



# Server Infrastructure and Virtualization Technology Refresh

## Request for Proposal

Version 1.0  
September 17, 2019

## **TABLE OF CONTENTS**

1.	Purpose and Background.....	5
1.1	Purpose.....	5
1.2	Background.....	5
1.3	Types of Proposals.....	5
1.4	Contract Terms.....	5
1.5	Contract Award.....	6
2.	Schedule of Events and Definition of Terms.....	6
2.1	Schedule of Events.....	6
2.2	Definition of Terms.....	6
3.	Proposal Instructions, Content, and Format.....	8
3.1	Proposal Inquiries.....	8
3.2	Delivery of Proposal.....	8
3.3	Required Review.....	8
3.4	Errors and Omissions.....	9
3.5	Addenda.....	9
3.6	Amendments to Proposals.....	9
3.7	Right of Rejection.....	9
3.8	Subcontractors.....	10
3.9	Conflict of Interest.....	10
3.10	Bidders Certification.....	11
3.11	Non-collusion.....	11
3.12	Disclosure of Proposal Content.....	11
3.13	System Demonstrations.....	11
3.14	Proposal Format.....	12
3.15	Proposal Content.....	12
3.15.1	Cover Page.....	12
3.15.2	Transmittal Letter.....	13
3.15.3	Table of Contents.....	13
3.15.4	Executive Summary.....	13
3.15.5	Introduction, Company Background, Experience and References.....	14
3.15.6	Proposed Solution.....	14
3.15.7	Implementation Approach and Work Plan.....	14
3.15.8	Cost Proposal.....	15
3.15.9	Contract Payment Details.....	16

4.	Scope of Work.....	16
4.1	Solution Scope .....	16
4.2	Current Environment Overview .....	17
4.3	Solution Requirements and Specifications .....	17
4.3.1	Minimum Solution Specifications.....	18
4.3.2	Detailed Solution Specifications .....	19
4.3.3	Documentation .....	23
4.3.4	Acceptance Test Procedure.....	24
5.	Evaluation Criteria and Vendor Selection .....	24
5.1	Proposal Evaluation Weightings .....	24
5.2	Rating and Scoring .....	25
5.3	Planned Evaluation Steps .....	25
5.3.1	Initial Screening .....	26
5.3.2	Evaluation of Written Proposals.....	26
5.3.3	Final Evaluation .....	26
5.4	Proposal Evaluation .....	26
5.4.1	Converting Costs to Points .....	27
6.	Standard Proposal Information .....	27
6.1	Assignment .....	28
6.2	Disputes .....	28
6.3	Severability .....	28
6.4	Supplemental Terms and Conditions.....	28
6.5	Clarification of Offers.....	28
6.6	Discussion with Bidders .....	29
6.7	F.O.B. Point.....	29
6.8	Contract Negotiation .....	29
6.9	Failure to Negotiate.....	30
6.10	Notice of Intent to Award.....	30
7.	Standard Contract Information.....	30
7.1	Contract Approval.....	30
7.2	Proposals as Part of the Contract .....	30
7.3	Additional Terms and Conditions .....	31
7.4	Proposed Payment Procedures .....	31
7.5	Retainer .....	31
7.6	Contract Payment.....	31
7.7	Contract Personnel .....	31

7.8	Inspection and Modification.....	31
7.9	Termination for Default.....	32
7.10	Schedule Delay Penalty.....	32
7.11	Contract Changes – Unanticipated Amendments.....	32
7.12	Contract Invalidation .....	33
8.	Appendix A: Supplemental Information .....	33
9.	Appendix B: Pricing Worksheet .....	34

## **1. Purpose and Background**

### ***1.1 Purpose***

The Central Bank of The Bahamas (the Bank) is requesting proposals from interested and qualified firms to provide a technology refresh of its servers, storage and virtualization infrastructure. Additionally, the Bank seeks to introduce a turn-key Virtual Desktop Infrastructure (VDI) Platform, enabling approximately 100 staff to concurrently access a virtual Microsoft Windows 10 desktop solution. This Request for Proposal (RFP) states the overall scope of the initiative, current technology used, outcomes desired, as well as, desired vendor qualifications, bid criteria and evaluation process.

