

2008



**[REQUEST FOR PROPOSAL  
FOR INTEGRATED  
CONVERGED VOICE & DATA  
IP PLATFORM]**

Issue Date: October 1

**REQUEST FOR PROPOSAL  
FOR INTEGRATED CONVERGED VOICE AND DATA IP SOLUTION PLATFORM**

**Project Background**

The Spectrum Management Authority (SMA) is an agency within the Ministry of Mining & Telecommunications, with a subsidiary company the Universal Access Fund Limited (UAFCL). The existing staff complement of the SMA is 31 and that of the UAFCL is 5. The SMA is constantly seeking innovative ways to improve its efficiency in a cost effective way with the ultimate aim of reducing costs and ultimately offering better services to its customers.

As such proposals are being invited to offer an all-in-one platform to provide business communications needs of the organization by delivering a complete, integrated converged voice and data services platform with at least the following main capabilities:

- Telephony,
- Unified Messaging,
- Interactive Voice Response, and
- IP Routing.

The overall objective is to obtain an efficient communications system which will be able to deliver world class service to our internal and external customers as the business grows.

**Description of bid process:**

The SMA is soliciting bids for meeting its needs for this project. Bidders must adhere to the timeline identified in this solicitation. In the event alterations to the timeline become necessary, all interested parties who have submitted their intention to bid will be notified of the changes.

Bids shall have a validity period of 90 days. The SMA reserves the right to call Bidder(s) for clarifications or demonstration. Bids will be evaluated on how well proposals meet the SMA's needs including their cost effectiveness. To that extent all bids will be evaluated using an objective scale as depicted below.

Company Profile	10%
System Technical Requirements	60%
System Administration Management	15%
System Cost of Ownership	15%

This Request for Proposal (RFP) does not commit the SMA to pay for any expenses incurred by any bidder in preparing its responses to this solicitation. The SMA reserves the right to accept or reject any or all responses to this RFP.

**Bidder's Response to the RFP:**

Bidders must indicate responsiveness to requirements by typing in bold letters **Comply** or **Does Not Comply** against each required feature in Summary Charts on pages 10 to 14.

Bidders are also requested to offer proof of their specification compliance by inserting proof responses within the body of this solicitation. Bidders are encouraged to insert images, pictures and other support materials that will enhance their written responses. Since the evaluation team will be looking to see how well the SMA's requirements are met, a clear and concise description is encouraged.

Proposals must include requisite training and pertinent warranty periods for each item bid. All bids must clearly identify how items bid meet solicitation requirements. They must also clearly show how those items may be configured and priced to meet requirements. If bidders do not bid on every item, those omitted items must be clearly identified.

If any questions arise concerning this solicitation, contact shall be made with the SMA representative identified on the page below. Telephone requests will not be accepted or acknowledged. All questions must be submitted in written form and submitted either via letter, email or fax.

All responses will be sent to all parties who have submitted their intention to bid.

**Bids must be submitted in a sealed envelope in the following manner:**

1. The *outer envelope* should be clearly marked:  
“**Tender for Integrated Converged Voice & Data IP Platform**” and addressed to:  
**Chairperson, Procurement Committee**  
**Spectrum Management Authority**  
**53 Knutsford Boulevard, Kingston 5**
2. Inside the outer envelope should be two (2) sealed envelopes, one marked “**Technical Proposal**” and the other “**Financial**”

Bids not received by the due date and time will not be considered and will be automatically disqualified. There will be no exceptions to this rule.

When bids are submitted, they must include a bidder's cover page as well as a table of contents to facilitate the evaluation process.

**Clarification of RFP**

RFP Contact: Mr. Anthony Murray, Manager, Information Technology  
Address: 2<sup>nd</sup> Floor, VM Building, 53 Knutsford Boulevard, Kingston 5  
Email address: amurray@sma.gov.jm  
Fax number: (876) 960-8981  
Phone number: (876) 929 -8520 / 929-8550

**Bidder's Contacts**

To assist the SMA's evaluation team in properly evaluating bids, please use the table below to indicate the name, title and contact information of personnel responsible for clarifying bidder's responses to this RFP.

