station	Eldoret	1 indoor camera offline	<ul style="list-style-type: none"> <li>-Re-cable and replace 1no camera for the Cctv equipment room.</li> <li>-Activate Access control system</li> <li>-Activate 4no existing Access control door system.</li> <li>-Re-cable and install 2no access control readers for the old control room.</li> <li>-install reader+door maglock to old control room door.</li> <li>-Replace all 12no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
14.	Rivatex Sub Station	Eldoret	1 gate camera offline	<ul style="list-style-type: none"> <li>-Replace 1no bullet camera</li> <li>-Re-cable and replace 1no 20Mpx,180 Deg Omni for the yard.</li> <li>-Replace all 12no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
<b>Mt Kenya Region</b>				
15.	Nyeri Office	Nyeri Stima-Nyeri town	Old system not recording	<ul style="list-style-type: none"> <li>- Supply and install 16-channel NVR with storage capacity of 12TB</li> <li>-Rewire and replace 1no 20Mpx,180 Deg Omni Camera.</li> <li>-Re-wire and replace 3no 5Mpx Bullet /dome outdoor (main entry and rear)</li> </ul>

				<p>-Re-wire and replace 7no 5MPX indoor dome cameras.(banking hall)</p> <p>-</p> <p>-Supply and Install Managed network switch: 24-Port Cisco Catalyst WS-C3560X-24T</p> <p>-Supply and install 1KVA UPS.</p> <p>-Supply and install fully loaded workstation with relevant OS and application software. The workstation shall operate as a server.</p> <p>NB: Installations must be compatible and should be integrated to GENETIC management software at NCC.</p> <p>-Supply and install 6U Cabinet.</p> <p>-Allow for installation of Ethernet to Fiber media convertor as well as liaise with KPLC for provision and configuration of fiber optic cable network to allow interlink of the system to Stima Plaza Control room.</p> <p>- Configure all UPS to allow monitoring over the network.</p> <p>NB: Specs provided for elsewhere in the document.</p>
16.	Meru office	Meru Town	Old system not recording	<p>-Supply and install 16-channel NVR with storage capacity of 12TB</p> <p>-Rewire and replace 1no 20Mpx, 180Deg Omni cameras.</p> <p>-Re-wire and replace 3no 5Mpx Bullet /dome outdoor (main entry and rear)</p>

				<p>-Re-wire and replace 7no 5MPX indoor dome cameras.(banking hall)</p> <p>-Supply and Install Managed network switch: 24-Port Cisco Catalyst WS-C3560X-24T</p> <p>-Supply and install 1.5KVA UPS.</p> <p>-Supply and install fully loaded workstation with relevant OS and application software. The workstation shall operate as a server. NB: Installations must be compatible and should be integrated to GENETIC management software at NCC.</p> <p>-Supply and install 6U Cabinet.</p> <p>-Allow for installation of Ethernet to Fiber media convertor as well as liaise with KPLC for provision and configuration of fiber optic cable network to allow interlink of the system to Stima Plaza Control room.</p> <p>- Configure all UPS to allow monitoring over the network.</p> <p>NB: Specs provided for elsewhere in the document.</p>
17.	Embu office	Embu town	Old system not recording	<p>-Rewire and replace 1no 20Mpx 180Deg Omni cameras.</p> <p>-Re-wire and replace 3no 5Mpx Bullet /dome outdoor (main entry and rear)</p> <p>-Re-wire and replace 6no 5MPX indoor dome cameras.(banking hall)</p> <p>-Supply and install 16-channel NVR with storage</p>

				<p>capacity of 8TB Cisco catalyst</p> <p>-Supply and Install Managed network switch: 24-Port Cisco Catalyst WS-C3560X-24T</p> <p>-Supply and install 1.5KVA UPS.</p> <p>-Supply and install fully loaded workstation with relevant OS and application software. The workstation shall operate as a server.</p> <p>NB: Installations must be compatible and should be integrated to GENETIC management software at NCC.</p> <p>-Supply and install 6U Cabinet.</p> <p>-Supply and install 1no 32 inches video monitor.</p> <p>-Allow for installation of Ethernet to Fiber media convertor as well as liaise with KPLC for provision and configuration of fiber optic cable network to allow interlink of the system to Stima Plaza Control room.</p> <p>- Configure all UPS to allow monitoring over the network.</p> <p>NB: Specs provided for elsewhere in the document</p>
18.	Kamburu substation		Gate camera offline	<p>-Repair 1no PTZ Camera</p> <p>-Replace all 32no, 7AH UPS batteries.</p> <p>-Identify and Label all connections to the CCTV equipment/cabinets</p> <p>- Configure all UPS to allow monitoring over the network.</p>
19.	Nanyuki Substation	Nanyuki	4no Faulty cameras	-Repair 1no PTZ camera (overlooking substation).



				<ul style="list-style-type: none"> <li>-Repair 1no Fixed dome camera(battery room)</li> <li>-Rewire and replace 2no 20Mpx,180 Deg Omni Cameras.1no to involve fabrication of bracket)</li> <li>-Replace all 32no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
20.	Kiganjo substation	Nyeri Kiganjo	Faulty 1no camera(open store)	<ul style="list-style-type: none"> <li>-Repair 1no 20Mpx,180 Deg OMNI camera</li> <li>-Replace all 32no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
21.	Meru Substation	Meru	1no PTZ-switch area)	<ul style="list-style-type: none"> <li>-Repair 1no PTZ Camera(yard)</li> <li>-Replace all 6no, 7AH UPS batteries.</li> <li>-Rename 180 Deg camera facing switch yard.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
22.	Thika Office	Thika town	Old system not recording	<ul style="list-style-type: none"> <li>-Replace of analog DVR with 32-channel Hybrid DVR one which can accommodate both analogue and IP.</li> <li>-Re cable and replace 8no HD dome cameras.</li> <li>-Replace faulty power supply units with 1.5KVA UPS.</li> </ul>

				<ul style="list-style-type: none"> <li>-Supply and Fix 4TB Hard disk.</li> <li>-Supply and fix 6U Cabinet.</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
<b>Coast Region</b>				
23.	Nyali Pay office	Nyali town	Old system but working	<ul style="list-style-type: none"> <li>-Supply 1.5KVA UPS</li> <li>- Replace of analog DVR with 16-channel Hybrid DVR</li> <li>-Repair 1no Door maglock</li> <li>-Service and maintain the system as is (6no analogue cameras 2no stand-alone access control system and all associated equipment and accessories.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
24.	Rabai Substation	Mombasa	13 cameras offline.	<ul style="list-style-type: none"> <li>-Replace 1no bullet camera(main gate)</li> <li>-Replace 5mpx 1no Dome camera(old control 2)</li> <li>-Replace 5mpx 3no Dome camera(old control room 1)</li> <li>-Remount existing 1no PTZ camera(old control 2 front area)</li> <li>-Remount 1no Access control door maglock(cabling done)</li> <li>-Re-cable and replace 2no PTZ on existing mast in the old control 2, cable distance 100m each.</li> <li>-Remount existing 2no 180 Deg Omni new control and old room control 2.</li> <li>-Replace 2no 3KVA UPS(old control 1&amp;2)</li> </ul>

				<ul style="list-style-type: none"> <li>-Replace all 32no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>-Provide for POE surge protection.</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
25.	Voi substation & stores	Voi	2No faulty cameras(PTZ camera offline main gate)	<ul style="list-style-type: none"> <li>-Repair 1no PTZ camera(Yard)</li> <li>-Replace 1no 5Mpx bullet camera(Gate)</li> <li>-Remount the CCTV cabinet by erecting a stand at height of 2ft. high.</li> <li>-Replace all 32no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
26.	Mariakani Substation			<ul style="list-style-type: none"> <li>-Re-cable and remount 2no PTZ on existing boundary wall using a 3M high pole and a cable distance of 100M each. Repair 2no PTZ camera (substation).</li> <li>-Replace all 6no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets.</li> <li>-Configurations of network upon FOX network link up by KPLC.</li> <li>-Configure all UPS to allow monitoring over the network.</li> </ul>
27.	Kiboko Substation	Mombasa	PTZ camera offline	<ul style="list-style-type: none"> <li>-Repair 1no PTZ</li> <li>-Shift and Swap Control room entrance Aricontvision</li> </ul>

				<p>with rear fence bullet camera.</p> <ul style="list-style-type: none"> <li>-Relocate 1no substation PTZ using existing pole cable distance of 100M.</li> <li>-Raise 1no Aricontvision camera about 1M high.</li> <li>-Replace all 6no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets.</li> <li>-Configurations of network upon FOX network link up by KPLC.</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
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<b>West Kenya Region</b>				
28.	Mamboleo substation	Kisumu	3 cameras offline	<ul style="list-style-type: none"> <li>-Shift/extend camera bracket for the main entry control room for better coverage.</li> <li>-Repair Faulty CCTV cabinet door.</li> <li>-Replace 1no 5mpx main gate Bullet Camera.</li> <li>-Repair faulty 2no PTZ Camera(Switchyard and mast)</li> <li>The Mast PTZ slipped out of its mounting requires remounting/repair</li> <li>- Replace all 6no, 7AH UPS batteries.</li> <li>-Identify and Label all connections to the CCTV equipment/cabinets</li> <li>- Configure all UPS to allow monitoring over the network.</li> </ul>
29.	Musaga substation	Kakamega	4no faulty cameras(charger	-Repair 3no Faulty cameras (main gate PTZ, relay room

			room PTZ and relay room)	(cabinet) Dome camera and charger room camera. Allow for relocating the main gate PTZ by mounting it on an existing pole -Replace socket with industrial Socket. -Re-cable and replace 1no Faulty dome. -Replace all 6no, 7AH UPS batteries. -Identify and Label all connections to the CCTV equipment/cabinets -Configure all UPS to allow monitoring over the network.
30.	Mumias substation	Mumias-Kisumu	No communication network to Mumias	-Replace all 6no, 7AH UPS batteries. -Identify and Label all connections to the CCTV equipment/cabinets. -Configurations of network upon FOX network link up by KPLC. - Configure all UPS to allow monitoring over the network
31.	Kegati Substation	Kisii	3no cameras offline	-Re-cable and replace 1no 5Mpx Bullet camera(Main gate) -Replace 1no 5Mpx bullet camera(backyard) -Repair 1no Dome camera(Charger room) -Replace socket with industrial socket outlet. - Replace all 6no, 7AH UPS batteries. -Identify and Label all connections to the CCTV equipment/cabinets -Configure all UPS to allow monitoring over the network.

32.	All substations with outdoor cameras	All regions	Unprotected switches from power surge.	Install POE surge protector for all switches carrying outdoor cameras.
33.	<b>NB: SPECIFICATIONS PROVIDED IN THE DOCUMENT</b>			

**SECTION V –CATEGORY 1: PRICE SCHEDULE FOR SERVICES CCTV SYSTEMS**  
**BILL OF QUANTITIES CATE 1: CCTV**  
***(THE CURRENCY MUST BE IN KENYA SHILLINGS)***

<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Cost exclusive of Taxes</b>	<b>Cost Inclusive of Taxes</b>
<b>A</b>	<p><b>Preventive Maintenance</b>  Prices should include activities as described in details of service for each the sites below:</p> <ul style="list-style-type: none"> <li>• Scheduled quarterly serving.(Drive Test and Optimization, Performance Reports (PMR)</li> <li>• Frequent inspections and monitoring of the systems (spot checks-control room data).</li> <li>• Training/Knowledge transfer</li> <li>• 24x7 remote technical support.</li> <li>• Software and firmware upgrades.</li> </ul>				
1	Stima Plaza	NO	8		
2	Electricity house Nairobi	NO	8		
3	Isiolo Road bulk stores and workshop	NO	8		
4	Likoni Road	NO	8		
5	Jogoo Road Pay office	NO	8		
6	Dandora S/S	NO	8		
7	National Control Centre Juja	NO	8		
8	Nairobi North Substation/Ndenderu	NO	8		
	<b>Total Carried to collection BQ Page 1</b>				

<b>CCTV BILL OF QUANTITIES PAGE 2</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price VAT Exclusive</b>	<b>Total Price VAT Exclusive</b>
<b>Rift valley :central and North Rift</b>					
1.	Lanet depot	NO	8		
2.	Makutano	NO	8		
3.	Suswa sub-station	NO	8		
4.	Chemosit	NO	8		
5.	KVDA banking hall	NO	8		
6.	Lessos Control Station	NO	8		
7.	Rivatex Sub Station	NO	8		
<b>Mt Kenya Region</b>					
8.	Nyeri Office	NO	8		
9.	Meru office	NO	8		
10.	Embu office	NO	8		
11.	Kamburu substation	NO	8		
12.	Nanyuki Substation	NO	8		
13.	Kiganjo substation	NO	8		
14.	Meru Substation	NO	8		
15.	Thika Office	NO	8		
<b>Coast region</b>					
16.	Nyali Pay office	NO	8		
17.	Rabai Substation	NO	8		
18.	Voi substation & stores	NO	8		
19.	Mariakani Substation	NO	8		
20.	Kiboko substation	NO	8		
<b>West Kenya Region</b>					
21.	Mamboleo substation	NO	8		
22.	Musaga substation	NO	8		
23.	Mumias substation	NO	8		
24.	Kegati substation	NO	8		
<b>Total Carried to collection BQ Page 2</b>					



<b>CCTV BILL OF QUATITIES PAGE 3</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price VAT Inclusive</b>	<b>Total Price VAT Inclusive</b>
a)	<p><b>CURATIVE MAINTENANCE (I)</b></p> <p>Prices should include activities as described in details of service for each the sites below:</p> <ul style="list-style-type: none"> <li>• Emergency on-site intervention.</li> <li>• 24x7 remote technical support-Supply and Install a Desktop online support application at the control room and suppliers end to achieve services as described in SLA.</li> <li>• Repair &amp; Return to operations faulty parts or system</li> <li>• Replacement of spare parts.</li> <li>• All consumables as described in detail of service.</li> </ul>				
1	Stima Plaza	NO	8		
2	Electricity house Nairobi	NO	8		
3	Isiolo Road bulk stores and workshop	NO	8		
4	Likoni Road	NO	8		
5	Jogoo Road Pay office	NO	8		
6	Dandora S/S	NO	8		
7	National Control Centre Juja	NO	8		
8	Nairobi North Substation/Ndenderu	NO	8		
<b>Total Carried to collection BQ Page 3</b>					

<b>CCTV BILL OF QUATITIES PAGE 4</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price VAT Exclusive</b>	<b>Total Price VAT Exclusive</b>
a)	<b>CURATIVE MAINTENANCE (I)</b>				
	<b>Rift valley :central and North Rift</b>				
1	Lanet depot	NO	8		
2	Makutano	NO	8		
3	Suswa sub-station/Naivasha	NO	8		
4	Chemosit	NO	8		
5	KVDA banking hall	NO	8		
6	Lessos Control Station	NO	8		
7	Rivatex Sub Station	NO	8		
	<b>Mt Kenya Region</b>				
8	Nyeri Office	NO	8		
9	Meru office	NO	8		
10	Embu office	NO	8		
11	Kamburu substation	NO	8		
12	Nanyuki Substation	NO	8		
13	Kiganjo substation	NO	8		
14	Meru Substation	NO	8		
15	Thika Office	NO	8		
	<b>Coast region</b>				
16	Nyali Pay office	NO	8		
17	Rabai Substation	NO	8		
18	Voi substation & stores	NO	8		
19	Mariakani Substation	NO	8		
20	Kiboko Substation	NO	8		
	<b>West Kenya Region</b>				
21	Mamboleo substation	NO	8		
22	Musaga substation	NO	8		
23	Mumias substation	NO	8		
24	Kegati Substation	NO	8		
	<b>Total Carried to collection BQ Page 4</b>				