Any decision to award a proposing firm shall be based on the demonstrated ability to understand and deliver the services desired by the Bank. Other factors that shall contribute to the selection of a proposing firm include, but are not limited to, price, accessibility, and a proven record of accomplishment in delivering the requested solution.

### ***1.2 Background***

The Bank is responsible, in its role as regulator of banks and trust companies licensed in The Bahamas, for ensuring monetary stability and ensuring a sound and stable financial system for The Bahamas.

### ***1.3 Types of Proposals***

Bidders are limited to one proposal as the prime bidder. Bidders shall be allowed to collaborate with others and may be included as subcontractors on multiple proposals. The result will be one contract between the Bank and the prime bidder. The prime bidder shall be wholly responsible for meeting the requirements of the RFP, for submission of the proposal, and for performance of the entire contract. The Bank will consider the prime bidder to be the sole point of contact with regard to all contractual matters, including payment of all charges resulting from any contracts.

### ***1.4 Contract Terms***

The terms of service requested is anticipated to commence within two to four weeks of contract agreement.

**1.5 Contract Award**

A contract awarded by the Bank will be based upon criteria, standards, and weighting identified in this RFP as applied to the total solution proposal. Each bidder’s proposal will be considered as a whole solution, without limitation, including all hardware, software and services proposed, qualifications of the bidder and any subcontractors, and cost.

**2. Schedule of Events and Definition of Terms**

**2.1 Schedule of Events**

The following table provides the Schedule of Events for this RFP through contract execution. The contract term and work schedule set out herein represent the Bank’s best estimate of the schedule that will be followed. If a component of this schedule (such as the proposal submission deadline) is delayed, then the rest of the schedule will be adjusted as needed.

Table 3-1-1: Schedule of Events

EVENT	DATE	TIME (EDT)
Request for Proposal Issue Date	September 17, 2019	
Deadline for Submitting Questions	September 27, 2019	4:00 pm
Deadline for Question Responses	October 4, 2019	
Proposal Submission Deadline	October 18, 2019	4:00 pm
Vendor Demonstrations	October 25-27, 2019	
Notice of Intent to Award	On or about November 11, 2019	

**2.2 Definition of Terms**

This RFP uses the following terminology:

- “Bidder” refers to any recipient of this RFP who submits a Proposal. All references that would normally use the words Bidder, Offer, or Bidder and Respondent, have been changed to Bidder for consistency.

- “The Central Bank” or “CBOB” or “the Bank” refers to the Central Bank of The Bahamas and includes the related entities who are seeking the services described in this RFP, the Bank’s employees, and Independent Consultants and Contractors retained by the Bank for this Project.
- “Commercially available” means the material or goods must be available from a company that provides ongoing support, maintenance, and licensing. Shareware and public domain software are not considered commercially available.
- “Contract” or “Agreement” refers to a signed agreement for consulting services between the successful Bidder and the Bank.
- “Contractor” refers to the vendor selected as the prime bidder as a result of this RFP.
- “Disaster Recovery” refers to the ability to recover from the loss of a complete system or site, whether due to natural disaster, system failure or malicious intent. Disaster recovery strategies include replication and backup/restoration.
- "Must", "mandatory" or "required" means a requirement that must be met in substantially unaltered form, for the proposal to receive consideration.
- “Project” refers to the objective of the contract, as a whole, the sum total of all elements of the contract.
- “Proposal” refers to the submission from a bidder in response to the RFP for the design, development, implementation, licensing and software maintenance of the requested Surveillance Solution.
- “RFP” refers to this Request for Proposal.
- “VDI” refers to Virtual Desktop Infrastructure
- “Services” refer to labor, resources and materials provided by the Contractor, as required to execute the Agreement.
- "Should" or “desirable” means a requirement having a significant degree of importance to the objectives of the Request for Proposal.
- “Solicitation” refers to the invitation by the Bank or proponents to submit formal quotations, bids, tenders, proposals or statements of qualifications in direct response to the invitation.
- “Subcontractor” refers to the party contracted with the prime bidder to deliver part of all of the solution and has no direct contractual relationship with the Bank.
- "Successful" or “winning bidder” means the successful proponent to this Request for Proposal who enters into a written contract with the Bank.

