

# MINUTES FOR PRE-BID MEETING AND SITE VISIT FOR TENDER KP1/9AA-2/PT/32/ITT/14-15 FOR THE SUPPLY, INSTALLATION AND COMMISSIONING OF NETWORK OPERATIONS CENTER (NOC) HELD ON THURSDAY, 5<sup>TH</sup> MARCH 2015 AT STIMA PLAZA, AUDITORIUM AT 10:00 A.M.

## IN ATTENDANCE

1. Benjamin Muoki	Telecoms Manager, Kenya Power	- Chairman
2. Jane Ndinya	Procurement Officer, Kenya Power	
3. Josphat Mbugua	Ag. Chief Engineer, Data Networks, Ke	nya Power
4. Isaac Kimuya	Telecoms, Kenya Power	- Secretary
5. Simon Muoki	World Electronic co. ltd	
6. Martin Mwita	Horsebridge Network Systems	
7. Shalom Opuck	Adwest Communications	
8. Peter Bosita	Adwest communications	
9. Paul Elungat	TBM	
10. Macharia Kinga	Camusat Kenya	
11. Antony Obwogo	Lantech Africa	
12. Maryann Cheruiyot	Adwest Communicatios	
13. James Otieno	Services Computer Industries	
14. Mary Njogu	Services & Computer Industries ltd	
15. Nathan Ateya	Computer Information Systems	
16. Antony Kungu	Kenvasha investments	
17. Okoko Philip	Joworld Agencies	
18. Kiraru Kumar	Symphony	
19. Kenneth Agina	T-Voli consulting	
20. Lweis Wachira	Symphony	
21. Josepho Odera	Microcity Kenya ltd	
22. Polycap Onyikin	Lantech Africa	
23. Caroline Mwangi	The copy Cat Itd	

## **AGENDA**

- 1. Pre-bid meeting
- 2. Site visit for Tender KP1/9AA-2/PT/32/ITT/14-15 for the Supply, Installation and Commissioning of Network Operations Center (NOC)

## **PART A - MINUTES**

The Chairman, Benjamin Muoki (Telecoms Manager, Kenya Power) called the meeting to order at 10:40a.m. and welcomed members. In his opening remarks he gave a brief overview of the

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project stating that it would be supply, installation and commissioning of a NOC responsible for monitoring Kenya Power Network devices, Applications and servers.

The team from Kenya Power was introduced to the members.

Jane Nginya (procurement) took the members on a brief of Procurement procedures and guidelines of the tender document. The following were the key points to note;-

- (i) The closing date will remain 7<sup>th</sup> March, 2015 at 10:00 a.m.
- (ii) Bidders advised to arrange their document as in SECTION II TENDER SUBMISSION CHECKLIST, PG. 6.
- (iii) Tender security (500,000/-) wording should be EXACTLY as outlined in the sample tender security form. Insurance Bonds SHALL NOT be accepted as tender security.
- (iv) Confidential Business Questionnaire (CBQ) Do not bid with more than one company.
- (v) Qualification Information form (QIF) Arrange as indicated.
- (vi) Site visit NOT MANDATORY
- (vii) Certificate of Confirmation of Directors and Shareholding(C.R. 12) –MANDATORY
- (viii) Bidders should be TAX compliant
- (ix) Bidders reminded to provide current ISO certificates, give brochures.
- (x) Proof that Forty Percent (40%) of supplies are from citizen contractors.
- (xi) Price Schedule do not fill using pens or pencil. They should be properly indicated (typed).
- (xii) Eligible and Ineligible tenderers
  - KPLC employees, Board or committee members and Public servants should not bid
  - Joint Ventures allowed
  - Relatives of KPLC not allowed to bid
- (xiii) Label envelope containing document clearly with tender number and title.
- (xiv) The tender is public and international and has no preference.
- (xv) Performance security of 10% of contract price.
- (xvi) Follow schedule of requirements and BOQ. Do not change the format.
- (xvii) Evaluation criteria should be adhered to.
- (xviii) Follow general conditions and contract as described in the Kenya procurement laws

The Chairman, Benjamin Muoki then took the members through an overview of what Kenya Power was looking for in the NOC. These points are noted below;