<b>CCTV BILL OF QUANTITIES PAGE 5</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price VAT Inclusive</b>	<b>Total Price VAT Inclusive</b>
a)	<b>CURATIVE MAINTENANCE(II): REPAIR OF FAULTY SYSTEMS</b> Prices should include Repair and return to normalcy all existing faults as described under Schedule of repair of faults - Existing faults. Indicate NONE where no faults exist.				
<b>Nairobi region</b>					
1.	Stima Plaza	LOT	1		
2.	Electricity house Nairobi	LOT	1		
3.	Isiolo Road bulk stores and workshop	LOT	1		
4.	Likoni Road	LOT	1		
5.	Jogoo Road Pay office	LOT	1		
6.	Dandora S/S	LOT	1		
7.	National Control Centre Juja	LOT	1		
8.	Nairobi North Substation/Ndenderu	LOT	1		
<b>Total Carried to collection BQ Page 5</b>					

<b>CCTV BILL OF QUATITIES PAGE 6</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price VAT Exclusive</b>	<b>Total Price VAT Exclusive</b>
a)	<b>CURATIVE MAINTENANCE(II): REPAIR OF FAULTY SYSTEMS</b>				
	<b>Rift valley: central and North Rift</b>				
1.	Lanet depot	LOT	1		
2.	Makutano	LOT	1		
3.	Suswa sub-station	LOT	1		
4.	Chemosit sub-station	LOT	1		
5.	KVDA banking hall	LOT	1		
6.	Lessos Control Station	LOT	1		
7.	Rivatex Sub Station	LOT	1		
	<b>Mt Kenya Region</b>				
8.	Nyeri Office	LOT	1		
9.	Meru office	LOT	1		
10	Embu office	LOT	1		
11	Kamburu substation	LOT	1		
12	Nanyuki Substation	LOT	1		
13	Kiganjo substation	LOT	1		
14	Meru Substation	LOT	1		
15	Thika Office	LOT	1		
	<b>Coast region</b>				
16	Nyali Pay office	LOT	1		
17	Rabai Substation	LOT	1		
18	Voi substation & stores	LOT	1		
19	Mariakani Substation	LOT	1		
20	Kiboko Substation	LOT	1		
	<b>West Kenya Region</b>				
21	Mamboleo substation	LOT	1		
22	Musaga substation	LOT	1		
23	Mumias substation	LOT	1		
24	Kegati Substation	LOT	1		
	<b>Total Carried to collection BQ Page 6</b>				

<b>CCTV BILL OF QUATITIES PAGE 7: GENETIC SOFTWARE SUPPORT</b>				
<b>Item Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price VAT Exclusive</b>	<b>Total Price VAT Exclusive</b>
<p><b>2 Years-Maintenance/Support of Existing GENETIC Unified Security Management Software Platform and Video/Storage Servers, workstations and Screens and related equipment</b></p> <p>Submit a detailed separate Proposal Which Must include but not limited to:</p> <ul style="list-style-type: none"> <li>• Scheduled quarterly serving. (Drive Test and Optimization, Performance Reports (PMR). for all GENETIC servers and related equipment.</li> <li>• Daily System Support to KPLC users as need arise.</li> <li>• Frequent inspections and monitoring of the systems (spot checks-control room data).</li> <li>• Training/Knowledge transfer to Security control room operators and technical team.</li> <li>• Detailed and thorough oversee Manufacturers Training for 2no KPLC Technical Support team on all applications of the software (Omni cast Video management, Synergis access control and AUTOVU License plate recognition and any newly released module. Include training cost and oversee transportation and exclude Flight and per diem cost which will be catered for by Kenya Power. Attach training schedule and outline.</li> <li>• 24x7 remote technical support.</li> <li>• Software and firmware upgrades. Upgrade of existing software and subsequent software update released including anti-viruses.</li> <li>• Management of the Video Server at NCC and other application PC where GENETIC is installed.</li> <li>• Integration of future systems as well as third party systems as need arise.</li> </ul>	LOT			
<b>Total Carried to collection BQ Page 7</b>				

<b>CCTV BILL OF QUATITIES PAGE 8: GENETIC SOFTWARE SUPPORT</b>					
	<b>Item Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price VAT Exclusive</b>	<b>Total Price VAT Exclusive</b>
<b>A</b>	Supply, install and configure GENETIC IP Video Device licenses	NO	300		
<b>B</b>	Supply, install and configure GENETIC Access Control devices licenses	NO	50		
<b>C</b>	Supply, install and configure GENETIC Federation(Client workstations) Licenses	NO	20		
<b>Total Carried to collection BQ Page 8</b>					

<b>SUMMARY PAGE BILL OF QUANTITIES CCTV</b>					
	Total Carried to collection BQ Page 1				
	Total Carried to collection BQ Page 2				
	Total Carried to collection BQ Page 3				
	Total Carried to collection BQ Page 4				
	Total Carried to collection BQ Page 5				
	Total Carried to collection BQ Page 6				
	Total Carried to collection BQ Page 7				
	Total Carried to collection BQ Page 8				
	<b>SUB TOTAL</b>				
	<b>Add 16% VAT</b>				
	<b>GRAND TOTAL</b>				

**\*Notes**

**CALL OUT RATES AND DAYWORK CHARGES**

Please note that the Contractor shall complete the price schedule above noting that hourly rates and charges are fixed and uniform subject to the region. There shall be no difference in pricing in relation to the night and daytime hours, more so on weekends/public holidays.

**(PART B) PRICED LIST OF SPARES CATEGORY 1: CCTV SYSTEMS**

<b>NO.</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>
1)	8-Channel DVR	1No	
2)	16-Channel DVR	1No	
3)	4-Channel DVR	1No	
4)	NVR	1No	
5)	Video Encoder 16 channel	1No	
6)	Video Encoder 32 channel		
7)	IP outdoor /indoor Camera Bullet/Box-3MPX	1No	
8)	IP indoor /outdoor Camera Bullet/Box-3MPX	1No	
9)	IP indoor/outdoor Camera Bullet/Box-5MPX	1No	
10)	IP indoor/ outdoor Camera Bullet/Box-8MPX	1No	
11)	IP indoor/ outdoor Camera Bullet/Box-12MPX	1No	
12)	20Mpx 180 Omni		
13)	IP indoor/Outdoor Cameras PTZ	1No	
14)	Analogue/HD indoor/ Outdoor Cameras Bullet/Box/Dome	1No	
15)	Analogue/HD indoor/ Outdoor PTZ Camera	1No	
16)	1A,12V Power supplies	1No	
17)	3A ,12V Power supplies	1No	
18)	8A ,12V Power supplies	1No	
19)	12-15 A ,12V Power supplies	1No	
20)	UPS 3kva	1No	
21)	UPS 5Kva	1No	
22)	UPS 1Kva	1No	
23)	Power supply transformer 12v	1No	
24)	Core Network Switch-24port	1No	
25)	Edge Network Switch-24port	1No	
26)	Network switch 24-48 Port	1No	
27)	Surge and Voltage protector	1No	
28)	1M Coaxial Cable	1No	
29)	1M UTP Cable	1No	
30)	1M Power cable	1No	
31)	Video monitor 21''	1No	
32)	Video monitor 32''	1No	
33)	Video monitor 42''	1No	

34)	1TB Hard Disk	1No	
35)	2TB Hard Disk	1No	
36)	3TB Hard Disk	1No	
37)	4TB Hard Disk	1No	
38)	Conduits 25mm	1No	
39)	Conduits 32mm	1No	
40)	Mini-trukin 25mm	1No	
41)	Mini-trukin 32mm	1No	
42)	1no IP Camera License (general price)	1No	
43)	Media convertors		
	List others if omitted. (Don't include consumables like BNC, Fuses, Remote batteries etc.)		
44)			
45)			
46)			
47)			
48)			
49)			
50)			

**NB: Indicate unit price. List other items omitted as per the site visit (mandatory)**

Item No.	Description	Unit Of Measure	Quantity	*Performance Period OR Performance Start Date	*Performance End Date
1	Repair of faulty CCTV as per schedule or requirement	LOT	1	Contract signing date	3 months after award
2	2 Year service and maintenance contract done quarterly in all sites	NO.	8	Date on completion of repairs above	2 years after repairs
3	2 Years GENETIC security management Support and maintenance	LOT	1	Date on completion of repairs above	2 years after initial upgrade and training.



Date:

Tender Number and Name:

**To:**

The Kenya Power & Lighting Company Limited,  
Stima Plaza,  
Kolobot Road, Parklands,  
P.O Box 30099 – 00100,  
Nairobi, Kenya.

Dear Sirs and Madams,

Having read, examined and understood the Tender Document including all Addenda, receipt of which we hereby acknowledge, we, the undersigned Tenderer, offer to provide .....(*insert services description*) for the sum of.....(*total tender price in words and figures*) or such other sums as may be ascertained in accordance with the schedule of prices inserted by me/ us above.

Name of Tenderer

\_\_\_\_\_

Name and Designation of authorised person signing the Tender

\_\_\_\_\_

Signature of authorised person signing the Tender

\_\_\_\_\_

Stamp of Tenderer

\_\_\_\_\_

**SECTION IV-CATEGORY 2-SCHEDULE OF REQUIREMENTS: INTRUDER ALARM, ELECTRIC FENCES SYSTEMS AND RESPONSE SERVICES**

**A) SCHEDULE OF EQUIPMENT AND SITES TO BE MAINTAINED CATEGORY 2: INTRUDER ALARMS, ELECTRIC FENCES AND RESPONSE SERVICES**

**a) SCHEDULE OF EQUIPMENT TO BE MAINTAINED**

The Schedule of Equipment has been prepared in general terms to identify the equipment covered by the Service and Maintenance Agreement (SLA). Those items not identified but which are clearly required for the operation of the INTRUDER ALARM, ELECTRIC FENCE AND RADIO RESPONSE SERVICES shall be included within the Service and Maintenance Agreement.

**\* All support shall be provided directly by the Contractor and shall be subject to a back-to-back agreement with the various Manufacturers involved (NEMTEK for electric fence and PROSYS (RISCO) panel for the intruder alarm) where the Contractor is not the Manufacturer.**

*A (a) Schedule of Equipment to be serviced and Maintained Category 2(i ) Intruder Alarms*

<b>NO.</b>	<b>ITEM DESCRIPTION</b>
<b>1</b>	<b>Alarm control panel - PROSYS(RISCO)</b>
<b>2</b>	<b>Magnetic contact-HD</b>
<b>3</b>	<b>Magnetic contact-LD</b>
<b>4</b>	<b>Back up Batory 12v,7AH</b>
<b>5</b>	<b>Siren box,Strobe and siren</b>
<b>6</b>	<b>Vibration sensors</b>
<b>7</b>	<b>Cables( Alarm cable, power etc)</b>
<b>8</b>	<b>Panic Button</b>
<b>9</b>	<b>4-channel remote Kit</b>
<b>10</b>	<b>Single channel remote Kit</b>
<b>11</b>	<b>Zone expander</b>
<b>12</b>	<b>Keypad</b>
<b>13</b>	<b>Surge protector</b>
<b>14</b>	<b>1A power supply unit</b>
<b>15</b>	<b>3A Power supply unit</b>
<b>16</b>	<b>9A Power supply unit</b>
<b>17</b>	<b>12A Power supply unit</b>
	<b>List others</b>
<b>18</b>	
<b>19</b>	

*A (a) Schedule of Equipment to be serviced and Maintained Category 2(ii) Electric Fences Intruder Alarms*

<b>No</b>	<b>Item</b>
1.	Electric Fence Energizers(NEMTEK and Hammer)
2.	Back up Battery 12v,7AH
3.	Siren box
4.	Strobe
5.	Siren
6.	Alarm cable
7.	Power cable
8.	Switching Button/remotes/Keyswitches
9.	Keypads
10.	Surge protector
11.	power supply units
12.	HT wires
13.	Fence Poles
14.	Razor Wires
15.	Insulators
16.	Under gate Cables
17.	Earthing Rods and Earthing System
18.	Warning Signs
19.	Cable ducts, trays and routing pipes and conduits/mini-trunkin
20.	Electric Fence Energizers(NEMTEK and Hammer)
	List others if omitted
21.	
22.	
23.	
24.	

**b) (i) Schedule of sites to be Serviced and Maintained Category 2 Intruder Alarms Systems**

	<b>Station</b>	<b>Location</b>	<b>Type of systems</b>	<b>Status</b>
	<b>Nairobi Region: LOT 1</b>			
1.	Stima Plaza	Parklands	Network-based	Working but with few faults/replacements as per the schedule of repairs of defects
2.	Electricity house Nairobi	Harambee Avenue -NRB	Network-based	Working but with few faults/replacements as per the schedule of repairs of defects
3.	Likoni road Stores	Likoni road-NRB	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects
4.	Isiolo road Stores and workshop	Isiolo road-NRB	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects
5.	Jogoo road pay office	Jogoo road-NRB	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects
	<b>Mt Kenya Region: LOT 2</b>			
6.	Thika banking Hall	Thika town	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects
7.	Muranga Office	Muranga town	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects
8.	Nyeri Stima Baking hall	Nyeri town	Network-based	Working but with few faults/replacements as per the schedule of repairs of defects
9.	Meru Banking Hall	Meru town	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects
10.	Embu office	Embu town	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects

11.	Nyahururu banking hall	Nyahururu	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects
<b>WEST KENYA:LOT 3</b>				
12.	Kericho Banking hall	Kericho town	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects. System to be moved to the new building.
13.	Kisii Banking hall	Kisii town	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects. System to be moved to the new banking hall.
14.	Electricity house Kisumu Banking hall	Kisumu city	Network-based	Working but with few faults/replacements as per the schedule of repairs of defects
15.	Kakamega Office	Kakamega town	Stand-alone	Working but with few faults/replacements as per the schedule of repairs of defects
<b>Central Rift</b>				
16.	Electricity house Nakuru Banking hall	Nakuru town	Network-based	Working but with few faults/replacements as per the schedule of repairs of defects
<b>North Rift</b>				
17.	<b>Eldoret KVDA banking hall</b>	Eldoret Town		Working but with few faults/replacements as per the schedule of repairs of defects
18.	<b>Kitale Banking hall</b>			Working but with few faults/replacements as per the schedule of repairs of defects

<b>COAST REGION: LOT 4</b>				
19.	Nyali Pay point			Working but with few faults/replacements as per the schedule of repairs of defects
		Nyali-Mombasa		