- “Supplier” refers to an individual, firm, consultant, or group awarded an agreement under a Bank solicitation invitation.

### **3. Proposal Instructions, Content, and Format**

#### **3.1 Proposal Inquiries**

All inquiries, interpretations, or clarifications, either administrative or technical, regarding this RFP, must be requested by email no later than the date indicated in the Schedule of Events. All non-proprietary written questions will be answered in writing and conveyed to all Bidders. Oral statements concerning the meaning or intent of the contents of this RFP by any person are not considered binding. Questions regarding any aspect of this RFP should be sent electronically to:

**Tenders' Committee**

**Central Bank of The Bahamas**

Subject Line: **Server Infrastructure and Virtualization Technology Refresh Request For Proposals**

Via E-Mail: [tenders@centralbankbahamas.com](mailto:tenders@centralbankbahamas.com)

#### **3.2 Delivery of Proposal**

Electronic copies of the proposal must be received on October 18, 2019, at or before 4:00 pm EDT. Faxed, hardcopy or oral proposals will not be accepted and could result in disqualification.

A bidder's failure to submit its proposal within the submission timeline will disqualify the proposal. Late proposals or amendments will not be accepted for evaluation.

All proposals submitted in response to this RFP must consist of a single electronic version of the proposal, including all required attachments (may be separate electronic documents but clearly identified), and be accompanied by a scanned and signed transmittal letter described in [Section 3.15.2: Transmittal Letter](#). The Cost Proposal ([Section 3.15.7](#)) must be submitted as a separate electronic document.

#### **3.3 Required Review**

Bidders should carefully review this solicitation for defects and questionable or objectionable material. The Bank must receive comments concerning defects and objectionable material at least five (5) days before the proposal opening. This will allow



issuance of any necessary amendments. It will also help to prevent the opening of a defective solicitation and exposure of bidders' proposals upon which award could not be made. Protests based on any omission or error, or on the content of the solicitation, will be disallowed if these faults have not been brought to the attention of the Bank, in writing, at least five (5) days before the time set for bid opening.

### **3.4 *Errors and Omissions***

If prior to the date fixed for submission of Proposal a Bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP or any of its exhibits and/or appendices, the Bidder shall immediately notify the Bank of such error in writing and request modification or clarification of the document. Modifications may be made by addenda prior to the RFP response deadline. Clarifications will be given by written notice to all active Bidders, without divulging the source of the request for it.

### **3.5 *Addenda***

The Bank may modify this RFP, any of its key action dates, or any of its attachments, prior to the date fixed for submission by issuance of a written addendum posted to its website. Addenda will be numbered consecutively as a suffix of the RFP Reference Number.

### **3.6 *Amendments to Proposals***

Amendments to or withdrawals of proposals will only be allowed if acceptable requests are received prior to the deadline that is set for receipt of proposals. No amendments or withdrawals will be accepted after the deadline, unless they are in response to the Bank's request.

### **3.7 *Right of Rejection***

Bidders must comply with all of the terms of the RFP and all applicable laws governing the Commonwealth of The Bahamas.

The Bank may reject any proposal that does not comply with all of the material and substantial terms, conditions, and performance requirements of the RFP.