1. NOC will not be monitoring any Voice end points.

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- 2. Kenya Power is looking to purchase site monitors for environmental monitor of its Data Centers across the country in its major depots. It should be SNMP compliant and have an IP interface. A total of fifteen (15) including two spares to be purchased. Installation costs to be included and complete integration with NOC.
- 3. Two (2) NMS will be purchased instead of one (1) for each of the NOC servers to complement each other.
- 4. A split air conditioning unit to be included for the cabinet room housing the NOC servers and database.
- 5. A small LAN for the empty room where the NOC will be installed. Fiber will be used to link to the next building and consequently to the Core Switch.
- 6. 5 KVA UPS as specified in the tender document.
- 7. Furniture should be of good quality. A proposal should be included and drawings clear.
- 8. Proposed number of cabinets is one (1) but if bidder's proposal is big and requires more, specifications for the extra cabinets remain the same. No other specs will be allowed.
- 9. The room proposed for NOC is fully dedicated for NOC and will not share space with any other users.
- 10. All Kenya Power devices are SNMP compliant and Kenya Power will help achieve this.
- 11. NOC should interact with normal system database OIDs. Kenya Power will avail OIDs to monitor servers. A good NMS should discover it.
- 12. Bidders were advised not supply NOC server of less quality even if bidder's solution required a NOC server of less quality. Technical specifications will be adhered to strictly during technical evaluation.
- 13. All features/specifications should be supplied as in tender document.
- 14. Database can run simple queries in a network environment.
- 15. NOC and Database servers should be compatible and not limited to Windows, Linux but custom to bidder's solution.
- 16. Solution is in-house and will not be hosted by a third party. A temporary VPN connection will be opened when troubleshooting and closed once the troubleshooting is done during implementation.
- 17. There NOC should be secure from any malware/viruses and should not derail network performance.
- 18. Database should be those listed on technical specification as Kenya Power administrators are trained in SQL, Oracle and if other software is used, include full cost of training the personnel.
- 19. Display of different customized dashboards for different administrators. For example; administrators in different regions monitoring different devices, server administrators

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- and application administrators. Dashboard pages can appear on multiple screens or one single page one all screens.
- 20. On ticketing system; Kenya Power has its own ticketing system (CRM). NOC to have its own ticketing system as a module of the NMS. Kenya Power CRM only accepts pre-formatted emails. Bidder should include ticketing system and agree on how interface the two.
- 21. License to target a maximum of 10,000 devices including PCS, servers, network devices and UPS. A maximum of 3000 network devices or instances to be monitored.
- 22. During implementation:
  - Kenya Power will give thresholds of what to monitor. Report status should in color code schemes.
  - Kenya Power will come up with scheme for the color codes; whether RED means danger or not; Status for ON/OFF, Server overloading status to change using color code, Server idle/busy status colors and others indicators.
  - At least six (6) provisions for administrator, three (3) local and three (3) remote. And at least fifty (50) users to query system at any given time remotely.
- 23. Addendum to be communicated through press and emails.
- 24. There will be changes to the BOQ and consequently Schedule of Requirements as in highlighted in BOLD in the table below;

## PART B - ADDENDUM

## (i) BILL OF QUANTITIES

Item No.	Description	Unit Of Measure	Quantity	Indicate Make & Type	Indicate Delivery Date
1.	Server	Piece	2		
2.	Operating System	Piece	2		
3.	NOC Database	Piece	2		
4.	NMS software	Piece	2		
5.	Desktop PC and Monitors	Piece	3		
6.	Laptop	Piece	4		
7.	Graphics User Interface (GUIs)	Piece	7		

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8.	Switch	Piece	1		
9.	Local Area Network	LOT	1		
10.	Fiber cable	Meters	50		
11.	Printers	Piece	1		
12.	Furniture	LOT	1	-	
13.	UPS	Units	2		
14.	Cabinet	Piece	1		
15.	Installation and Commissioning	LOT	1		
16.	Training	LOT	1		
17.	Site Monitor Unit	Piece	15		
18.	Split Air Conditioning unit	Piece	2		

Table 1: BOQ

## a. Network Monitoring Software (NMS)

The Network Operations Center (NOC) will have two servers complimenting each other. The two servers will have separate NMS installed and therefore need to include another in the Bill of Quantities (BOQ). Therefore the number of NMS licenses to be purchased has increased from one (1) to two (2) as indicated in Table 2.1 above.