**b (ii) Schedule of sites to be Serviced and Maintained Category 2 Electric Fences**

	<b>SUBSTATION</b>	<b>LOCATION</b>	<b>COVERAGE IN LINEAR METERS</b>	<b>STATUS/SCOPE OF WORKS.</b>
	<b>NAIOBI REGION:LOT 1</b>			
	<b><u>NAIROBI</u></b>			
1.	<b>Limuru Substation</b>	Limuru Town	<b>640</b>	Working but with few faults/replacements as per the schedule of repairs of defects
2.	<b>Dandora Substation</b>	Nairobi Area	<b>450</b>	Working but with few faults/replacements as per the schedule of repairs of defects
3.	<b>Doonholm Substation</b>	Nairobi Area	<b>94</b>	Working but with few faults/replacements as per the schedule of repairs of defects
4.	<b>Nairobi West Substation</b>	Nairobi Area	<b>453</b>	Working but with few faults/replacements as per the schedule of repairs of defects
5.	<b>Nairobi South Staff Quarters</b>	Nairobi Area	<b>1500</b>	Working but with few faults/replacements as per the schedule of repairs of defects
6.	<b>Roysambu Substation</b>	Nairobi Area	<b>1,600</b>	Working but with few faults/replacements as per the schedule of repairs of defects
7.	<b>Isiolo Road – E-Plant &amp; Bulk Stores</b>	Nairobi Area	<b>500</b>	Working but with few faults/replacements

				as per the schedule of repairs of defects
8.	<b>Athi River Substation</b>	Athi - River	<b>350</b>	Working but with few faults/replacements as per the schedule of repairs of defects
9.	<b>New Industrial Area Substation</b>	Nairobi Area	<b>1000</b>	Working but with few faults/replacements as per the schedule of repairs of defects
10.	<b>Likoni Road Stores</b>	Nairobi Area	<b>850</b>	Working but with few faults/replacements as per the schedule of repairs of defects
11.	<b>Training School (Ruaraka)</b>	Nairobi Area	<b>730</b>	Working but with few faults/replacements as per the schedule of repairs of defects
12.	<b>Dara Substation</b>	Nairobi Area	<b>45</b>	Working but with few faults/replacements as per the schedule of repairs of defects
13.	<b>High Ridge Staff Quarters</b>	Nairobi Area	<b>400</b>	Working but with few faults/replacements as per the schedule of repairs of defects
14.	Ngong Road Substation	Ngong road	<b>Check record and</b>	Working but with few faults/replacements as per the schedule of repairs of defects



15.	Karen Substation	Karen		Working but with few faults/replacements as per the schedule of repairs of defects
	<b><u>MT KENYA LOT 2</u></b>			
16.	White Sisters Substation	Thika Town	260	Working but with few faults/replacements as per the schedule of repairs of defects
17.	Kingongo Substation	Nyeri Town	350	Working but with few faults/replacements as per the schedule of repairs of defects
18.	Kiganjo Store yard	Kiganjo-Nyeri		Working but with few faults/replacements as per the schedule of repairs of defects
19.	Kinoru Substation	Meru Town	180	Working but with few faults/replacements as per the schedule of repairs of defects
20.	Meru store yard	Meru Town	165	Working but with few faults/replacements as per the schedule of repairs of defects
21.	Embu Depot/stores			Working but with few faults/replacements as per the schedule of repairs of defects
22.	Ruringu substation			Faulty and requiring repairs as

				per the schedule of repairs of defects
23.	Karatina Substation			Faulty and requiring repairs as per the schedule of repairs of defects

<b>WEST KENYA:LOT 3</b>				
24.	Kakamega office	Kakamega Town	<b>350</b>	Working but with few faults/replacements as per the schedule of repairs of defects
25.	Kakamega Substation	Kakamega Town	<b>260</b>	Working but with few faults/replacements as per the schedule of repairs of defects
26.	Kericho Depot	Kericho Town	<b>500</b>	Working but with few faults/replacements as per the schedule of repairs of defects
27.	Kisumu Depot	Kisumu Town	<b>450</b>	Working but with few faults/replacements as per the schedule of repairs of defects
<b>CENTRAL RIFT</b>				
28.	Nakuru Depot	Nakuru Town	<b>800M</b>	Working but with few faults/replacements as per the schedule of repairs of defects
29.	Nyahururu Depot	Nyahururu Town	<b>550</b>	Working but with few faults/replacements as per the schedule of repairs of defects

<b>NORTH RIFT</b>				
<b>30.</b>				Working but with few faults/replacements as per the schedule of repairs of defects
	<b>Eldoret Depot</b>	Eldoret Town	<b>635</b>	
<b>31.</b>				Working but with few faults/replacements as per the schedule of repairs of defects
	<b>Kitale Substation</b>	Kitale Town	<b>382</b>	
<b>COAST REGION:LOT 4</b>				
32.	Kilifi Substation		<b>462</b>	Working but with few faults/replacements as per the schedule of repairs of defects
		Kilifi Town		
33.	Likoni Substation		<b>320</b>	Working but with few faults/replacements as per the schedule of repairs of defects
		Mombasa Town		
34.	Nyali Substation		<b>250</b>	Working but with few faults/replacements as per the schedule of repairs of defects
		Mombasa Town		
35.	New Bamburi Substation		<b>395</b>	Faulty and requiring repairs as per the schedule of repairs of defects
		Bamburi Town		
36.	Makande Substation		<b>180</b>	Working but with few faults/replacements as per the schedule of repairs of defects
		Mombasa Town		
<b><u>SUMMARY</u></b>				
Total Number of fences				

**b (iii) Schedule of sites for Radio Response Services Category 2 Intruder Alarms and Electric Fences**

<b>Item No.</b>	<b>STATION</b>	<b>LOCATION</b>	<b>PROPOSED SERVICE</b>
	<b>Schedule of Sites Response Services</b>		
	<b>Nairobi Region: LOT 1</b>		
1.	Limuru Substation		Install Radio Alarm transmitter and related services.
2.	Dandora Substation		Install Radio Alarm transmitter and related services.
3.	Doonholm Substation		Install Radio Alarm transmitter and related services.
4.	Nairobi West Substation		Install Radio Alarm transmitter and related services.
5.	Nairobi South Staff Quarters		Install Radio Alarm transmitter and related services.
6.	Roysambu Substation		Install Radio Alarm transmitter and related services.
7.	Isiolo Road – E-Plant & Bulk Stores		Install Radio Alarm transmitter and related services.
8.	Athi River Substation		Install Radio Alarm transmitter and related services.
9.	New Industrial Area Substation		Install Radio Alarm transmitter and related services.
10.	Likoni Road Stores		Install Radio Alarm transmitter and related services.
11.	Training School (Ruaraka)		Install Radio Alarm transmitter and related services.
12.	Dara Substation		Install Radio Alarm transmitter and related services.
13.	High Ridge Staff Quarters		Install Radio Alarm transmitter and related services.
14.	Ngong Road Substation		Install Radio Alarm transmitter and related services.
15.	Karen Substation		Install Radio Alarm transmitter and related services.
	<b>Page 1 schedule of Sites radio services</b>		

<b>Item No.</b>	<b>STATION</b>	<b>LOCATION</b>	<b>PROPOSED SERVICE</b>
	<b>Nairobi Region: LOT 1 CONTD'</b>		
16.	Stima Plaza		Install Radio Alarm transmitter and related services
17.	Electricity house Nairobi		Install Radio Alarm transmitter and related services
18.	Jogoo road pay office		Install Radio Alarm transmitter and related services
<b>Page 2 schedule of Sites radio services: Total LOT1 :18no</b>			

<b>Item No.</b>	<b>STATION</b>	<b>LOCATION</b>	<b>PROPOSED SERVICE</b>
	<b>Response services</b>		
	<b>Mt Kenya Region: LOT 2 CONTD'</b>		
1.	White Sisters Substation		Install Radio Alarm transmitter and related services
2.	Kingongo Substation		Install Radio Alarm transmitter and related services
3.	Kinoru Substation		Install Radio Alarm transmitter and related services
4.	Kiganjo yard		Install Radio Alarm transmitter and related services
5.	Ruringu substation		Install Radio Alarm transmitter and related services
6.	Karatina substation		Install Radio Alarm transmitter and related services
7.	Meru store yard		Install Radio Alarm transmitter
8.	Nyeri Stima Baking hall		Install Radio Alarm transmitter and related services
9.	Meru Banking Hall		Install Radio Alarm transmitter and related services
10.	Embu office		Install Radio Alarm transmitter and related services
11.	Embu Depot/substation		Install Radio Alarm transmitter and related services
12.	Nyahururu banking hall		Install Radio Alarm transmitter and related services
<b>Page 3 Schedule of Sites radio services: Total LOT2 :12no</b>			

<b>Item No.</b>	<b>STATION</b>	<b>LOCATION</b>	<b>PROPOSED SERVICE</b>
	<b>Response services</b>		
	<b>WEST KENYA: LOT 3</b>		
1.	Kericho Banking hall		Install Radio Alarm transmitter and related services
2.	Kericho Depot		Install Radio Alarm transmitter and related services
3.	Kisii Banking hall		Install Radio Alarm transmitter and related services
4.	Electricity house Kisumu Baking hall		Install Radio Alarm transmitter and related services
5.	Kisumu Depot		Install Radio Alarm transmitter and related services
6.	Kakamega Office		Install Radio Alarm transmitter and related services
7.	Kakamega Substation		Install Radio Alarm transmitter and related services
8.	<b>Central Rift</b>		
9.	Electricity house Nakuru Baking hall		Install Radio Alarm transmitter and related services
10.	Nakuru Depot		Install Radio Alarm transmitter and related services
11.	<b>North Rift</b>		
12.	Eldoret Depot		Install Radio Alarm transmitter and related services
13.	Kitale Substation		Install Radio Alarm transmitter and related services
14.	Kitale Banking hall		Install Radio Alarm transmitter and related services
<b>Page 4 Schedule of Sites radio services: Total LOT3 :14no</b>			

Item No.	STATION	LOCATION	PROPOSED SERVICE
	<b>Response services</b>		
	<b>COST REGION: LOT 4</b>		
1.	Kilifi Substation		Install Radio Alarm transmitter and related services
2.	Likoni Substation		Install Radio Alarm transmitter and related services
3.	Nyali Pay Point		Install Radio Alarm transmitter and related services
4.	Nyali Substation		Install Radio Alarm transmitter and related services
5.	New Bamburi Substation		Install Radio Alarm transmitter and related services
6.	Makande Substation		Install Radio Alarm transmitter and related services
<b>Page 5 Schedule of Sites radio services: Total LOT3 :6no</b>			

## **B. SCHEDULE OF MAINTENANCE ROUTINES CATEGORY 2: INTRUDER ALARMS, ELECTRIC FENCES AND RADIO BACK UP RESPONSE SERVICES**

This schedule has been prepared to indicate the minimum requirements for the preventative maintenance of **the Intruder Alarm, Electric Fence and Radio Response services**. The Contractor shall be responsible for all of the maintenance necessary to ensure that the complete Intruder Alarm, Electric Fence and Radio Response services as specified in this Service and Maintenance Agreements achieves a constant high quality operation.

The schedule indicates the maintenance tasks required but does not state how they will be carried out. All maintenance activities will be completed in accordance with the equipment manufacturer's guidelines, recommendations and good working practices.

The following symbols are used:-

- M Monthly (calendar)
- 3M Quarterly (3 monthly)
- 6M Semi-annually (6 monthly)
- Y Annually

In all instances where preventative maintenance work has identified the need to replace equipment, items or components, this work shall be carried out under the maintenance function as defined within the Contract.

### ***B (i) schedule of maintenance routines Intruder Alarm Systems***

ADDENDUM 1-TENDER NO KP1/9AA-2/OT/57/ADM/16-17 FOR PRVISION OF SERVICE AND MAINTENANCE CONTRACT FOR SECURITY SYSTEMS COMPANYWIDE



No.	Code	Description	Service description	Frequency	Remarks
	<b>Intruder Alarms</b>				
	C1	<i>External Housings(siren boxes, sensors etc)</i>	<ul style="list-style-type: none"> <li>• <i>Visual inspect, check weatherproof gasket for seal, rectify where necessary.</i></li> <li>• <i>Check internal of housing for moisture rectify where necessary.</i></li> <li>• <i>Check external joints, glands, make off and re-seal where necessary</i></li> <li>• <i>Clean housing glass. Replace where necessary.</i></li> </ul>	6months	
	C5	<i>PIR /Magnetic contacts, Vibration sensors, Panic buttons Performance</i>	<ul style="list-style-type: none"> <li>• <i>Measure and record device performance.</i></li> <li>• <i>Provide hard /soft copy of report of the tests.</i></li> </ul>		
	C7	<i>Cables and ducting</i>	<ul style="list-style-type: none"> <li>• <i>Check cable protection ducts, conduits, mini-trucking etc to ensure proper physical conditions.</i></li> <li>• <i>Check all cables for damage, continuity, etc. Replace where necessary</i></li> </ul>	3 months	
	C8	<i>Connections</i>	<i>Check all connections, plugs for damage continuity, moisture ingress Check BNC,RG 45 and other connectors. Replace where necessary</i>		
	D1	<i>Control Panel performance/functionality</i>	<ul style="list-style-type: none"> <li>• <i>Check all functions operate correctly(Recording, time, playbacks, Event logs,voltages,resolution,software,d rives,streaming,network,database,etc</i></li> <li>• <i>Check all control functions</i></li> <li>• <i>Reconfigure to right performance specifications/factory resets where necessary.</i></li> </ul>		

M1	Monitors	<ul style="list-style-type: none"> <li>• Check video signal for level.</li> <li>• Check BNC/RJ and other connections. Remake or</li> <li>• Inspect display tube. Replace where necessary</li> <li>• Check condition of cables.</li> <li>• Inspect display tube.</li> <li>• Adjust, rectify or Replace where necessary</li> <li>• Perform any factory resets if need be.</li> </ul>		
PC1	Control System and PC	<p>Clean PC. Clean filters to PC fans. Check security of cable connections Clean hard disks Software checks and upgrades. Check antivirus and malware protection.</p>		
E1	Electrical Power Supplies	<ul style="list-style-type: none"> <li>• Check all input and output parameters (Voltage, current, power, frequency etc.) and ensure its within accepted nominal values as per IEE standards.</li> <li>• Check all surge/overvoltage protection units to ensure correct functionality.</li> <li>• Check operation of Fuses and circuit breakers</li> <li>• Check for ingress of moisture at distribution boards, plugs and sockets</li> <li>• Check all cables for damage, continuity, etc</li> <li>• Check earthing connections</li> <li>• Fixed wiring inspection and test to BS 7671 standards.-(after 2 years)</li> <li>• Rectify where necessary.</li> </ul>		
	All INTRUDER ALARM equipment	<ul style="list-style-type: none"> <li>• Clean or blow to prevent dust, dirt or any form of corrosion.</li> <li>• Cleaning material and process shall be as per IEE standards of cleaning electrical equipment and in accordance with safety regulations.</li> </ul>		

**B.(i) Schedule of Maintenance Routines Category 2: Intruder Alarms**

**B (ii) Schedule of maintenance routines Electric Fence**

The following items shall be checked **quarterly**.

1. Check all the wiring and connections, fixing any loose connections and discontinuity to ensure electrical continuity of both the voltage, current and earthing.
2. Check and record operational voltage and current parameters to ensure that they are within the expected range.
3. Check the electric fence energizer and other electrical devices against dust, loose connections, short circuit, overheating and other malfunctioning, checking all input and outputs parameters to ensure proper operations.
4. Check electric fence against any environmental hazards like vegetation growths, fallen tree branches, leaves and other objects, leakages, corrosive materials, chemicals and others.
5. Check and ensure proper electrical insulation.
6. Prepare and submit a maintenance report with a check list of all the above checks properly detailing operations/action taken and recommendations where necessary.
7. Test and ensure the entire fence is working properly.
8. Check and rectify any other item that may hinder efficient operation of the entire electric fence.
9. Allow for replacement of faulty parts as per the attached list of spares.
10. Prepare and submit Service and Maintenance quarterly report within first week of servicing.