The Bank may waive minor informalities that:

- do not affect responsiveness;
- are merely a matter of form or format;

- do not change the relative standing or otherwise prejudice other offers;
- do not change the meaning or scope of the RFP;
- are trivial, negligible, or immaterial in nature;
- do not reflect a material change in the work;
- do not constitute a substantial reservation against a requirement or provision.

The Bank reserves the right to refrain from making an award if it determines that to be in its best interest.

### **3.8 Subcontractors**

Subcontractors may be used to perform work under this contract. If a bidder intends to use subcontractors, the bidder must identify the following in the proposal:

- a. Complete name of the subcontractor;
- b. Complete address of the subcontractor;
- c. Type of work the subcontractor will be performing;
- d. Percentage of work the subcontractor will be providing;
- e. A written statement signed by each proposed subcontractor, that clearly verifies that the subcontractor agrees to the terms of this RFP and is committed to rendering the services required by the contract.

**N.B.** The subcontractor must also comply with Section 3.10: Bidders Certification as outlined in this document.

The substitution of one subcontractor for another may be made only at the discretion and prior written approval of the Bank. If subcontractors are used, the prime bidder retains all responsibility for full delivery of all requirements of this RFP.

### **3.9 Conflict of Interest**

Each proposal shall include a statement in the transmittal letter indicating whether or not the firm or any individuals working on the contract has a possible conflict of interest (e.g., employed by the Bank) and, if so, the nature of that conflict.

The Bank reserves the right to cancel the award if any interest disclosed from any source could either give the appearance of a conflict or cause speculation as to the integrity of the solution by the bidder. The Bank's determination regarding any questions of conflict of interest shall be final.

### **3.10 Bidders Certification**

By signature on the proposal, bidders certify that they comply with:

- a. the laws of the Commonwealth of The Bahamas (including N.I.B. certificate, V.A.T. compliance and a valid Business License);
- b. all terms and conditions set out in this RFP;
- c. a condition that the proposal submitted was independently arrived at, without collusion, under penalty of perjury;
- d. the requirement that the offers will remain open and valid for at least 60 days.

If a bidder fails to comply with [a] through [d] of this paragraph, the Bank reserves the right to disregard the proposal, terminate the contract, or consider the contractor in default.

### **3.11 Non-collusion**

The bidder's signature on a proposal submitted in response to this RFP guarantees that the prices, terms and conditions, and services quoted have been established without collusion with other bidders and without effort to preclude the Bank from obtaining the best possible competitive proposal.

### **3.12 Disclosure of Proposal Content**

All proposals and other material submitted become the property of the Bank and may be returned only at its option. All proposal information, including detailed price and cost information, will be held in confidence during the evaluation process and prior to the time a Notice of Intent to Award is issued.

Trade secrets and other proprietary data contained in proposals may be held confidential, if the bidder requests, in writing, that the Bank does so, and if the Bank officer agrees, in writing, to do so. Material considered confidential by the bidder must be clearly identified and the bidder must include a brief statement that sets out the reasons for confidentiality.

### **3.13 System Demonstrations**

The Bank reserves the right to require a bidder to make system demonstrations of their proposed solutions onsite at its main office in Nassau, The Bahamas. All costs associated with a demonstration shall be borne entirely by the bidder.

### **3.14 Proposal Format**

Vendors must organize their proposals in the following format:

- Cover Page
- Transmittal Letter
- Table of Contents
- Executive Summary (concise overview of solution proposed)
- Introduction, Company Background, Experience and References
- General System Design, Functional Specifications, and Implementation Approach (including responses to questions in [Section 4.3 General Requirements and Specifications](#))
- Cost Proposal
- Draft contract with the proposal based on information in the RFP
- Copy of valid Tax Compliance Certificate
- Copy of current Business License
- Attachments

The bidder must provide a point by point technical response stating compliance or taking exception to any or all sections of this RFP and provide sufficient information to allow the Bank to evaluate the proposal. Any deviations or exceptions to the Bank's requirements should be noted. Incomplete proposals or proposals that do not comply with the Bank's stated requirements may be eliminated from the selection process at the Bank's discretion.