Section	Name	Position	E-mail
Entire RFP			
System Technical Requirements			
Cost & Pricing Information			
Service & Support Requirements			

**Bidder is to provide a pricing quotation as follows:**

1. Quotation #1 shall be for an Integrated Converged Voice & Data IP Platform configured as defined in this solicitation which must include the appropriate software for voice mail and all appropriate software licensing.
2. Quotation #2 shall be for a SLA (Service Level Agreement) as defined in this solicitation which must include stated guaranteed response times.
3. Quotation #3 must be for the number and style of included handsets.

**Each of these quotations must include all installation fees. All parts are to be listed as separate line items.**

**Remember - Proposals must include requisite user and administrative training and must also include pertinent warranty periods for each item bid. All bids must clearly identify those items that meet requirements set forth in this solicitation and must clearly show how those items may be configured and priced to meet bid requirements. If bidders do not bid on every item, those omitted items must be identified.**

## Company Evaluation Section

Profile the bidder's company. Indicate its experience providing similar solutions to organizations like the SMA's.

Indicate the bidder's commitment to the proposed manufacturer's solution. Include number of certified technicians, length of time representing manufacturer's products, etc.

Indicate the bidder's ability to support the SMA's installation, service and maintenance needs. Include hours of operation, number of pertinent personnel, spares inventory, etc.

### **Reference Accounts**

Please indicate below five existing customer references. These customers must be able to be contacted and/or visited to witness system performance and its ability to support the SMA's needs as defined in this solicitation.

Company Address	Contact/Position	Phone	Fax

## **System Technical Requirements Section**

Discuss specifically how the proposed solution complies and addresses each of the following requirements.

### **Section 1: Architecture**

Describe the overall architecture of the system. Provide a diagram that illustrates all of the major network components, their role and interactions with each other. Where applicable, indicate the OS that the IP Gateway software runs on. You may refer to these diagrams in later sections.

Describe how the proposed system can be expanded without replacing or radically changing the initially purchased equipment.

Describe the proposed system's ability to route calls and voice mail message alerts outside the system to home phones, cell phones and other devices.

Describe all programmable features, indicating which ones are user programmable.

Describe fully the power requirements of the system.

Provide reliability details and indicate all elements and system redundancy.

### **Section 2: Phones**

#### a) Digital Phones (Basic)

These phones require only the ability to handle the following basic features:

- Call Transfer
- Message Waiting Light
- Call Park
- Call Pickup
- Conference (Indicate the limit of phones that can be conferenced)
- Incoming Call waiting beep
- Call Forward (Indicate the limitation of paths the call may take)

b) IP Phones & Power Options

These must be in-line powered. Describe any standards that allow you to power your phones from a wiring closet using other vendor's networking equipment and taking advantage of interoperable standards. Please provide the part number for each product that will be referenced in the price list and you may optionally provide a brief description. The feature set of these phone are the same as for the basic digital phones with the addition of speaker phone functionality (*Note: The existing network switches lacks Power over Ethernet (PoE) capability*).

c) Additional Features:

Please describe any additional features that distinguish your phones.

d) Suppliers:

List any third party suppliers of phones compatible with your system.

### Section 3: IP Gateway /IP PBX Functionality

- a) Describe exactly how many IP phones your product can support
- b) Describe how many Digital phones your product can support
- c) Do you provide Automatic Route Selection/Least Cost Routing?
- d) How many classes of service do you provide for Toll Restriction?
- e) Do you provide classes of service based upon PIN number?
- f) Can you restrict calling to specific Area Codes?
- g) Can you restrict individual numbers from being called?
- h) Do you provide differentiated ringing for internal and external calls?

#### **Section 4: Access to PSTN**

- a) Describe the equipment necessary to provide digital access for outgoing trunks to the Public Switched Telephone Network. (PSTN)
- b) Describe in detail any fail-back mechanisms via the PSTN that exist in the event the data network is unavailable either due to congestion or a down circuit.
- c) Describe the equipment necessary to provide digital access for 2 incoming trunks for DID service.

#### **Section 5: Integrated Messaging**

Integrated messaging allows an email client to retrieve voice mail messages from a voice mail system. The messages are in turn interleaved with current email messages, with meaningful information in the summary lines.

- a) Describe your integrated messaging solution.
- b) Diagram and explain what is necessary for the email client and server software to retrieve voice mail messages.
- c) Indicate the voice mail systems that this architecture is compatible with.
- d) List the email systems that are compatible based upon client and server requirements.
- e) Indicate what is used to populate the subject lines of the email system with meaningful information from the voice mail system.