**Daily**

Contractor shall check with Security Control room fault Logs and attend accordingly.

The contractor shall prepare and submit reports of faults attended to.

**C. BRIEF SCHEDULE OF SERVICES REQUIRED CATEGORY 2 INTRUDER ALARM, ELECTRIC FENCES AND RADIO RESPONSE SERVICES**

- i) Repair of Faulty Alarm System, electric fences and Radio response Services shall be as per the schedule below and should commence upon contract signing.
- ii) The contract duration for the Repairs should not exceed 3 months from commencement of contract.
- iii) Service and maintenance **period** will be two years after repairs as per the schedule.

Item No.	Description	Unit Of Measure	Quantity	*Performance OR Performance Date	Period Start	*Performance End Date
1	Repair of faulty electric fence and alarms in all Lots.	LOT	1	Contract signing date		3 months after award
2	2-Years' service and maintenance contract done quarterly in all sites	NO.	8	Date on completion of repairs above		2 years after repairs
3	2 Years Radio Alarm Response Services	LOT	1	Date on completion of repairs above		2 years after repairs

**D: Schedule of Repair of Defects Category 2 Intruder Alarm System and Electric Fence****D (i) Existing Faults Category 2: Intruder Alarm Systems**

	<b>Station</b>	<b>Location</b>	<b>Nature of fault</b>	<b>Proposed Remedy</b>
	<b>Nairobi Region: LOT 1</b>			<b>Zone expander module(fire exit doors)</b> -
1.	Stima Plaza	Parklands	System working but need some repairs and adjustments as described.	-Replace 1no 16-zone expander module -Replace 5no PSU and panel batteries. -Supply and install IP/GSM module as one unit. -Supply and install IP/GSM base station module and relevant software for receiving and managing all alarms from Fences and intruder alarms. -Provide 1no Long range remote kit with extra 2no buttons. -Provide current version Pros Alarm management application software to integrate all alarm installations. -Supply and install 1no work station to act as the alarm server with an extra 42 inch monitoring screen.

2.	Electricity house Nairobi	Harambee Avenue -NRB	Working but require some adjustments as indicated.	-Supply and install IP/GSM module as one unit. -Replace 2no PSU and panel battery.
3.	Likoni road Stores	Likoni road-NRB	Working but require some adjustments as indicated	-Supply and install IP/GSM module as one unit. -Replace 6no PSU and panel batteries
4.	Isiolo road Stores and workshop	Isiolo road-NRB	Working but require some adjustments as indicated	-Supply and install IP/GSM module as one unit -Replace 8no PSU and panel battery.
5.	Jogoo road pay office	Jogoo road-NRB	Working but require some adjustments as indicated	-Supply and install IP/GSM module as one unit. -Replace 2no PSU and panel batteries
<b>Mt Kenya Region: LOT 2</b>				
6.	Thika banking Hall	Thika town		-Replace faulty alarm panel with Pros 128 with additional 1no Keypad for the Safe. -Supply and install 1no 8-zone expander -Re-cable and replace 2no motion detectors. -Supply and fix 1no Long range remote kit with 2no extra buttons. -Replace 1no PSU battery. -Supply and install IP/GSM module as one unit

7.	Muranga Office	Muranga town		<ul style="list-style-type: none"> <li>-Replace faulty Keypad.</li> <li>-Replace 2no PSU and panel batteries.</li> <li>-Supply and install IP/GSM module as one unit</li> <li>-Replace 1no Panic button.</li> </ul>
8.	Nyeri Stima Baking hall	Nyeri town		<ul style="list-style-type: none"> <li>-Supply and install 1no Motion detector for the safe.</li> <li>- Supply and install 1no Keypad for the safe.</li> <li>-Re-cable and install 2no panic buttons.</li> <li>-Replace 2no panel and PSU batteries.</li> </ul>
9.	Meru Banking Hall	Meru town		<ul style="list-style-type: none"> <li>-Replace alarm panel with Pros 128 with additional 1no Keypad for the Safe</li> <li>-Rewire, Supply and install 6no Motion detectors.</li> <li>- Rewire, Supply and install 4no Magnetic contacts.</li> <li>-Re-cable and install 1no panic buttons.</li> <li>-Supply and Install 1no 8-zone expander module</li> <li>-Replace 2no panel and PSU batteries</li> <li>-Replace 1no Short range remote Kit.</li> <li>- Supply and install IP/GSM module as one unit</li> </ul>
10.	Embu office	Embu town		<ul style="list-style-type: none"> <li>-Rewire, Supply and install 4no Motion detectors.</li> </ul>

				<ul style="list-style-type: none"> <li>- Rewire, Supply and install 2no Magnetic contacts.</li> <li>-Relocate 2no cashiers panic buttons.</li> <li>-Replace 1no panel batteries.</li> <li>-Replace 1no Short range remote Kit.</li> <li>- Supply and install IP/GSM module as one unit</li> </ul>
11.	Nyahururu banking hall	Nyahururu		<ul style="list-style-type: none"> <li>-Replace alarm panel with Pros 128 with additional 1no Keypad for the Safe</li> <li>-Rewire, Supply and install 5no Motion detectors.</li> <li>- cable, Supply and install 8no Magnetic contacts.</li> <li>-Mount firmly loose panic buttons.</li> <li>-Supply and Install 1no 8-zone expander module</li> <li>-Supply and fix 1no Short range remote Kit.</li> <li>- Supply and install IP/GSM module as one unit</li> </ul>
12.	Kiganjo Substation	Nyeri-Kiganjo		<ul style="list-style-type: none"> <li>- Supply and install IP/GSM module as one unit</li> <li>-Replace Siren Kit</li> <li>-Replace panel Battery.</li> <li>-Supply 2no Remote buttons.</li> </ul>
	<b>WEST KENYA:LOT 3</b>			
13.	Kericho Banking hall	Kericho town		<ul style="list-style-type: none"> <li>-Remove existing system from old</li> </ul>



				<p>office and transfer to the new building with the following:-</p> <ul style="list-style-type: none"> <li>-Supply and fix additional 1no Keypad for the Safe</li> <li>-Rewire, and remount 3no Motion detectors.</li> <li>- Supply and install 1no HD Magnetic contacts.</li> <li>-Cable and remount 1no Magnetic contacts.</li> <li>-Cable and re-mount 2no panic buttons.</li> <li>-Re-mount 1no Short range remote Kit.</li> <li>-Replace 1no Panel Battery.</li> <li>-Replace 1no Siren Kit.</li> <li>- Supply and install IP/GSM module as one unit</li> </ul>
14.	Kisii Banking hall	Kisii town		<ul style="list-style-type: none"> <li>-Remove existing system from old office and transfer to the new building with the following:-</li> <li>- Replace alarm panel with Pros hybrid 128 with additional 1no Keypad for the Safe. Panel to accommodate access control module.</li> <li>-Rewire, and remount 5no Motion detectors.</li> <li>-Cable, Supply and install 1no additional Motion detector.</li> <li>- Supply and install 1no HD Magnetic contacts.</li> </ul>

				<ul style="list-style-type: none"> <li>-Cable and remount 2no Magnetic contacts.</li> <li>-Cable and re-mount 5no panic buttons.</li> <li>-Cable, supply and install 8no Panic Buttons</li> <li>-Re-mount 1no Short range remote Kit.</li> <li>-Replace 1no Panel Battery.</li> <li>- Replace 1no Siren Kit</li> <li>-Re-cable and Transfer 3no Manual door system</li> <li>-Supply and install 1no Access control module to work with the Alarm panel to control the doors.</li> <li>- Supply and install IP/GSM module as one unit</li> </ul>
15.	Electricity house Kisumu Banking hall	Kisumu city		<ul style="list-style-type: none"> <li>-Remount 1no loose Magnetic contacts.</li> <li>- Remount Loose Control panel, Power supply unit and IP/GSM module.</li> <li>- Replace 2no Panel + PSU Batteries.</li> </ul>
16.	Kakamega Office	Kakamega town		<ul style="list-style-type: none"> <li>Replace alarm panel with Pros hybrid 128 with additional 1no Keypad for the Safe and 1no 8-Zone expander module.</li> <li>Panel to accommodate access control module.</li> <li>-Rewire, and remount 3no Motion detectors.</li> </ul>

				<ul style="list-style-type: none"> <li>-Cable, Supply and install 3no additional Motion detector.</li> <li>- Supply and install 2no HD Magnetic contacts.</li> <li>-Cable and remount 1no Magnetic contacts.</li> <li>-Cable and re-mount 4no panic buttons.</li> <li>-Remount loose 2no existing cashier panic buttons.</li> <li>-Cable, supply and install 8no Panic Buttons</li> <li>-Re-mount 1no Short range remote Kit.</li> <li>-Replace 1no Panel Battery.</li> <li>- Replace 1no Siren Kit</li> <li>-Relocate 1no banking hall Keypad to the entrance.</li> <li>-Supply and install 1no Access control module to work with the Alarm panel to control the doors.</li> <li>- Supply and install IP/GSM module as one unit</li> </ul>
	<b>CENTRAL RIFT</b>			
17.	Electricity house Nakuru Banking hall	Nakuru town		<ul style="list-style-type: none"> <li>- Replace 2no Panel+ PSU Batteries</li> <li>-Supply and install 1no Long range remote kit with extra 2no buttons.</li> <li>- Supply and install IP/GSM module as one unit</li> </ul>

	NORTH RIFT			
18.	Eldoret Depot	Eldoret Town		<ul style="list-style-type: none"> <li>- Remount loose 1no existing cashier panic buttons</li> <li>-Re-cable and replace 2no cashier panic buttons.</li> <li>-Remount 1no loose remote kit.</li> <li>-Replace 2no Remote buttons.</li> <li>-Supply and install IP/GSM module as one unit</li> <li>-Supply and install 1no Extra keypad for the safe.</li> <li>-Relocate 1no Motion detector for the banking hall.</li> </ul>
19.	Kitale Banking hall	Kitale Town		<ul style="list-style-type: none"> <li>-Replace alarm panel with Pros hybrid 128 with additional 1no Keypad for the Safe</li> <li>-Relocate 3no Motion detectors for good coverage (Entrance and revenue office.)</li> <li>- Supply and install 1no Extra keypad for the safe.</li> <li>-Recable and replace 1no Panic button.</li> <li>-Supply and install 1no Motion detector for the safe.</li> <li>- Replace 2no short range Remote buttons</li> </ul>

				-Supply and install IP/GSM module as one unit - Supply and install 1no Extra keypad for the safe.
<b>Coast Region: LOT 4</b>				
20.	Nyali Pay point	Mombasa Nyali	-	- Replace alarm panel with 128 with additional 1no Keypad for the Safe -Supply and install IP/GSM module as one unit -Supply and install 1no Motion detector for the safe. - Supply and install 1no short range remote kit.

*Note.*

The Contractor will be required to carry out any defect repairs and undertake a full preventative maintenance service at the commencement of the Maintenance Contract, such that all defects are repaired and the system returned to optimum operating performance within 12 weeks of the award of the contract.

## D (ii) Existing Faults Category 2: Electric Fences Systems

	Station	Location	Nature of faults	Proposed scope of works./remedy
	<b>NAIOBI REGION:LOT 1</b>			
	<b><u>NAIROBI</u></b>			
1.	Limuru Substation	Limuru Town	Fence working but require corrections as described.	-Treat and repaint Fence poles and Razor. -Install IP/GSM Module as one unit.
2.	Dandora Substation	Nairobi Area	Fence working but require corrections as described.	-Supply and Install IP/GSM Module as one unit. -Run Power cable, install MCB and related equipment and accessories from the control room building to supply the energizer seated at the guard house situated at an approximate distance of 250M. Works to meet all standards of external electrical installation as per the IEE standards. -Supply and install 1no short range remote Kit. -Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.
3.	<b>Donholm Substation</b>	Nairobi Area	Fence working but require corrections as described	- Supply and Install IP/GSM Module as one unit.

				<ul style="list-style-type: none"> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> </ul>
4.	<b>Nairobi West Substation</b>	Nairobi Area	Fence working but require corrections as described	<ul style="list-style-type: none"> <li>- Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> </ul>
5.	<b>Nairobi South Staff Quarters</b>	Nairobi Area	Fence working but require corrections as described	<ul style="list-style-type: none"> <li>- Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> </ul>
6.	<b>Roysambu Substation</b>	Nairobi Area	Fence working but require corrections as described	<ul style="list-style-type: none"> <li>- Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> </ul>

				-Supply and install 1no short range remote Kit.
7.	<b>Isiolo Road – E-Plant &amp; Bulk Stores</b>	Nairobi Area	Fence working but require corrections as described	- Supply and Install IP/GSM Module as one unit. -Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit.
8.	<b>Athi River Substation</b>	Athi - River	Fence working but require corrections as described	- Supply and Install IP/GSM Module as one unit. -Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit.
9.	<b>New Industrial Area Substation</b>	Nairobi Area	Fence working but require corrections as described	- Supply and Install IP/GSM Module as one unit. -Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit.
10.	Likoni Road Stores	Nairobi Area	Fence working but require corrections as described	- Supply and Install IP/GSM Module as one unit.



				<ul style="list-style-type: none"> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> </ul>
<b>11.</b>	Training School (Ruaraka)	Nairobi Area	Fence working but require corrections as described	<ul style="list-style-type: none"> <li>- Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> </ul>
<b>12.</b>	Dara Substation	Nairobi Area	Fence working but require corrections as described	<ul style="list-style-type: none"> <li>- Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> </ul>
<b>13.</b>	High Ridge Staff Quarters	Nairobi Area	Fence working but require corrections as described	<ul style="list-style-type: none"> <li>- Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no long range</li> </ul>

				remote Kit with 2no extra buttons.
14.	Ngong Road Substation	Ngong road	Fence working but require corrections as described	<ul style="list-style-type: none"> <li>- Repair Faulty Fence section of 20M.</li> <li>-Replace the energizer with NEMTEK Druid 15.</li> <li>-Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> </ul>
15.	Karen Substation	Karen	Fence working but require corrections as described	<ul style="list-style-type: none"> <li>- Repair Faulty Fence section of 15M.</li> <li>-Replace the energizer with NEMTEK Druid 15.</li> <li>-Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> </ul>
	<b>MT KENYA LOT 2</b>			
16.	White Sisters Substation	Thika Town	Fence working but require corrections as described	-Supply and Install IP/GSM Module as one unit.