### **3.15 Proposal Content**

Proposals **must** contain the following:

#### **3.15.1 Cover Page**

The first page of the bidder's proposal must be a cover page containing the following text:

**CENTRAL BANK OF THE BAHAMAS  
INFORMATION TECHNOLOGY DEPARTMENT  
RESPONSE TO RFP No. IT2019009  
Server Infrastructure and Virtualization Technology Refresh**

The cover page must also include the bidder's name, contact person, contact telephone number, address, city, state, country, zip code, fax number, and e-mail address.

### **3.15.2 Transmittal Letter**

The bidder must submit a signed transmittal letter with its response that includes the items below.

- a. Bidder's legal name and any other name under which the bidder does business; mailing address; street address (for courier mail services); name and title of individual who will sign the contract; name and title of the company contact person (if different); and for each key person: direct telephone number, fax number, and e-mail address;
- b. A statement that the individual who signs the transmittal letter is authorized to commit the company;
- c. A statement that the proposal is effective for a period of **sixty (60) days**;
- d. A guarantee that prices quoted in the proposal were established without collusion with other bidders and without effort to preclude the Bank from obtaining the best possible competitive price;
- e. Acknowledgement that the bidder has read this RFP and subsequent amendments;
- f. A statement indicating whether or not the bidder or any individual working on the contract has a possible conflict of interest;
- g. A statement identifying all subcontractors and joint venture partners.

### **3.15.3 Table of Contents**

The bidder must provide a table of contents with corresponding page numbers related to its proposal.

### **3.15.4 Executive Summary**

The Executive Summary, which must not exceed five (5) pages, must provide a concise overview of the bidder's proposed solution and services, but must exclude pricing information. Bidders are encouraged to highlight those factors that they believe distinguish their proposals from their competitors.

### **3.15.5 Introduction, Company Background, Experience and References**

The bidder must provide an introduction, the background of the company and details of the organization's experience with deploying similar solutions. As the Bank will evaluate qualifications of key staff proposed by the bidder, this section should include:

- a. Proposed team organization and the designation and identification of key staff;
- b. Qualification of the candidate for project manager;
- c. Qualifications of candidates for key bidder staff roles i.e. solution design architects, server and storage engineers, etc.; and
- d. References: last three implementations for this proposed solution.

### **3.15.6 Proposed Solution**

The bidder must identify the proposed solution up to and including the following:

- a. Provide a brief solution overview of the various solution components, their release history, current release being proposed, and number of operational installations for the proposed software solution;
- b. Describe and illustrate the general system design of the proposed solution;
- c. Identify any additional features, functionality, recommended solution components or services that were not outlined in [Section 4: Scope of Work](#) but that the Bidder recommends that the Bank consider. Include a description of the features and functions of each additional proposed module;
- d. Describe the security features of the proposed solution;
- e. Describe alternative service delivery models (i.e. Software-as-a-Service, Application Service Provider, Hosted, etc.) available to the Bank and indicate how these might impact the proposed solution; and
- f. Confirm ability to conform to the requirements in [Section 4.3: Solution Requirements and Specifications](#) or clearly articulate proposed alternatives.

### **3.15.7 Implementation Approach and Work Plan**

Bidders are required to describe their proposed implementation approach, clearly identifying each phase, the timeline proposed, roles and responsibilities to be performed by the Bidder and those to be performed by the Bank. The

Bidder should clearly indicate the Bank's resource requirements needed to meet the Bidder's proposed schedule and