#### **Section 6: Telecommuting**

- a) Describe any features that give a telecommuting or traveling employee the ability to receive calls from home or a hotel room with Internet access. Include the cost per employee.
- b) Please indicate the type and level of internet access that is necessary for secure access from an employee's home, and when traveling.

## **Section 7: High Availability**

Describe how you will provide the highest levels of reliability and uptime. You may refer to Section 1.

## **Section 8: Network Design Guidelines**

- a) Provide the amount of peak bandwidth necessary per phone per call between the IP phones and the IP Telephony Gateway for a typical call & signaling session.
- b) Provide the amount of peak bandwidth per call between the IP Telephony Gateway at the Branch and at the Head Office.
- c) Indicate the QoS standards supported by the phones, PBX, gateways and other end nodes where applicable, that help the voice services to achieve preferred priority levels on the network from end to end. Explain how the components implement QoS standards such as 802.1p, DiffServ, ToS or RSVP.
- d) Indicate any other networking services that must be implemented, such as DHCP, DNS etc., in order to support the system and the options that must be turned on.

## **Section 9: Call Accounting Features**

- a) Do you provide SMDR (Station Message Detail Recording)? If yes, describe the options for handling the output of the data.
- b) Can you provide busy studies on outbound trunk groups? If yes, describe the feature that makes this possible.
- c) Can you provide busy studies on incoming trunk groups? If yes, describe the feature that makes this possible.
- d) Can you provide usage reports base upon PIN or account numbers?
- e) Discuss other reporting features provided by you or a third party.
- f) Are any of the above reports accessible via the web?

### Section 10: Voice Mail Integration

List the voice mail vendors that you are capable of supporting, and the minimum requirements for the support.

### Section 11: APIs

List the API's that are supported, and the benefits of the API support such as third party products that have been developed and partnerships that have been formed for future third party development.

### Section 12: Standards

Please describe the standards that you are supporting that will provide interoperability among vendors for components of a VoIP PBX solution.

### Summary Chart

Please indicate compliance to the features required by the SMA in the proposed solution. In the S/O column indicate if the feature is standard or an option. In the comments column indicate any exceptions or enhancements. Also indicate any additional costs if it is a cost option.

FEATURE	COMPLY	S/O	COMMENTS
Add on Conference (4 party)			
Account Codes			
Attendant Alternate Answer			
Attendant Barge In			
Attendant Night Transfer			
Attendant Overflow			
Attendant Transfer – Announced			
Attendant Transfer – Unannounced			
Automated Attendant			
ANI			
Busy Lamp Field			

Call Forward – By time of day			
Call Forward – remote			
Call Forward – Busy			
Call Park			
Call Pickup			
Call Queuing			
Call Transfer			
CENTREX Compatibility			
Digit Manipulation			
Called Number Display			
Name Display – External			
Name Display - Internal			
Distinctive Ringing			
Volume Control - Handset			
Volume Control – Ringing			
Volume Control – Intercom/HF			
Flexible Key Assignment			
ANI			
Last Number Redial			
Least Cost Routing			
External Paging Access			
Message Waiting Indication			
Automatic Set Relocation			
Multiple Console Operation			
PC Used as Attendant Console			
Music on Hold			

Multiple Tenant Service			
Off Premise Connections via IP			
Internal Paging			
Power Failure Transfer (4 lines)			
Prime Line Pickup			
SMDR output			
System Programmed through web browser			
Toll Restriction			
Flexible Numbering of Stations (3,4,5 digits)			
Consistent Station Numbering among multiple tied sites			
System Speed Dialing			
Station Speed Dialing			
Voice Mail Integration			
Simultaneous Voice and Data per port			
DS1 must support minimum of 3			
Automatic Alternate Routing			
Inter-switch Feature Transparency			
PRI support			
Subnet Trunking			
Traffic Reports			
Non-Volatile System Program			
Headset compatible telephone sets			
Support for analog station connections: fax, cordless phones			

Retrieve Voice Mail Messages from a personal computer			
Multiple Line Appearances per station			
TAPI/WAV support			

Voice Mail configuration – The voice mail must be configured with the following parameters.