				-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit.
<b>17.</b>	Kingo'ng'o Substation	Nyeri Town	Fence working but require corrections as described	-Supply and Install IP/GSM Module as one unit. -Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit.
<b>18.</b>	Kiganjo Pole yard	Kiganjo Nyeri	Fence working but require corrections as described	-Connect and configure Fence to existing Alarm GSM/IP Module -Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.
<b>19.</b>	Kinoru Substation	Meru Town	Fence working but require corrections as described	-Supply and Install IP/GSM Module as one unit. -Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit.
<b>20.</b>	Meru store yard	Meru Town	Fence working but require	-Check and rectify the earthing

			corrections as described	systems providing for earthing at intervals of not less than 30M. -Connect and configure Fence to existing Alarm GSM/IP Module
21.	Embu Office/stores		Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit. -Connect and configure Fence to existing Alarm GSM/IP Module.
		Embu		
22.	Embu store/substation		Fence faulty	-Check, diagnose and rectify power source to the energizer. - Generally examine the fence structure and Rectify short circuit or tighten any loose wires. -Supply and Install IP/GSM Module as one unit. -Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no Long range remote Kit with extra 2no remote buttons.
		Embu		

23.	Ruringu substation		Fence working but require corrections as described	<ul style="list-style-type: none"> <li>-Repair short circuit.</li> <li>Replace the energizer with NEMTEK Druid 15.</li> <li>-Replace Strobe.</li> <li>- Check and rectify the earthing systems providing for earthing at intervals of not less than 30M</li> <li>-Supply and install 1no short range remote Kit.</li> <li>-Supply and Install IP/GSM Module.</li> </ul>
24.	Karatina Substation		Fence working but require corrections as described	<ul style="list-style-type: none"> <li>-Replace the energizer with NEMTEK Druid 15.</li> <li>-Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no short range remote Kit.</li> <li>-Generally examine the fence structure and Rectify short circuit or tighten any loose wires.</li> </ul>

<b>WEST KENYA:LOT 3</b>				
<b>1.</b>			Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Connect and configure Fence to existing Alarm GSM/IP Module.
	Kakamega office	Kakamega Town		
<b>2.</b>			Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit. - Supply and Install IP/GSM Module as one unit.
	Kakamega Substation	Kakamega Town		
<b>3.</b>			Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit. - Supply and Install IP/GSM Module as one unit.
	Kericho Depot	Kericho Town		
<b>4.</b>			Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit.
	Kisumu Depot	Kisumu Town		

				- Supply and Install IP/GSM Module as one unit.
	<b>CENTRAL RIFT</b>			
5.	Nakuru Depot	Nakuru Town	Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no Long range remote Kit. - Supply and Install IP/GSM Module as one unit.
	<b>NORTH RIFT</b>			
6.	Eldoret Depot	Eldoret Town	Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no Long range remote Kit with extra 2no Remote buttons. - Supply and Install IP/GSM Module as one unit.
7.	Kitale Substation	Kitale Town	Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit. - Supply and Install IP/GSM

				Module as one unit.
	<b>COAST REGION:LOT 4</b>		Fence working but require corrections as described	
8.	Kilifi Substation	Kilifi Town	Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no long range remote Kit with 2no extra buttons - Supply and Install IP/GSM Module as one unit.
9.	Likoni Substation	Mombasa Town	Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit. - Supply and Install IP/GSM Module as one unit.
10.	Nyali Substation	Mombasa Town	Fence working but require corrections as described	-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M. -Supply and install 1no short range remote Kit. - Supply and Install IP/GSM



				Module as one unit.
11.	New Bamburi Substation		Fence working but require corrections as described	<ul style="list-style-type: none"> <li>-Replace the energizer with NEMTEK Druid 15 complete with battery and lockable energizer cabinet.</li> <li>-Supply and Install IP/GSM Module as one unit.</li> <li>-Check and rectify the earthing systems providing for earthing at intervals of not less than 30M.</li> <li>-Supply and install 1no long range remote Kit.</li> <li>-Generally examine the fence structure and Rectify short circuit or tighten any loose wires.</li> <li>- Repair Faulty Fence section of 50M complete with all necessary materials.</li> <li>-Supply and install 1no 10A MCB</li> <li>-Treat and paint existing fence poles.</li> <li>-Replace 1no siren kit.</li> <li>-Replace 1no Avs surge protector.</li> </ul>
		Bamburi Town		
12.	Makande Substation		Fence working but require corrections as described	Check and rectify the earthing systems providing for earthing at
		Mombasa Town		

				intervals of not less than 30M. -Supply and install 1no short range remote Kit with extra 2no remote buttons. - Supply and Install IP/GSM Module as one unit.
	<b><u>SUMMARY</u></b>			
	Total Number of fences			

**SECTION V – CATEGORY 2: PRICE SCHEDULE FOR PROVISION OF SERVICES AND MAINTENANCE SLA INTRUDER ALARM SYSTEMS AND ELECTRIC FENCES**

*(THE CURRENCY MUST BE IN KENYA SHILLINGS)*

**PART (A)(I) BILL OF QUANTITIES CATEGORY 2: INTRUDER ALARM SYSTEMS**

**INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 1**

<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>A</b>	<p><b>Preventive Maintenance</b> Prices should include activities as described in details of service for each the sites below:</p> <ul style="list-style-type: none"> <li>• Scheduled quarterly serving. (Drive Test and Optimization, Performance Reports (PMR)</li> <li>• Frequent inspections and monitoring of the systems (spot checks-control room data).</li> <li>• Training/Knowledge transfer</li> <li>• 24x7 remote technical support.</li> <li>• Software and firmware upgrades.</li> </ul>				
	<b>Nairobi Region: LOT 1</b>				
1.	Stima Plaza	No	8		
2.	Electricity house Nairobi	No	8		
3.	Likoni road Stores	No	8		
4.	Isiolo road Stores and workshop	No	8		
5.	Jogoo road pay office	No	8		
	<b>Total Carried to collection BQ Page 1</b>				

<b>INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 2</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Preventive Maintenance</b>				
	<b>Mt Kenya Region: LOT 2</b>				
1.	Thika banking Hall	No	8		
2.	Muranga Office	No	8		
3.	Nyeri Stima Baking hall	No	8		
4.	Meru Banking Hall	No	8		
5.	Embu office	No	8		
6.	Nyahururu banking hall	No	8		
7.	Kiganjo Substation	No	8		
	<b>Total Carried to collection BQ Page 2</b>				

<b>INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 3</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Preventive Maintenance</b>				
	<b>WEST KENYA: LOT 3</b>				
1	Kericho Banking hall	No	8		
2	Kisii Banking hall	No	8		
3	Electricity house Kisumu Baking hall	No	8		
5	Kakamega Office	No	8		
	<b>Central Rift</b>				
13	Electricity house Nakuru Baking hall	No	8		
	<b>North Rift</b>				
21	Eldoret KVDA Banking hall	No	8		
22	Kitale Banking hall.	No	8		
	<b>Total Carried to collection BQ Page 3</b>				



<b>INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 5</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>B</b>	<p><b>Curative Maintenance (I)</b> Prices should include activities as described in details of service for each the sites below:</p> <ul style="list-style-type: none"> <li>• Emergency on-site intervention.</li> <li>• 24x7 remote technical support Supply and Install a Desktop online support application at the control room and suppliers end to achieve services as described in SLA.</li> <li>• Repair &amp; Return to operations faulty parts or system</li> <li>• Replacement of spare parts.</li> </ul>				
<b>Nairobi Region: LOT 1</b>					
1.	Stima Plaza	Item	1		
2.	Electricity house Nairobi	Item	1		
3.	Likoni road Stores	Item	1		
4.	Isiolo road Stores and workshop	Item	1		
5.	Jogoo road pay office	Item	1		
<b>Total Carried to collection BQ Page 5</b>					

<b>INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 6</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance</b>				
	<b>Mt Kenya Region: LOT 2</b>				
1.	Thika banking Hall	Item	1		
2.	Muranga Office	Item	1		
3.	Nyeri Stima Baking hall	Item	1		
4.	Meru Banking Hall	Item	1		
5.	Embu office	Item	1		
6.	Nyahururu banking hall	Item	1		
7.	Kiganjo Substation				
	<b>Total Carried to collection BQ Page 6</b>				



<b>SLA INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 7</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance</b>				
	<b>WEST KENYA: LOT 3</b>				
1.	Kericho Banking hall	Item	1		
2.	Kisii Banking hall	Item	1		
3.	Electricity house Kisumu Baking hall	Item	1		
4.	Kakamega Office	Item	1		
	<b>Central Rift</b>				
5.	Electricity house Nakuru Baking hall	Item	1		
	<b>North Rift</b>				
6.	Eldoret KVDA Banking hall	Item	1		
7.	Kitale Banking Hall.	Item	1		
	<b>Total Carried to collection BQ Page 7</b>				

<b>INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 8</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance</b>				
	<b>COST REGION: LOT 4</b>				
1	Nyali pay point	Item	1		
	<b>Total Carried to collection BQ Page 8</b>				

<b>INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 9</b>					
<b>ALARM SYSTEM</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>C</b>	<p><b>Curative maintenance(ii): repair of faulty systems</b></p> <ul style="list-style-type: none"> <li>Prices should include Repair and return to normalcy all existing faults as described under Schedule of Existing faults. Indicate NONE where no faults exist.</li> </ul>				
<b>Nairobi Region: LOT 1</b>					
1.	Stima Plaza	Item	1		
2.	Electricity house Nairobi	Item	1		
3.	Likoni road Stores	Item	1		
4.	Isiolo road Stores and workshop	Item	1		
5.	Jogoo road pay office	Item	1		
<b>Total Carried to collection BQ Page 9</b>					



<b>INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 11</b>					
<b>ALARM SYSTEM</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative maintenance(ii): repair of faulty systems</b>				
	<b>WEST KENYA: LOT 3</b>				
1.	Kericho Banking hall	Item	1		
2.	Kisii Banking hall	Item	1		
3.	Electricity house Kisumu Baking hall	Item	1		
4.	Kakamega Office	Item	1		
	<b>Central Rift</b>				
5.	Electricity house Nakuru Baking hall	Item	1		
	<b>North Rift</b>				
6.	Eldoret KVDA Banking hall	Item	1		
7.	Kitale Banking hall	Item	1		
	<b>Total Carried to collection BQ Page 11</b>				

<b>INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 12</b>					
<b>ALARM SYSTEM</b>					
	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative maintenance(ii): repair of faulty systems</b>				
	<b>COST REGION: LOT 4</b>				
	Nyali pay point	Item	1		
	<b>Total Carried to collection BQ Page 12</b>				

**SLA INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 13****(ii)ELECTRIC FENCES**

<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>A</b>	<p><b>Preventive Maintenance</b></p> <p>Prices should include activities as described in details of service for each the sites below:</p> <ul style="list-style-type: none"> <li>• Scheduled quarterly serving.(Drive Test and Optimization, Performance Reports (PMR)</li> <li>• Frequent inspections and monitoring of the systems (spot checks-control room data).</li> <li>• Training/Knowledge transfer</li> <li>• 24x7 remote technical support.</li> <li>• Software and firmware upgrades.</li> </ul>				
	<b>Nairobi Region: LOT 1</b>				
1.	Limuru Substation	No	8		
2.	Dandora Substation	No	8		
3.	Donholm Substation	No	8		
4.	Nairobi West Substation	No	8		
5.	Nairobi South Staff Quarters	No	8		
6.	Roysambu Substation	No	8		
7.	Isiolo Road – E-Plant & Bulk Stores	No	8		
8.	Athi River Substation	No	8		
9.	New Industrial Area Substation	No	8		
10.	Likoni Road Stores	No	8		
11.	Training School (Ruaraka)	No	8		
12.	Dara Substation	No	8		
13.	High Ridge Staff Quarters	No	8		
14.	Ngong Road Substation	No	8		
15.	Karen Substation	No	8		
	<b>Total Carried to collection BQ Page 13</b>				

**SLA INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 14**

<b><u>ELECTRIC FENCES</u></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>Preventive Maintenance</b>					
<b>Mt Kenya Region: LOT 2</b>					
1.	White Sisters Substation	No	8		
2.	Kingongo Substation	No	8		
3.	Kiganjo Substation	No	8		
4.	Kinoru Substation	No	8		
5.	Meru store yard	No	8		
6.	Embu store yard/substation	No	8		
7.	Nyahururu Substation	No	8		
8.	Karatina Substation	No	8		
<b>Total Carried to collection BQ Page 14</b>					



<b>SLA INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 15</b>					
<b><u>ELECTRIC FENCES</u></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Preventive Maintenance</b>				
	<b>WEST KENYA: LOT 3</b>				
1.	Kakamega office	No	8		
2.	Kakamega Substation	No	8		
3.	Kericho Depot	No	8		
4.	Kisumu Depot	No	8		
5.	<b>Central Rift</b>				
6.	Nakuru Depot	No	8		
7.	<b>North Rift</b>				
8.	Eldoret Depot	No	8		
9.	Kitale Substation	No	8		
	<b>Total Carried to collection BQ Page 15</b>				

SLA INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 16					
<u>ELECTRIC FENCES</u>					
Item No.	Description	Unit Of measure	QTY	Unit Price DDP, VAT Inclusive	Total Price DDP, VAT Inclusive
	<b>Preventive Maintenance</b>				
	<b>COST REGION: LOT 4</b>				
1.	Kilifi Substation	No	8		
2.	Likoni Substation	No	8		
3.	Nyali Substation	No	8		
4.	New Bamburi Substation	No	8		
5.	Makande Substation	No	8		
	<b>Total Carried to collection BQ Page 16</b>				

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 17</b>					
<b><u>ELECTRIC FENCES</u></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>B</b>	<p><b>Curative Maintenance (I)</b> Prices should include activities as described in details of service for each the sites below:</p> <ul style="list-style-type: none"> <li>• Emergency on-site intervention.</li> <li>• 24x7 remote technical support.</li> <li>• Repair &amp; Return to operations faulty parts or system</li> <li>• Replacement of spare parts.</li> </ul>				
<b>Nairobi Region: LOT 1</b>					
1.	Limuru Substation	Item	1		
2.	Dandora Substation	Item	1		
3.	Donholm Substation	Item	1		
4.	Nairobi West Substation	Item	1		
5.	Nairobi South Staff Quarters	Item	1		
6.	Roysambu Substation	Item	1		
7.	Isiolo Road – E-Plant & Bulk Stores	Item	1		
8.	Athi River Substation	Item	1		
9.	New Industrial Area Substation	Item	1		
10.	Likoni Road Stores	Item	1		
11.	Training School (Ruaraka)	Item	1		
12.	Dara Substation	Item	1		
13.	High Ridge Staff Quarters	Item	1		
14.	Ngong Road Substation	Item	1		
15.	Karen Substation	Item	1		
<b>Total Carried to collection BQ Page 17</b>					

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 18</b>
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<b>ELECTRIC FENCES</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance(I)</b>				
<b>Mt Kenya Region: LOT 2</b>					
1.	White Sisters Substation	Item	1		
2.	Kingongo Substation	Item	1		
3.	Kiganjo Substation	Item	1		
4.	Kinoru Substation	Item	1		
5.	Meru store yard	Item	1		
6.	Embu store yard	Item	1		
7.	Nyahururu Substation	Item	1		
8.	Karatina Substation	Item	1		
<b>Total Carried to collection BQ Page 18</b>					

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 19</b>					
<b><i>ELECTRIC FENCES</i></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance(I)</b>				
	<b>WEST KENYA: LOT 3</b>				
1.	Kakamega office	Item	1		
2.	Kakamega Substation	Item	1		
3.	Kericho Depot	Item	1		
4.	Kisumu Depot	Item	1		
	<b>Central Rift</b>				
5.	Nakuru Depot	Item	1		
	<b>North Rift</b>				
6.	Eldoret Depot	Item	1		
	Kitale Substation	Item	1		
	<b>Total Carried to collection BQ Page 19</b>				