- a. Describe your implementation and project management methodology and approach to ensure a successful implementation;
- b. Provide a project organization chart highlighting the key staff who will be assigned to the project. Provide names and resumes for the project manager and other key assigned resources;
- c. Provide a detailed work plan that identifies major activities, tasks, deliverables, and resources. The work plan should assume that project will kick-off within no more than 3 weeks of the approval of the contract by the Bank;
- d. Describe the roles and responsibilities of Bank staff during implementation. Include the minimal and optimal number of Bank staff members (with job category) and the expected role and level of effort during each phase of the project;
- e. Describe the roles and responsibilities of the Bank staff required to maintain and update the system during the first 5 years. Include the minimal and optimal number of Bank Staff members (with job category), the expected role and level of effort on an on-going basis;
- f. Describe your change management methodology and activities that will be performed during the implementation;
- g. Describe your user acceptance methodology and the responsibilities of Bank staff during testing;
- h. Describe your training methodology and approach; and
- i. Describe how the use of any alternative service delivery models would impact the proposed implementation approach, work plan, and Bank staff level of effort.

### **3.15.8 Cost Proposal**

As indicated in [Section 3.2: Delivery of Proposal](#), the Cost Proposal must be separated from the remainder of the RFP response documents. The Bank seeks a clear and comprehensive understanding of all costs associated with the acquisition, implementation and ongoing maintenance of the proposed solution. In this section, Bidders must itemize all costs inclusive of all shipping, taxes (e.g. Value Added Taxes and duties). In addition to a detailed cost breakdown, a three-year Total Cost of Ownership worksheet must be completed as part of the cost proposal. A sample of the worksheet can be found in [Section 9](#).

### **3.15.9 Contract Payment Details**

This section should outline, among other things specific to your firm, the following terms and conditions:

- Total contract sum
- Mobilization deposit
- Stage payments
- Final payment
- Retention terms

## **4. Scope of Work**

### **4.1 Solution Scope**

The Bank requires a robust virtual server and desktop infrastructure capable of supporting mission critical workloads across a various operating system platforms including but not limited to Windows, Linux, Unix etc. The solution must support high availability, be highly scalable and agile with a simplified deployment and operational management of the infrastructure. The virtual desktop infrastructure must be accessible remotely and support the highest security encryption standards.

The Bank seeks a qualified vendor to perform the necessary upgrades and enhancements to the Bank's server infrastructure and to expand the current virtualization footprint with the inclusion of a virtual desktop infrastructure (VDI). The Bank recognizes that there have been significant advances in virtual server and desktop space and wishes to modernize its environment to benefit from the advancements.

In scope for this activity is the Bank's head office location located and Frederick and Shirley Streets and the Disaster Recovery (DR) facility located at Maxil Cable Bahamas.

The proposal must list all hardware, software and professional services required to meet the Bank's needs.

The key business requirements of the project are as shown below:

- Refresh and consolidate the server and storage infrastructure and simplify management across sites.
- Protect critical corporate data and ensure availability of the same in case of disaster



- Seamless integration with existing or new servers, storage and network solutions present and future applications planned for procurement.
- Should allow faster provisioning of virtual servers.
- Should provide high availability for business resiliency.

#### **4.2 Current Environment Overview**

The Bank consist primarily of two sites. Its head office located at Frederick and Shirley Streets and a disaster recovery facility at Maxil Cable Bahamas. Supporting the Bank's application workloads are two (2) IBM BladeCenter H (MT-M 8852-HC1); one (1) installed at the head office and the other deployed at the DR facility each of which are integrated with an IBM v7000 storage area network and using VMware as its virtualization software.

Only the most critical workloads are made available at the DR facility. The Bank internal technical resources are responsible for maintaining the current environment inclusive of system maintenance, operation, availability, backup and support. The Bank staff consist of 275 personnel that access various systems for daily operations. In addition, the Bank makes available, via virtual private networking and/or external web portals, several applications such as real-time gross settlement and two web-based reporting portals. The estimated number of simultaneous users across these various platforms is approximately 800.