Parameter	Minimum	Proposed	Comments
Number of users			
Number of Ports			
Storage Capacity			
Growth Capacity – Ports			
Growth Capacity – Hours of storage			

Please indicate compliance to the voice mail features required by the SMA in the proposed solution. In the S/O column indicate if the feature is standard or an option. In the comments column indicate any exceptions or enhancements. Also indicate any additional costs if it is a cost option.

FEATURE	COMPLY	S/O	COMMENTS
Automatic station identification			
Broadcast messages			
Distribution lists			
Outcall notification			
Message waiting indication control			
Delivery Priority			
Return to operator or other user			

Retrieve messages from computer – unified mailbox			
Retrieve email messages from telephone – unified mailbox			

## **System Administration Management Section**

Discuss how the SMA's internal staff can maintain and support system users. Is a simple Graphics User Interface (GUI) interface available for system administration? Identify what levels of training are necessary to perform these functions and what the costs of that training might be.

Discuss what controls and abilities users have that enable them to make changes to their stations without the need of a trained technician.

Discuss how the system may be upgraded without having to change the hardware. Discuss what system or administrative changes can be made to the system without disrupting ongoing user functions.

Discuss how an audit trail is generated to track system management changes.

Training for new users is an important issue for the SMA. Discuss how a new user will get functioning quickly and with a limited amount of SMA technical support. Discuss self-help screens, initial voice mail setup functions, GUI user desktop option management, etc.

Since the SMA must support home teleworkers, discuss how easy it would enable an SMA worker to unplug the office phone and plug it into a home DSL/Cable modem/etc. digital network connection. Describe the functionality of this home phone connection.

## **System Cost of Ownership Section**

Discuss the manufacturer's history of system software revisions to installed systems. Since its first software version, how many revisions have been released? What is the policy for upgrading existing systems to the newest level of software? What are the charges from the manufacturer for these software upgrades?

How many years of hardware warranty are offered by the manufacturer?

Discuss how the scalability of this solution will enable the SMA to purchase only what it needs when it needs it, yet be able to grow and add functionality at a reasonable cost.

## APPENDIX 1 - CURRENT ENVIRONMENT

### Summary of SMA's Existing PBX System:

- Nortel Norstal-PLUS Modular ICS with one (1) M12X0 Trunk Module (Full) and one (1) M0X16 Station Module
- There is one free 1D slot available.
- SMA currently has a total of twenty-one (21) Cable & Wireless lines & six (6) Digicel lines

### Cable & Wireless Lines:

- Five (5) are connected to the PBX
  - 2 inbound
  - 2 outbound
  - 1 inbound/outbound
- Twelve (12) straight lines routed via PBX
- Two (2) fax lines
- One (1) ADSL line and one (1) Remote Access

### Digicel Lines

- Three (3) are configured for 'hunting' in the PBX
- Three (3) straight lines routed via PBX

### List of Telephone Lines

Telephone Number	Straight Line (Y or N)	PBX Line (Y or N)
960-2654	Y	
960-3455	Y	
960-4720	Y	
920-1101	Y	
920-3593	Y	
960-0015	Y	
960-8034	Y - FAX LINE	
960-8981	Y - FAX LINE	
968-0378	Y	
968-9512	Y	

927-1727	Y - UAFCL	
929-8807	Y	
968-2425	Y	
926-3960	Y	
929-1730		Y
929-4610		Y
929-8520		Y
929-8550		Y
968-3585		Y
960-7493	Y	
929-3582		ADSL

42 Extensions, handsets include the following:

- Norstar M7208 Rel. 22 - 15
- Norstar M7310 Rel. 23 - 8
- Norstar M7324 Rel. 04 – 1
- Nortel M8004 Rel. 01 – 1
- Nortel T7208 Rel. 04 - 5

**Broadband Connection**

The organization currently utilizes both a static 3MB Wireless Subscriber Line connection via a Cisco Router and a dynamic Asymmetric Digital Subscriber Line (ADSL) connection: 3072 kbps downstream/512 kbps upstream. These data connections are connected to a Symantec Gateway Security 1620 appliance.

A dial-up connection is utilized for communication with a mobile vehicle (31 Kbps)

The Data networking needs of SMA are considered to be a separate but related issue. SMA does not wish to lock its data networking equipment into the same vendor that provides voice solutions. For this reason, any features that enable voice as an application on SMA’s LAN must be standards based and interoperable with other vendor’s data networking equipment.

**Current Network Infrastructure**