<b>SLA INTRUDER ALARM AND ELECTRIC FENCES SYSTEMS BILL OF QUATITIES</b>					
<b>PAGE 20</b>					
<b><i>ELECTRIC FENCES</i></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance(I)</b>				
	<b>COST REGION: LOT 4</b>				
1.	Kilifi Substation	Item	1		
2.	Likoni Substation	Item	1		
3.	Nyali Substation	Item	1		
4.	New Bamburi Substation	Item	1		
5.	Makande Substation	Item	1		
	<b>Total Carried to collection BQ Page 19</b>				

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 20</b>					
<b><u>ELECTRIC FENCES</u></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>B</b>	<b>Curative Maintenance (II)</b> <b>Curative maintenance(ii):repair of faulty systems</b> <ul style="list-style-type: none"> <li>• Prices should include Repair and return to normalcy all existing faults as described under Appendix (VII) - Existing faults. Indicate NONE where no faults exist.</li> </ul>				
<b>Nairobi Region: LOT 1</b>					
1.	Limuru Substation	Item	1		
2.	Dandora Substation	Item	1		
3.	Donholm Substation	Item	1		
4.	Nairobi West Substation	Item	1		
5.	Nairobi South Staff Quarters	Item	1		
6.	Roysambu Substation	Item	1		
7.	Isiolo Road – E-Plant & Bulk Stores	Item	1		
8.	Athi River Substation	Item	1		
9.	New Industrial Area Substation	Item	1		
10.	Likoni Road Stores	Item	1		
11.	Training School (Ruaraka)	Item	1		
12.	Dara Substation	Item	1		
13.	High Ridge Staff Quarters	Item	1		
14.	Ngong road Substation	Item	1		
15.	Karen Substation	Item	1		
<b>Total Carried to collection BQ Page 20</b>					

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 21</b>					
<b><i>ELECTRIC FENCES</i></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance (II)</b>				
	<b>Mt Kenya Region: LOT 2</b>				
1.	White Sisters Substation	Item	1		
2.	Kingongo Substation	Item	1		
3.	Kiganjo Substation	Item	1		
4.	Kinoru Substation	Item	1		
5.	Meru store yard	Item	1		
6.	Embu Store yard/substation	Item	1		
7.	Nyahururu Depot				
	<b>Total Carried to collection BQ Page 21</b>				



<b>SLA INTRUDER ALARM SYSTEM &amp; ELECTRIC FENCES BILL OF QUANTITIES</b>					
<b>PAGE 22</b>					
<b><i>ELECTRIC FENCES</i></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance (II)</b>				
	<b>WEST KENYA: LOT 3</b>				
1.	Kakamega office	Item	1		
2.	Kakamega Substation	Item	1		
3.	Kericho Depot	Item	1		
4.	Kisumu Depot	Item	1		
	<b>Central Rift</b>				
5.	Nakuru Depot	Item	1		
	<b>North Rift</b>				
6.	Eldoret Depot	Item	1		
7.	Kitale Substation	Item	1		
	<b>Total Carried to collection BQ Page 22</b>				

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 23</b>					
<b><i>ELECTRIC FENCES</i></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Curative Maintenance (II)</b>				
	<b>COST REGION: LOT 4</b>				
1.	Kilifi Substation	Item	1		
2.	Likoni Substation	Item	1		
3.	Nyali Substation	Item	1		
4.	New Bamburi Substation	Item	1		
5.	Makande Substation	Item	1		
	<b>Total Carried to collection BQ Page 23</b>				

**PART D: RADIO BACK UP RESPONSE SERVICES**

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 31</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Exclusive</b>	<b>Total Price DDP, VAT Exclusive</b>
<b>D</b>	<p><b>Response services</b></p> <p>Prices should include monthly charges for the following:</p> <ul style="list-style-type: none"> <li>• Emergency on-site intervention.</li> <li>• Response less than 5 minutes on demand.</li> <li>• 24x7 remote technical support.</li> <li>• Repair &amp; Return to operations faulty transmitter and other related radio response equipment.</li> <li>• Clients impromptu system response tests</li> <li>• Submission of response report submitted monthly and any other time as requested by the client. The report shall be submitted in hard and soft copies through E-mail and other medium as preferred by the client.</li> <li>• On call escort of client's staff on demand.</li> <li>• Standby back-up services on site in case of complete failure or malfunctioning of the intruder system.</li> <li>• Connection /Linking of the systems to Police line.</li> </ul>				
	<b>(FILL AMOUNTS IN NEXT PAGE)</b>				
	<b>Total Carried to collection BQ Page 31</b>	0			

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUANTITIES PAGE 32</b>					
<b><u>PART D: RADIO BACK UP RESPONSE SERVICES</u></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>D</b>	<b>Response services (Quote per Quarter)</b>				
	<b>Nairobi Region: LOT 1</b>				
1.	Stima Plaza	NO	8		
2.	Electricity house Nairobi	NO	8		
3.	Jogoo road pay office	NO	8		
4.	Limuru Substation	NO	8		
5.	Dandora Substation	NO	8		
6.	Donholm Substation	NO	8		
7.	Nairobi West Substation	NO	8		
8.	Nairobi South Staff Quarters	NO	8		
9.	Roysambu Substation	NO	8		
10.	Isiolo Road – E-Plant & Bulk Stores	NO	8		
11.	Athi River Substation	NO	8		
12.	New Industrial Area Substation	NO	8		
13.	Likoni Road Stores	NO	8		
14.	Training School (Ruaraka)	NO	8		
15.	Dara Substation	NO	8		
16.	High Ridge Staff Quarters	NO	8		
	<b>Total Carried to collection BQ Page 32</b>				



<b>SLA INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 34</b>					
<b>RADIO BACK UP RESPONSE SERVICES</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Response services(Quote per Quarter)</b>				
	<b>WEST KENYA: LOT 3</b>				
1.	Kericho Banking hall	NO	8		
2.	Kericho Depot	NO	8		
3.	Kisii Banking hall	NO	8		
4.	Electricity house Kisumu Baking hall	NO	8		
5.	Kisumu Depot	NO	8		
6.	Kakamega Office	NO	8		
7.	Kakamega Substation	NO	8		
8.	Milimani Staff Quarters	NO	8		
9.	Ondiek Staff quarters	NO	8		
	<b>Central Rift</b>				
10.	Electricity house Nakuru Baking hall	NO	8		
11.	Nakuru Depot	NO	8		
	<b>North Rift</b>	NO	8		
12.	Eldoret Depot	NO	8		
13.	Eldoret KVDA Banking hall	NO	8		
14.	Kitale Substation	NO	8		
15.	Kitale Banking Hall	NO	8		
	<b>Total Carried to collection BQ Page 34</b>				

<b>SLA INTRUDER ALARM SYSTEM BILL OF QUATITIES PAGE 35</b>					
<b><i>RADIO BACK UP RESPONSE SERVICES</i></b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
	<b>Response services(Quote per Quarter)</b>				
	<b>COST REGION: LOT 4</b>				
1.	Kilifi Substation	NO	8		
2.	Likoni Substation	NO	8		
3.	Nyali Substation	NO	8		
4.	Nyali Pay Point	NO	8		
5.	New Bamburi Substation	NO	8		
6.	Makande Substation	NO	8		
	<b>Total Carried to collection BQ Page 35</b>				

<b>SUMMARY PAGE 1 CATEGORY 2: INTRUDER ALARMS, ELECTRIC FENCES AND RADIO BACK UP REPOSE SERVICES</b>				
Total Carried to collection BQ Page 1				
Total Carried to collection BQ Page 2				
Total Carried to collection BQ Page 3				
Total Carried to collection BQ Page 4				
Total Carried to collection BQ Page 5				
Total Carried to collection BQ Page 6				
Total Carried to collection BQ Page 6				
Total Carried to collection BQ Page 8				
Total Carried to collection BQ Page 9				
Total Carried to collection BQ Page 10				
Total Carried to collection BQ Page 11				
Total Carried to collection BQ Page 12				
Total Carried to collection BQ Page 13				
Total Carried to collection BQ Page 14				
Total Carried to collection BQ Page 15				
Total Carried to collection BQ Page 16				
Total Carried to collection BQ Page 17				
Total Carried to collection BQ Page 18				
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Total Carried to collection BQ Page 25				
Total Carried to collection BQ Page 26				
Total Carried to collection BQ Page 27				
Total Carried to collection BQ Page 28				
Total Carried to collection BQ Page 29				
Total Carried to collection BQ Page 30				
Total Carried to collection BQ Page 31				
Total Carried to collection BQ Page 32				
Total Carried to collection BQ Page 33				
Total Carried to collection BQ Page 34				
Total Carried to collection BQ Page 35				
<b>SUB TOTAL</b>				
<b>Add 16% VAT</b>				
<b>GRAND TOTAL</b>				



**PART (E) PRICED LIST OF SPARES CATEGORY 2: INTRUDER ALARMS SYSTEMS**

<b>NO.</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE(KSHS)</b>
	Alarm control panel	NO	
	Magnetic contact-HD	NO	
	Magnetic contact-LD	NO	
	Back up Battery 12v,7AH	NO	
	Siren box	NO	
	Strobe	NO	
	Siren	NO	
	Motion detector(PIR)	NO	
	Vibration sensors	NO	
	Alarm cable 1M	M	
	Power cable 1M	M	
	Panic Button	NO	
	4-channel remote Kit	NO	
	Single channel remote Kit	NO	
	Zone expander	NO	
	Single channel Remote buttons	NO	
	Multi-channel Remote buttons	NO	
	Keypad	NO	
	Surge protector	NO	
	1A power supply unit	NO	
	3A Power supply unit	NO	
	9A Power supply unit	NO	
	12A Power supply unit	NO	
	On call escort of clients staff on demand (Per call).	NO	
	GSM/IP Module	NO	
	List others		

**SECTION VI: ELECTRIC FENCE SLA PRICED LIST OF SPARE PARTS: ELECTRIC FENCES**

NO.	ITEM	UNIT	UNIT PRICE
A	Fence Energizer with Specification as described in Specification Section XXIII	NO	
B	Lead out under gate cable	LM	
C	High tensile fence wire ( HT ) Galvanized	LM	
D	25 x 25mm Hollow Square Tube 18 Gauge for W and Strainers fully painted with 3no coat of paint to client satisfaction.	NO	
E	12V, 7AH Batteries.	NO	
F	12 Volts D.C. siren	NO	
G	12 Volts D.C. strobe	NO	
H	AVS 30 Voltage protector as sollatek or equal and approved	NO	
I	W Insulators	NO	
J	Strain insulators STF Black.	NO	
K	Earth Rod	NO	
L	Hatari signs	NO	
M	4 core Alarm cable	LM	
N	Steel Box Energizer Cabinet size 500 x 500 x 250 mm	NO	
P	25mm conduits	NO	
Q	Energizer Capacitor	NO.	
R	Energizer Transistor	NO.	
S	Energizer Key Switch	NO.	
T	Energizer ON/OFF Key	NO.	
U	Energizer Transformer	NO.	
V	Energizer Power supply board section	NO.	
W	Painting one liner meter section of fence	LM.	
X	coil size - 450mm diameter, Blade profile - Ripper Razor Wire, stretch factor - maximum of 10M per coil and secured with steel plates at 1M centers (Galvanized)		
Y	GSM/IP Module	LM	
Z	Complete repair of one Linear meter length of fence with all necessary items i.e. hollow square tube Pole, insulators, Ht Wire, and any other necessary item to restore the damaged section, with 3-coat relevant paint to client satisfaction.	NO	
		LM	

**NOTES ON PRICE SCHEDULE OF PRICE**

**The prices shall be DDP and varied for one year from Contract effective date**

**\*Notes**

**CALL OUT RATES AND DAYWORK CHARGES**

Please note that the Contractor shall complete the price schedule above noting that hourly rates and charges are fixed and uniform subject to the region. There shall be no difference in pricing in relation to the night and daytime hours, more so on weekends/public holidays.

Date:

Tender Number and Name:

**To:**

The Kenya Power & Lighting Company Limited,  
Stima Plaza,  
Kolobot Road, Parklands,  
P.O Box 30099 – 00100,  
Nairobi, Kenya.

Dear Sirs and Madams,

Having read, examined and understood the Tender Document including all Addenda, receipt of which we hereby acknowledge, we, the undersigned Tenderer, offer to provide .....(*insert services description*) for the sum of.....(*total tender price in words and figures*) or such other sums as may be ascertained in accordance with the schedule of prices inserted by me/ us above.

Name of Tenderer

---

Name and Designation of authorised person signing the Tender

---

Signature of authorised person signing the Tender

---

Stamp of Tenderer

---

**SECTION IV-CATEGORY 3-SCHEDULE OF REQUIREMENTS: WALKTHROUGH METAL DETECTORS**

**A) SCHEDULE OF EQUIPMENT AND SITES TO BE MAINTAINED CATEGORY 3: WALKTHROUGH METAL DETECTORS**

i) Schedule of Equipment to be maintained Category 3: Walkthrough Metal Detectors

The Schedule of Equipment has been prepared in general terms to identify the equipment covered by the Service and Maintenance Agreement. (SLA) Those items not identified but which are clearly required for the operation of the Walkthrough Metal Detector system shall be included within the Service and Maintenance Agreement.

*These items should be listed here individually.*

A(i) Schedule of Equipment to be maintained Category 3: Walkthrough Metal Detectors

<b>NO.</b>	<b>ITEM DESCRIPTION</b>
1.	Central Control panel
2.	Back up Battery
3.	Audio devices
4.	Visual indicators e.g LED and other warnings
5.	All cabling and connections
6.	Walkthrough Keypads/board
7.	Detection Zones
8.	Surge protector
9.	Power supply unit
10.	Mechanical and physical strength of the walkthrough.
11.	Programming features and parameters
12.	List others

A.(i) Schedule of Equipment Category 3 Walkthrough Metal Detectors

## A(ii) Schedule of Equipment Category 3 Walkthrough Metal Detectors

	Station	Location	QTY	Model	Status
1	Stima Plaza	Kolobot road-Parklands	3	Check Point	working
2	Electricity house Nairobi	Harambee Avenue	3	Check Point	working
3	Electricity house Mombasa	Nkuruma Road-Mombasa	1	Check Point	working
4	Electricity house Nakuru	Near County office-Nakuru	1	Check Point	working
5	Electricity house Kisumu	Kisumu CBD	1	Check Point	working
6	Juja Control	Dandora	1	Check Point	working
	<b>TOTAL</b>		<b>10</b>		

## B. SCHEDULE OF SERVICE AND MAINTENANCE ROUTINE CATEGORY 3: WALKTHROUGH METAL DETECTORS

This schedule has been prepared to indicate the minimum requirements for the preventative maintenance of the WALKTHROUGH METAL DETECTOR system. The Contractor shall be responsible for all of the maintenance necessary to ensure that the complete WALKTHROUGH METAL DETECTOR system as specified in this Maintenance Agreement achieves a constant high quality operation.

The schedule indicates the maintenance tasks required but does not state how they will be carried out. All maintenance activities will be completed in accordance with the equipment manufacturer's guidelines, recommendations and good working practices.

The following symbols are used:-

M	Monthly (calendar)
3M	Quarterly (3 monthly)
6M	Semi-annually (6 monthly)
Y	Annually

In all instances where preventative maintenance work has identified the need to replace equipment, items or components, this work shall be carried out under the maintenance function as defined within the Contract.