The current desktop computer configuration includes Windows 10 and Macintosh OS X 10.5. The Bank runs primarily Windows Server, virtualized in VMware, to host its business systems. The Bank utilizes Microsoft Active Directory Services for most system and network authentication. Currently supported databases include Oracle, MySQL and Microsoft SQL Server. The Bank uses MS Exchange 2010 for all corporate email communications with plans to upgrade to Exchange 2016 by the end of the year. The Bank has a very robust network infrastructure consisting of 1Gbps hard-wired access connectivity, VLANs, QOS, multiple ISPs and unified threat management.

#### **4.3 Solution Requirements and Specifications**

The solution being proposed must meet the requirements detailed below and the response should clearly indicate how these requirements would be satisfied.

### **4.3.1 Minimum Solution Specifications**

The Bank has established the following minimum specifications. Each bid must meet or exceed the specifications listed below in order to be considered.

#### **General Requirements**

- The solution shall not have a single point of failure, and shall provide 99.999% service availability in a 24-hour period of each calendar day. Solutions with limited scalability will not be accepted by the Bank;
- The solution shall have an expected life span of a minimum of five (5) years;
- The solution shall support the ability to add capacity via scale-out or scale-up methods;
- The solution shall support upgrades to firmware and software;
- The solution shall support VDI sessions via remote access;
- The solution shall provide a consistent end-user experience;
- The solution shall support at least 100 concurrent Windows 10 VDI sessions;
- The solution shall include all costs for hardware virtualization, software, and consulting services to implement and configure the platform;
- All provided equipment to be in a new factory condition with full warranty;
- All equipment is to be rack mountable in a standard four pedestal rack using square holes. All proposed equipment will be mounted in contiguous rack units;
- All equipment is to have power connections that are capable of auto-switching between 110-208 volts and include power cords with C14 ends;
- All Equipment is to include three (3) years parts and labor warranty with same day service and/or replacement part delivery;
- Proposed solution is to include three (3) years 24x7 manufacturer support for hardware, software and/or licensed services;
- All equipment should provide for management and configuration by the Bank's IT staff;
- The proposed solution should be managed centrally through a single Management Console. The management platform should be configured to proactively detect the health issues and service degradation/interruptions and should be able to create event / alerts to the relevant administrators through Email, SMS etc.

- All storage network connections are to be 10 Gb Ethernet and minimum 25 Gb Fibre;
- Management network connections should be physically and logically separate from the storage network and be able to support a minimum 1 Gb Ethernet throughput using CAT 6 cabling;
- Proposals are to include storage network cabling between switches and the SAN device's controllers (management network cabling will be provided by the Bank);
- All equipment shall be enable to be monitored by the Bank's monitoring and notification system using SNMP or other method; and
- All equipment proposed must be configured to operate within a manufacturer supported configuration and support VMware virtualization, IBM Spectrum Protect and Veeam backup without workarounds. While not strictly necessary, it is preferable to have hardware and configuration that is certified by VMware and Veeam.

#### **4.3.2 Detailed Solution Specifications**

In addition to the minimum specifications listed above, the proposed solution must meet the following solution requirements.

##### **SAN Requirements**

- The SAN must provide at least a total of 60 TB usable capacity as presented to the VMware environment before deduplication or compression. This usable capacity is after the SAN is fully installed and configured for production use, including the setup of the RAID volumes and space required for software if applicable.
- The SAN is to be configured with hot spare drives in a quantity and manner that follow the manufacturers' best practices.
- The SAN is to include all solid state drive technology, but it is expected that the SAN will be able to support both solid state and traditional hard disk drives if the Bank determines a need in the future. This includes NVMe flash drives.
- The SAN is to include automation for data tiering or prioritization of data between installed storage types.
- The SAN shall have at least two controllers that provide for automatic and seamless failover and fallback.
- Each controller will have 10 Gb Ethernet and 100 Gb Fibre connections to each of the switches for storage data traffic.