### b. Site Monitor Unit

A site monitor will be installed in all our Data Centers in the country to monitor operational parameters of the Data Centers and instances captured and recorded by the NMS. It will monitor environmental parameters such as temperature and humidity gauges, flood detection, liquid level and measure AC/DC voltages and currents, from a local or remote location, over an intranet or internet connection. Monitor battery voltage, battery charging current, battery discharge current for UPS batteries.

The site monitor is a rack mount device that should be able to generate alarms when a circuit is open or closed, or when a sensor reading is above or below a user defined range. Alarm notifications can be sent via SMS, Trap SNMP and displayed on a customized dashboard on the NMS and adjustable alert threshold. Site monitor shall have IP interface.

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## List of sites to be installed include;

	Site Name	Quantity
1.	Stima Plaza	2
2.	Electricity House – Nairobi	2
3.	Electricity House – Mombasa	I
4.	Electricity House – Kisumu	1
5.	Electricity House - Nakuru	1
6.	Nyeri Stima	1
7.	Thika	1
8.	Eldoret	1
9.	Nairobi South	1
10.	Nairobi North – Ruaraka	1
11.	Juja NCC – Comm room	1
12.	Spare	1
13.	Spare	1
	Total	15

# Technical Specifications for Site Monitor

16	Site Monitor			
	Housing	Rack mount		
	Indicators	Alert; Power, Network link		
	Sensor Pods	Room, Rack, Wireless Sensor Pods		
1	Power	Double power feed: (16-60) Vdc and/or (12-40)Vac, 20 VA		
	Requirements			
	Communications	- 2RS232 connections for local target communication		
	=	- 10/100 Base-T communication port		
		- GSM cellular link		
	Inputs and Outputs	- 4 analog inputs +/- 60mVdc / +/- 60Vdc full range		
		- 12 analog inputs: 0-5 Vdc		
		- 32 Dry inputs		
		- 16 dry outputs N/O - N/C		
		- 4 temperature sensors inputs		
		- 2 humidity sensors inputs		
		- 1 flood detector input		
		- 2 liquid-level sensor (4-20)mA inputs		
		- 2 frequency meter inputs		
		- 2kMH meter inputs		
	Accessories	- AC measurement adapter (4 channel galvanically isolated		
		transformer based)		
		- DC measurement adapter (4 channel galvanically isolated		
		dc or ac/dc based)		
		- AC current transformer		
		- DC current – Hall sensor		





	- Temperature sensor
	- Humidity sensor
	- Flood sensor
	- internal backup battery (2-Hr)
	- auxiliary dc feed outputs
Protocols	TCP/IP; HTTP; HTTPS; SMTP; SNMP v1, v2c, and v3;
	DHCP; DNS; Socks v4 or V5 Proxy Server; A-Link
Management	Internet Explorer v5.5 or later; Mozilla 1.3 or later; Firefox
Interface	2.0 or later; StruxureWare Data Center Expert
Protocols	TCP/IP; HTTP; HTTPS; SMTP; SNMP v1, v2c, and v3;
	DHCP; DNS; Socks v4 or V5 Proxy Server; A-Link
Operating	Temperature: 0 - 50C (32 – 113F); Relative Humidity: 10-
Environment	95% (non-condensing);
Warranty	Two Years
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## c. Split Air Conditioning Unit

There will be need for cabinet to be enclosed for reasons of environment control and Noise reduction. Enclosure will be provided by Kenya Power. A split air conditioning unit will be supplied and installed on site.

## Technical Specifications of Split Air Conditioning Unit

17	Split Air Conditioning Unit	11.0
	BTU Performance	24,000/24,500
	Cooling EER (BTU/Watts)	9.4/9.4
	Dehumidification (Pts/Hr)	7.8
	Dry Air Flow (CFM)	590
	dBA Level (Indoor/Outdoor)	65/67
	Est. Cooling Area (Sq. Ft.)	1560
	Energy Star	Yes
	Thermostat Control	Thermistor
	Air Direction	4-WAY
	Remote Control	Yes
	Energy Saver Function	Yes
	Programmable Timer	24 Hrs, On/Off
	Fan Speed: Cooling	3
	Fan Only Speed	3
	Compressor	Rotary
	Indoor Fan Type	Blower
	Type air Discharge	Тор
	Outdoor Vent/Exhaust	Yes
	Classic Type	Slide-In-Out
	Voltage	240/50 Hz
	Watts (cooling)	2600





Rated Amps	11.3
Cable	200m Cable (from consumer unit to
	Split A/C) comes with 30A MCB and
	its associated rated AVS
Extension cords	Three (3) pieces of 3m 4 plug extension
	cord
Warranty	5 Years Parts and Labor

## (ii) TRAINING

The equipment (Hardware and software) training period of engineers at Manufacturers premises changes from two (2) to one (1) week and number of engineers from five (5) to four (4). Factory acceptance Test will be conducted by four (4) and not (3). Local operational training will remain one week (1) for ten (10) staff. The FAT and local training will be done same week by the same people.