### *B(i) schedule of service and maintenance routines category 3: walkthrough detectors*

No	Code	Description	Service description	Frequency
<b>WALKTHROUGH METAL DETECTORs</b>				
	C1	External Housings	<ul style="list-style-type: none"> <li>• Visual inspect, check weatherproof gasket for seal, rectify where necessary.</li> <li>• Check internal of housing for moisture rectify where necessary.</li> <li>• Check external joints, glands, make off and re-seal where necessary</li> <li>• Clean housing covers.</li> <li>• Replace where necessary.</li> </ul>	3months
	C2	Cables and ducting	<ul style="list-style-type: none"> <li>• Check cable protection ducts, conduits, mini-trucking etc to ensure proper physical conditions.</li> </ul>	3 months

			<ul style="list-style-type: none"> <li>• Check all cables for damage, continuity, etc.</li> <li>• Replace where necessary</li> </ul>	
	C3	Connections	<ul style="list-style-type: none"> <li>• Check all connections, plugs for damage continuity, moisture ingress</li> <li>• Check all connectors.</li> <li>• Replace where necessary</li> </ul>	3months
	C4	Central Control Panel performance/functionality	<ul style="list-style-type: none"> <li>• Check all functions operate correctly(Recording, time, playbacks, Event logs,voltages, resolution,software,drives, network,database,etc</li> <li>• Check all control functions</li> <li>• Reconfigure to right performance specifications/factory resets where necessary.</li> </ul>	3months
	C5	Monitors	<ul style="list-style-type: none"> <li>• Check all visual indicators for correct performance and clarity..</li> <li>• Check all connections.</li> <li>• Inspect display tube. Replace where necessary</li> <li>• Check condition of cables.</li> <li>• Adjust, rectify or Replace where necessary</li> <li>• Perform any factory resets if need be.</li> </ul>	3months
	C6	Control System and PC-where applicable	<p>Clean PC. Clean filters to PC fans. Check security of cable connections Clean hard disks Software checks and upgrades. Check antivirus and malware protection.</p>	3months
	C7	Electrical Power Supplies	<ul style="list-style-type: none"> <li>• Check all input and output parameters (Voltage, current, power, frequency etc.) and ensure its within accepted nominal values as per IEE standards.</li> </ul>	3months



			<ul style="list-style-type: none"> <li>• <i>Check all surge/overvoltage protection units to ensure correct functionality.</i></li> <li>• <i>Check operation of Fuses and circuit breakers</i></li> <li>• <i>Check for ingress of moisture at distribution boards, plugs and sockets</i></li> <li>• <i>Check all cables for damage, continuity, etc</i></li> <li>• <i>Check earthing connections</i></li> <li>• <i>Fixed wiring inspection and test to BS 7671 standards.- (after 2 years)</i></li> <li>• <i>Rectify where necessary.</i></li> </ul>	
	C8	<b>Cleaning</b>	<ul style="list-style-type: none"> <li>• <i>Clean or blow to prevent dust, dirt or any form of corrosion.</i></li> <li>• <i>Cleaning material and process shall be as per IEE standards of cleaning electrical equipment and in accordance with safety regulations.</i></li> </ul>	3months

*B(i) Schedule of Service and Maintenance Routines Category 3: Walkthrough Detectors*

**DETECTORS****Existing faults** (Non at the point of tendering. Fill any noticed during site survey)

	Station	Location	Model	Nature of Faults	Proposed remedy
1	Stima Plaza	Kolobot road- Parklands	Check Point	None	
2	Electricity house Nairobi	Harambee Avenue	Check Point	None	
3	Electricity house Mombasa	Nkuruma Road- Mombasa	Check Point	None	
4	Electricity house Nakuru	Near County office-Nakuru	Check Point	None	
5	Electricity house Kisumu	Kisumu CBD	Check Point	None	
6	Juja Control	Dandora	Check Point	None	

**SECTION -V -CATEGORY 3: PRICE SCHEDULE FOR PROVISION OF SERVICE AND MAINTENANCE CONTRACT (SLA) FOR WALKTHROUGH METAL DETECTOR SYSTEMS IN THE COMPANY**

*(THE CURRENCY MUST BE IN KENYA SHILLINGS)*

***PART (A)BILL OF QUANTITIES***

**WALKTHROUGH METAL DETECTORS BILL OF QUATITIES PAGE 1**

<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>A</b>	<p><b>Preventive Maintenance (Quote per quarter)</b>            Prices should include activities as described in details of service for each the sites below:</p> <ul style="list-style-type: none"> <li>• Scheduled quarterly serving. (Drive Test and Optimization, Performance Reports (PMR)</li> <li>• Frequent inspections and monitoring of the systems (spot checks-control room data).</li> <li>• Training/Knowledge transfer</li> <li>• 24x7 remote technical support.</li> <li>• Software and firmware upgrades.</li> </ul>				
1	Stima Plaza	NO	8		
2	Electricity house Nairobi	NO	8		
3	Electricity house Mombasa	NO	8		
4	Electricity house Nakuru	NO	8		
5	Electricity house Kisumu	NO	8		
6	Juja Control	NO	8		
<b>Total Carried to collection BQ Page 1</b>					

<b>WALKTHROUGH METAL DETECTORS BILL OF QUANTITIES PAGE 2</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>B</b>	<p><b>CURATIVE MAINTENANCE (I)(Quote per quarter)</b>            Prices should include activities as described in details of service for each the sites below:</p> <ul style="list-style-type: none"> <li>• Emergency on-site intervention.</li> <li>• 24x7 remote technical support -Supply and Install a Desktop online support application at the control room and suppliers end to achieve services as described in SLA.</li> <li>• .Repair &amp; Return to operations faulty parts or system</li> <li>• Replacement of spare parts.</li> <li>• All consumables as described in detail of service</li> </ul>				
1	Stima Plaza	NO	8		
2	Electricity house Nairobi	NO	8		
3	Electricity house Mombasa	NO	8		
4	Electricity house Nakuru	NO	8		
5	Electricity house Kisumu	NO	8		
6	Juja Control	NO	8		
	<b>Total Carried to collection BQ Page 2</b>				

<b>SUMMARY</b>	<b>PAGE</b>	<b>CATEGORY</b>	<b>3:</b>				
<b>WALKTHROUGH METAL DETECTORS</b>							
Total Carried to collection BQ Page 1							
Total Carried to collection BQ Page 2							
<b>SUB TOTAL</b>							
<b>Add 16% VAT</b>							
<b>GRAND TOTAL</b>							

**PART(C) PRICED LIST OF SPARES CATEGORY 3: WALKTHROUGH METAL DETECTORS**

NO.	ITEM DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
1	Central Control panel	NO	
2	Back up Battery	NO	
3	Audio device	NO	
4	Visual indicators panel	NO	
5	1M Power cable	M	
6	Walkthrough Keypads/board	NO	
7	Detection Zone sensors	NO	
8	Surge protector	NO	
9	Power supply unit	NO	
10	Power supply transformer	NO	
	List Others(not consumables like connectors, Screws)		

**NOTES ON PRICE SCHEDULE OF PRICE**

**The prices shall be DDP and varied for two years from Contract effective date**

**Brief description on service delivery schedule**

Item No.	Description	Unit Of Measure	Quantity	*Performance Period OR Performance Start Date	*Performance End Date
1	Repair of faulty Walkthrough detectors	LOT	1	Contract signing date	3 months after award
2	2 Year service and maintenance contract done quarterly in all sites	NO.	8	Date on completion of repairs above	2 years after repairs

## **CONTRACT PRICE –GENERAL SUMMARY CATEGORY 3: WALKTHROUGH METAL DETECTOR**

### **1.1 CONTRACTOR’S PRICE**

This will be the Contractor’s price inclusive of labour, transport, Communication, accommodations, replacement, to carry out planned preventative maintenance and fault repair of the WALKTHROUGH METAL DETECTOR system in accordance with the terms and conditions of this maintenance agreement is as per the schedule or prices and Bills of quantities.

The Contractor’s price shall also include cost for all hoists, scaffolding, barriers, signage, lighting and the like to enable him to properly and safely carry out the maintenance works

**Note: The Contractor’s price must be broken down under the separate headings provided and all costs stated under Section 2 shall be net of V A T.**

**The Contractor’s price shall be transferred to the Form of Tender.**

### **2.2 CALL OUT RATES AND DAYWORK CHARGES**

The Contractor shall complete the schedule below noting his hourly rates and charges. These rates and charges will only be used for the rectification of faults and problems not covered by the terms and conditions of the Maintenance Agreement.eg work over holidays, off office works etc.

#### **2.2.1 Call Out Rates and Charges for Service Engineers/team**

<b>No.</b>	<b>Call out description</b>	<b>Call Out Charge Amount per hour (Kshs)</b>
a)	0800 -1800 Monday to Friday	
b)	1800 -0000 Monday to Friday	
c)	0000 -0800 Monday to Friday	
d)	0000 -0800 Monday to Friday	
e)	Resolved by Telephone	
f)	Other: (Contractor to State)	

Hourly rates shall include all overheads and profits.

Contractor to state any minimum charges.

**Note:** The completed call out rates and day work charges are to be returned with the Form of Tender.

Date:

Tender Number and Name:

**To:**

The Kenya Power & Lighting Company Limited,  
Stima Plaza,  
Kolobot Road, Parklands,  
P.O Box 30099 – 00100,  
Nairobi, Kenya.

Dear Sirs and Madams,

Having read, examined and understood the Tender Document including all Addenda, receipt of which we hereby acknowledge, we, the undersigned Tenderer, offer to provide .....(*insert services description*) for the sum of.....(*total tender price in words and figures*) or such other sums as may be ascertained in accordance with the schedule of prices inserted by me/ us above.

Name of Tenderer

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Name and Designation of 128authorized person signing the Tender

---

Signature of 128authorized person signing the Tender

---

Stamp of Tenderer

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**SECTION VI: SCHEDULE OF REQUIREMENT FIRE DETECTION/ALARM SYSTEM AND FIRE FIGHTING EQUIPMENT ELECTRICITY HOUSE NAIROBI**

**A) SCHEDULE OF EQUIPMENT TO BE MAINTAINED CATEGORY 4: FIRE ALARMS SYSTEM AND FIRE FIGHTING EQUIPMENT-ELECTRICITY HOUSE NAIROBI**

The Schedule of Equipment has been prepared in general terms to identify the equipment covered by the Maintenance Agreement. Those items not identified but which are clearly required for the operation of the FIRE ALARM system shall be included within the Maintenance Agreement.

The Existing Equipment is from HONEYWELL and all **support shall be provided directly by the Contractor and shall be subject to a back-to-back agreement with the HONEYWELL Manufacturers where the Contractor is not the Manufacturer**

A (i) Schedule of Equipment to be maintained Category 4: Fire Alarms System Electricity House Nairobi

NO.	ITEM DESCRIPTION		
1	Fire Alarm control panel and related software's and equipment.		
2	Fire loop /zone Module		
3	Repeater Module		
4	Fire exit door system		
5	UPS and Batteries		
6	Public Address system		
7	Sounders and Strobe		
8	Fire Alarm cable 1M		
9	All Fire alarm cabling		
10	Break glasses		
11	Detector Call point		
12	Keypads		
13	Surge protectors		
14	Safety Signage's		
15	Dot Matrix Printer		
16	Fire detectors(Heat and smoke)		
17	Application management computer and related software's and accessories		
	List others if omitted during the mandatory site visit		
20			
21			

**A (ii) Schedule of Equipment to be maintained Category 4: Fire Detection Equipment  
Electricity House Nairobi**

<b>Fire Fighting Appliances at Electricity House Nairobi</b>														
Item	CO2 (kgs)		Dry Powder (Kgs)		H2O (ltr)	Foam (ltr)	Fire Blanket	Hose Reels	Landing Valves	Booster Pumps	Sprinkler System	Fire Alarm	Total	
	5	2	6	9	9	9								
1	Total Equipment	65	8	2	45	68	10	2	53	45	1	2	1	302

**B SCHEDULE OF MAINTENANCE ROUTINES CATEGORY 4: FIRE ALARMS SYSTEM ELECTRICITY HOUSE NAIROBI**

This schedule has been prepared to indicate the minimum requirements for the preventative maintenance of the FIRE ALARM system and Fire Fighting Equipment . The Contractor shall be responsible for all of the maintenance necessary to ensure that the complete FIRE ALARM system as specified in this Maintenance Agreement achieves a constant high quality operation.

The schedule indicates the maintenance tasks required but does not state how they will be carried out. All maintenance activities will be completed in accordance with the equipment manufacturer's guidelines, recommendations and good working practices.

The following symbols are used:-

M	Monthly (calendar)
3M	Quarterly (3 monthly)
6M	Semi-annually (6 monthly)
Y	Annually

In all instances where preventative maintenance work has identified the need to replace equipment, items or components, this work shall be carried out under the maintenance function as defined within the Contract.

**B (i) Schedule of Maintenance Routines Category 4: Fire Alarms System and Fire Fighting Equipment Electricity House Nairobi**

No	Code	Description	Service description	Frequency	Remarks
<b>Fire Alarms</b>					
	C1	<i>External Housings(siren boxes, strobes etc)</i>	<ul style="list-style-type: none"> <li>• <i>Visual inspect, check weatherproof gasket for seal, rectify where necessary.</i></li> <li>• <i>Check internal of housing for moisture rectify where necessary.</i></li> <li>• <i>Check external joints, glands, make off and re-seal where necessary</i></li> <li>• <i>Clean housing glass. Replace where necessary.</i></li> </ul>	6months	
	C5	<i>Detectors Performance</i>	<ul style="list-style-type: none"> <li>• <i>Measure and record device performance.</i></li> <li>• <i>Provide hard /soft copy of report of the tests.</i></li> </ul>		
	C7	<i>Cables and ducting</i>	<ul style="list-style-type: none"> <li>• <i>Check cable protection ducts, conduits, mini-trucking etc. to ensure proper physical conditions.</i></li> <li>• <i>Check all cables for damage, continuity, etc. Replace where necessary</i></li> </ul>	3 months	
	C8	<i>Connections</i>	<i>Check all connections, plugs for damage continuity, moisture ingress Check BNC, RG 45 and other connectors. Replace where necessary</i>		
	D1	<i>Control Panel performance/functionality</i>	<ul style="list-style-type: none"> <li>• <i>Check all functions operate correctly(Recording, time, playbacks, Event logs,voltages,resolution,software,drives,streaming,network,data base,etc</i></li> <li>• <i>Check all control functions</i></li> <li>• <i>Reconfigure to right performance specifications/factory resets where necessary.</i></li> </ul>		
	M1	<i>Monitors</i>	<ul style="list-style-type: none"> <li>• <i>Check video signal for level.</i></li> </ul>		

			<ul style="list-style-type: none"> <li>• Check BNC/RJ and other connections. Remake or</li> <li>• Inspect display tube. Replace where necessary</li> <li>• Check condition of cables.</li> <li>• Inspect display tube.</li> <li>• Adjust, rectify or Replace where necessary</li> <li>• Perform any factory resets if need be.</li> </ul>		
	PC1	Control System and PC	<p>Clean PC, Clean filters to PC fans.  Check security of cable connections  Clean hard disks  Software checks and upgrades.  Check antivirus and malware protection.</p>		
	E1	Electrical Power Supplies	<ul style="list-style-type: none"> <li>• Check all input and output parameters (Voltage, current, power, frequency etc.) and ensure its within accepted nominal values as per IEE standards.</li> <li>• Check all surge/overvoltage protection units to ensure correct functionality.</li> <li>• Check operation of Fuses and circuit breakers</li> <li>• Check for ingress of moisture at distribution boards, plugs and sockets</li> <li>• Check all cables for damage, continuity, e.t.c</li> <li>• Check earthing connections</li> <li>• Fixed wiring inspection and test to BS 7671 standards.-(after 2 years)</li> <li>• Rectify where necessary.</li> </ul>		
		All Fire alarm Equipment	<ul style="list-style-type: none"> <li>• Clean or blow to prevent dust, dirt or any form of corrosion.</li> <li>• Cleaning material and process shall be as per IEE standards of cleaning electrical equipment and in accordance with safety regulations.</li> </ul>		

Additional information

The following items shall be inspected by the Contractor at the agreed upon intervals:

- a) Safety Signage
- b) Operational Check
- c) control panel
- d) detector call point
- e) Cable plant (zone & loop).
- f) backup batteries
- g) Computers
- h) printers to
- i) mains changeover
- j) log book entries
- k) alarm functions
- l) environmental
- m) All Fire Fighting Equipment as described in Schedule of Requirement

***B (ii) Schedule of Maintenance Routines Category 4: Fire Alarms System Electricity House Nairobi***

<b>Table 1: Fire Alarm System Maintenance Work Classification</b>		
<b>Category</b>	<b>Sub-Category</b>	<b>Description</b>
Planned maintenance	Time-based /Scheduled Maintenance	Detects system deterioration and prevents failure by systematic inspection and monitoring undertaken at predetermined time intervals
	Condition-based Maintenance	Corrective maintenance work performed, as a result of significant deterioration or failure, to restore the system to full functionality.
	Statutory Maintenance	Actions performed to provide the minimum level of maintenance to meet mandatory requirements of <b>International Code of Practice such as BS5839 Part 1. As well as Kenya Standards and County Government Bi-laws on Safety, Health and occupation.</b> (Often includes some of the Time-based and Condition-based maintenance tasks).
Unplanned Maintenance	Routine & Breakdown Maintenance	Unplanned and reactive maintenance actions performed to restore the system to full functionality, as a result of an unforeseen failure.
	Incident Maintenance	Unplanned maintenance actions to restore the system to full functionality as a result of damage resulting from a lightning strike, vandalism, fire or other accidents.

Daily	<ol style="list-style-type: none"> <li>1. Attend to failures recorded in the daily logs by Security Control room operators on the control panel to ascertain that it shows normal operation.</li> <li>2. Replacement of any broken break glass.</li> </ol>
Monthly	<ol style="list-style-type: none"> <li>3. Ensure that Check any printers to ensure that reserves of consumables are adequate for 2 weeks' normal usage (KPLC Control Room Operators in Liaison with Contractor.)</li> </ol>
Quarterly	<ol style="list-style-type: none"> <li>4. Check entries to Security Control room log book and ensure that necessary actions are taken</li> <li>5. Examine batteries and their connections and test them as specified by supplier to ensure that it is not likely to fail before the next quarterly inspection.</li> <li>6. Check Alarm functions of the panel by operating a detector /call point in each zone</li> <li>7. Check Alarm sounders and automatic link to remote centers, if any.</li> <li>8. Check all ancillary functions of the control panel, where possible.</li> <li>9. Check all fault indicators and circuits by simulating a fault condition.</li> <li>10. Visually inspect the control panel for signs of moisture ingress or other deterioration.</li> <li>11. Visually inspect whether structural or occupancy changes have affected the requirements for the siting of call points, detectors and sounders.</li> <li>12. Visually inspect to confirm that a clear space of at least 750mm is preserved in all directions below each detector, that detectors are sited in accordance with code of practice clauses 12 &amp;/or 13 and that all call points remain unobstructed and conspicuous.</li> <li>13. These tests should be done by a competent person, and upon completion, a certificate of testing is issued to the responsible person.</li> <li>14. Check the management computer and application software and take any necessary corrective measure including any software updates and also the anti-virus upgrades.</li> <li>15. Simulate mains failure to automatically start standby generator to power the fire alarm system for at least 1 hour. Check for malfunctions. Restore to normal supply and advise /Inform of any need to check the generator to the client ie need to check generator startup battery &amp; charger, fill up of the fuel tanks, top up oil and coolant if necessary by the client.</li> <li>16. Ensure that the system is capable of operating under alarm conditions by operating at least one detector or call point on one circuit (zone or loop). For systems with 13 circuits or less, each circuit should be tested in turn. For systems with more than 13 circuits, then more than one circuit must be tested each week so that the interval between tests on one circuit does not exceed 13 weeks</li> </ol>
Annually (4 <sup>th</sup> quarter service)	<ol style="list-style-type: none"> <li>17. Check each detector for correct operation in accordance to manufacturer's recommendation.</li> <li>18. Visually check all cable fittings and equipment are secure, undamaged and adequately protected.</li> <li>19. Record any defects in a logbook and upon completion, a certificate of testing is issued to the responsible person.</li> <li>20. Replace all UPS/Power back up batteries.</li> </ol>



ii) *Schedule of Maintenance routines details of service for maintenance of firefighting equipment*

1. For every cartridge operated extinguisher, weigh the cartridges to ascertain its adherence to its weight specification for each visit.
2. For every Co2 extinguisher weigh it to ascertain that it conforms to its weight specification for each visit
3. For every pressure type extinguisher (dry powder, water and foam) check the gauge to ascertain the equipment is pressurized for each visit
4. Change the water in the water extinguisher once per year
5. Change the chemical foam once every two years
6. Clean and blow dust the discharge pipes during every visit
7. Check for dents, corrosion, and leaks on the fire extinguisher shell
8. Check on the extinguisher head valves for cracks or any other damage
9. Check and ensure safety pins are in place and secure with security seals
10. Check and ensure the instruction labels are neat and legible
11. Ensure the fire extinguishers are properly coded
12. Mark on the fire extinguisher service label the date of inspection and status of the extinguisher
13. Do a detailed report indicating any major repairs/replacements that may be required

***C) Schedule of Repairs of Existing Faults Category 4-Fire Alarm System Electricity House Nairobi***

<b>ELECTRICITY HOUSE NAIROBI: HARAMBEE AVENUE EXISTING SYSTEM TYPE: HONEYWELL</b>				
	<b>Station</b>	<b>Location</b>	<b>Nature of fault</b>	<b>Proposed Remedy</b>
1	Break glasses	Check Entire Building	Broken	Replace accordingly
2	Software upgrade to allow local and remote Viewing and system Back-up at Stima Plaza and NCC. This should include in necessary network modules/interfaces. Existing Software-Honeywell	Control room	Software version out of date	Upgrade
3	Isolated detectors on 2 <sup>nd</sup> Floor ICT	2 <sup>nd</sup> Floor	Isolated due to renovation works	Re-cable/Manage cable as well as remount 5no detectors, test and confirm working ok.
4	UPS and Batteries	Basement	Drained batteries.	Replace all batteries and confirm UPS working ok. Ensure UPS is monitored via network.
5	Fire Exit door system	Both wings	Maglock not connected and no MC to monitor the door	Re-mount 35no Maglock to the newly installed door and install magnetic contacts monitoring system to be monitored via application software at the Security Control room. This should include all necessary cabling.
	List Others as noticed during mandatory Site Visit.			
6				
7				

**SECTION V – PRICE SCHEDULE FOR GOOD AND SERVICES CATEGORY 4  
FOR PROVISION OF SERVICE AND MANTENANCE CONTRACT (SLA) FOR FIRE  
ALARM SYSTEMS IN THE COMPANY**

*(THE CURRENCY MUST BE IN KENYA SHILLINGS)*

*PART (A) BILL OF QUANTITIES PAGE 1*

<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>A</b>	<p><b>Preventive Maintenance</b></p> <p>Prices should include the following items as well as the activities as described in details of service for the Electricity House Nairobi Fire System:</p> <ul style="list-style-type: none"> <li>• Scheduled quarterly serving. (Drive Test and Optimization, Performance Reports (PMR)</li> <li>• Frequent inspections and Daily monitoring of the systems (Daily and spot checks-control room data).</li> <li>• Training/Knowledge Transfer-Local training for 5no Security Controllers and 2no.Technical team. Technical training shall include application training at the manufacturers for 2no Technical support team. Include only training cost and transport and meals oversee and exclude Flight and Perdiem which will be catered for by KPLC. Attach training schedule and outline.</li> <li>• 24x7 remote technical support.</li> <li>• Software and firmware upgrades.</li> </ul>	NO	8		
	<b>Subtotal A</b>				
<b>B</b>	Quarterly Servicing of All Firefighting Equipment as described in Detail of service and as in Schedule of requirement.	NO	8		
	<b>Subtotal B</b>				
	<b>Total Carried to collection BQ Page 1</b>				

<b>SLA FIRE ALARM SYSTEM BILL OF QUATITIES PAGE 2</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Exclusive</b>	<b>Total Price DDP, VAT Exclusive</b>
<b>B</b>	<p><b>Curative Maintenance (i)(quote per quarter)</b> Prices should include the following items and activities and as described in details of service for Electricity House Fire System:</p> <ul style="list-style-type: none"> <li>• Emergency on-site intervention.</li> <li>• 24x7 remote technical support- Supply and Install a Desktop online support application at the control room and suppliers end to achieve services as described in SLA.</li> <li>• Repair &amp; Return to operations faulty parts or system</li> <li>• Replacement of spare parts. This will include daily check and replacement of any faulty/broken break glasses.</li> </ul>	NO	8		
	<b>Total Carried to collection BQ Page 2</b>				

<b>SLA FIRE ALARM SYSTEM BILL OF QUANTITIES PAGE 3</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Inclusive</b>	<b>Total Price DDP, VAT Inclusive</b>
<b>B</b>	<p><b>Curative Maintenance (II)</b></p> <p><b>Curative maintenance(ii): repair of faulty systems</b></p> <ul style="list-style-type: none"> <li>Prices should include Repair and return to normalcy all existing faults as described under schedule of Existing faults</li> </ul>	Item	1		
<b>Total Carried to collection BQ Page 3</b>					

**PART B: PRICE SCHEDULE FIRE EMERGENCY RESPONSE SERVICES**

<b>SLA FIRE ALARM SYSTEM BILL OF QUANTITIES PAGE 4</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit Of measure</b>	<b>QTY</b>	<b>Unit Price DDP, VAT Exclusive</b>	<b>Total Price DDP, VAT Exclusive</b>
<b>A</b>	<p><b>Response services (Quote per quarter)</b></p> <p>Prices should include monthly charges for the following:</p> <ul style="list-style-type: none"> <li>• Emergency on-site intervention.</li> <li>• Liaison fee with emergency fire response providers to ensure that fire response takes less than 5 minutes on occurrence.</li> <li>• 24x7 remote technical support.</li> <li>• Repair &amp; Return to operations faulty Equipment or System RESET upon Fire incidence.</li> <li>• Clients impromptu system response tests</li> <li>• Submission on response report on demand both in hard and soft copies through E-mail and other medium as preferred by the client.</li> <li>• System Resets (Panel and detectors/modules)</li> <li>• Response to Security Control room Fault logs.</li> <li>• 2no Fire Drills Per Year for 2 years.</li> </ul>				
<b>Total Carried to collection BQ Page 4</b>		<b>NO</b>	<b>8</b>		

<b>SUMMARY PAGE FIRE ALARMS AND FIRE FIGHTING EQUIPMENT</b>					
Total Carried to collection BQ Page 1					
Total Carried to collection BQ Page 2					
Total Carried to collection BQ Page 3					
Total Carried to collection BQ Page 4					
<b>SUB TOTAL</b>					
<b>Add 16% VAT</b>					
<b>GRAND TOTAL</b>					

**PART(C) PRICED LIST OF SPARES CATEGORY 4: FIRE ALARM SYSTEMS**

<b>NO.</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>
	Fire Alarm control panel	NO	
	Fire loop /zone Module	NO	
	Repeater Module	NO	
	Magnetic contact-HD	NO	
	Magnetic contact-LD	NO	
	Back up Batery 12v,7AH	NO	
	Siren/Audio alert box	NO	
	Strobe	NO	
	Siren	NO	
	Fire Alarm cable 1M	M	
	Power cable 1M	M	
	Break glass	NO	
	Detector Call point	NO	
	Zone expander	NO	
	Keypad	NO	
	Surge protector	NO	
	1A power supply unit	NO	
	3A Power supply unit	NO	
	9A Power supply unit	NO	
	12A Power supply unit	NO	
	Safety Signage	NO	
	Dot Matrix Printer	NO	
	Application management computer	ITEM	
	<b>List others</b>		

**Additional Priced List of Spares Fire Fighting Equipment  
(Check Next Page for more)**



## Additional Priced List of Spares Fire Fighting Equipment

Fire Fighting Appliances at Electricity House Nairobi													
Item		CO2 (kgs)		Dry Powder (Kgs)		H2O (ltr)	Foam (ltr)	Fire Blanket	Hose Reels	Landing Valves	Booster Pumps	Sprinkler System	Total
		1	2	6	9	9	9						
1	Total Equipment	1	1	1	1	1	1	1	1	1	1	1	1
A	Service cost (kshs)	Per Unit											
		Total											
B	Refilling cost (kshs)	Per Unit											
		Total											
C	Grand Total												

NB	Supply of a new appliance will be as at when required at the rates below per unit below.												
D	Cost of New Appliance												

## **NOTES ON PRICE SCHEDULE OF PRICE CATEGORY 4: FIRE ALARMS**

**The prices shall be DDP and varied for one year from Contract effective date**

### **CONTRACT PRICE -GENERAL SUMMARY**

#### **1.2 CONTRACTOR'S PRICE**

This will be the Contractor's price inclusive of labour, transport, Communication, accommodations, replacement, to carry out planned preventative maintenance and fault repair of the FIRE ALARM system in accordance with the terms and conditions of this maintenance agreement is as per the schedule or prices and Bills of quantities.

The Contractor's price shall also include cost for all hoists, scaffolding, barriers, signage, lighting and the like to enable him to properly and safely carry out the maintenance works

**Note: The Contractor's price must be broken down under the separate headings provided and all costs stated under Section 2 shall be nett of V A T.**

**The Contractor's price shall be transferred to the Form of Tender .**

#### **2.2 CALL OUT RATES AND DAYWORK CHARGES**

The Contractor shall complete the schedule below noting his hourly rates and charges. These rates and charges will only be used for the rectification of faults and problems not covered by the terms and conditions of the Maintenance Agreement.eg work over holidays, off office works etc.

##### **2.2.1 Call Out Rates and Charges for Service Engineers/team**

<b>No.</b>	<b>Call out description</b>	<b>Call Out Charge Amount per hour (Kshs)</b>
a)	0800 -1800 Monday to Friday	
b)	1800 -0000 Monday to Friday	
c)	0000 -0800 Monday to Friday	
d)	0000 -0800 Monday to Friday	
e)	Resolved by Telephone	
f)	Other: (Contractor to State)	

Hourly rates shall include all overheads and profits.

Contractor to state any minimum charges.

**Note:** The completed call out rates and day work charges are to be returned with the Form of Tender.

Item No.	Description	Unit Of Measure	Quantity	*Performance Period OR Performance Start Date	*Performance End Date
1	Repair of faulty Fire Alarm system	LOT	1	Contract signing date	3 months after award
2	2 Year service and maintenance contract done quarterly in all sites	NO.	8	Date on completion of repairs above	2 year after repairs