15	TRAINING
	Hardware and Software training for 4 Engineers at Manufacturers premises for a minimum
	one (1) week
	Factory Acceptance Test at Manufacturers premises for 4 Officers
	Operator training and On The Job local training for 10 staff for a minimum one (1) week

#### (iii) CLARIFICATIONS SOUGHT FROM INTERESTED BIDDERS DURING PRE-BID.

- a. <u>Question</u>: What is the total number of Service Desk users in your environment?
   <u>Answer</u>: we have a service desk already and NOC to be integrated into the existing one.
- b. <u>Question:</u> What is the maximum number of Administrators (named users) do you require to be supported by the Service Desk solution?

  <u>Answer:</u> we said in pre-bid at least 6 admins are expected and 10 to be trained. Also it

can support 50 users who can query the system at any given time remotely or locally.

- c. <u>Question:</u> What is the maximum number of Helpdesk do you require to be supported by the solution at a given time?
  - Answer: we shall have only three positions at the NOC and rest are remote viewers only.
- d. <u>Question:</u> What is the Total Number of Change Management Users? <u>Answer:</u> The three admins in part 2 above to handle all these
- e. <u>Question:</u> What is the Total Number of Asset & Configuration Management Users? <u>Answer:</u> The three admins in part 2 above to handle all these
- f. Question: Number of servers and applications

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Answer: Kenya Power will be looking to monitor a maximum of 3,000 network devices. Some of the devices have more than two instances. The number of instances should be equal to number of nodes to be monitored. Thresholds for monitoring of servers, radio, routers and other devices will be agreed upon during time of implementation.

g. <u>Question</u>: Number of cabinet?
 <u>Answer</u>: The minimum number of cabinets is one (1) as in tender specification but if solution needs more, more cabinets of similar specifications can be added.

h. Question: Is Fiber cable indoor or outdoor?

Answer: The fiber cable is in-door.

i. Question: Under **NOTE**, point no. 2, on Pg. 40 of the tender document, what is meant by backup system?

Answer: Replace words backup system with NOC

j. Question: What types of servers need to be managed; number of cores and types of applications running on the servers?
Answer: The issue of types of servers, operating systems, number of CPUs, number of CPU cores etc. will depend on licensing of specific applications for the NOC. Kenya Power NOC will currently concentrate on Network Visibility only and later add the additional non network objects such as server OS, databases. The Applications and server types have been listed on the tender document under server and application specifications.

k. Question: Are there any existing NOC at Kenya Power? Answer: This is the first NOC Kenya Power is purchasing so there will be no need for any migration. All devices to be monitored will be Automatic discovered of which Kenya Power will make SNMP compliant and SNMP is not vendor dependent. This includes Call managers (Cisco) and Radio managers (Radwin and Cambium/Motorola).

## (iv) TENDER CLOSING DATE

The tender closing date has not been changed and still remains on *Tuesday 17<sup>th</sup> March 2015* at 10.00a.m. All the other terms and conditions remain as per the tender document.

All the other terms and conditions remain as per the tender document.

### (v) PRE-BID MEETING AND SITE VISIT

The Pre-bid meeting held on Thursday, March 05, 2015 at Stima Plaza, Auditorium and a site visit at Stima Mall previously indicated as MANDATORY was been deemed **NON-MANDATORY** as the tender is public and welcomes international bids.

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The site visit took place after the Pre-bid meeting and bidders were familiarized with NOC room and SITE VISIT FORMS signed by Kenya Power staff and handed over to bidders.

With No other business to conduct, the Pre-bid meeting and Site visit was closed at 1 p.m.

Signed.  $\frac{7}{10/03/20/5}$  Date.  $\frac{10/03/20/5}{10/03/20/5}$ 

Isaac Kimuya Secretary

Signed Samoel

Date (8/03/2015

Benjamin Muoki Chairman