- Each controller should have separate management network connections.
- The SAN shall include fully redundant power supplies.
- The SAN shall provide for future expansion, either externally or internally.
- The SAN shall provide snapshot capability.
- Storage Area Network with redundant controllers.
- Data Progression.
- VMware certified.
- Install and configure proposed SAN.
- SAN should include a chargeback reporting option.
- Thin provisioning for LUNs.
- Veeam and Spectrum Protect snapshot integration.
- Deduplication features.
- Compression features.
- The solution must support AES 256 encryption for data in-transit and data at rest.

#### **Server Requirements**

- Six (6) servers per site featuring:
  - Dual 2<sup>nd</sup> generation Intel Xeon processors or higher (minimum of 4 cores per processor).
  - Raided NVMe SSD local drives to support VMware installation
  - Redundant power supplies
  - 1U or 2U form factor
  - Imbedded systems management
  - 1TB GB memory (or more sized for existing workload and VDI deployment).
- Two (2) 24-48 port 16GB fibre channel blade fabric for the server and SAN connectivity. Fibre switch and routers must include redundant power supplies and fans.
- Two (2) 25Gbe network top of the rack 48 port switches that will act as uplink to the Bank's current and future core networking environment. Network switches must include redundant power supplies and fans.
- Rack mounting, cabling and onsite implementation of servers and associated equipment.
- Onsite installation and configuration of the VMware cluster and high availability.

- Configuration of remote monitoring, integration with the Bank's SIEM tool (IBM QRadar) and systems monitoring tools (Solarwinds and Site24x7).
- VMWare 7.x Enterprise and features: Highly Available, Vmotion, and Fault Tolerance

#### **Virtual Desktop Infrastructure (VDI)**

- The Vendor shall create up to three (3) Windows 10 Enterprise images based on the Bank's requirements;
- Additionally, the Bank's application requirements will include the following:
  - Windows 10 Enterprise desktop;
  - Office 2019 and Office 365 Pro Plus;
  - Nitro and Adobe Acrobat Readers;
  - IBM iSeries Access Solutions;
  - Microsoft Edge, Mozilla Firefox, and Google Chrome for internal web applications;
  - Symantec Endpoint Protection client;
  - Java and Flash to support third-party web applications; and
  - Kofax Ascent Capture.
- The Bank's hardware integration requirements will include the following USB devices:
  - Thumb drives with encryption; and
  - Duo and Safenet Hardware Tokens.
- The solution shall include details regarding network printers and mainframe printing.
- The VDI solution should be capable of efficiently allocating resources as per the job requirements

#### **Systems Management, Monitoring and Reporting**

- Unified management of servers (physical and virtual), storage, networking (physical and virtual) and virtual desktop infrastructure.
- "Single pane" management console preferred.
- Monitor systems health and performance.
- Provide for rapid deployment of physical and virtual servers.
- Rapid repurpose of compute and storage resources.

- The reporting solution shall provide system monitoring and must be capable of exporting logs to Security Information and Event Management software (SIEM).
- The reporting solution shall conform to service level metrics that can be tabulated in numerical form for monitoring and performance measurement.
- The reporting solution alerts and reports shall be developed by the Vendor to inform the Bank of service level metrics and performance measurement.

### **Security Requirements**

- All default passwords must be changed and documented.
- All hardware and software components must be configured to industry best practices such as NIST, ISO, etc.
- All user and administrator activities must be logged.
- Where possible, role based security must be implemented.
- Where possible, user access should be integrated with the Bank's Active Directory solution.

### **Implementation and Ongoing support**

- The successful bidder shall perform the Project Management for the entire project from commencement to final hand over for production use. This should include:
  - A comprehensive Project Plan including Risk, Quality, Migration, Resource, Change and Communication Management Plan.
  - The name of the Project Manager who would be the single point of contact during the complete project implementation.
  - A detailed implementation of the solution. Plan should include the full scope of the project as mentioned above. On acceptance of such plan by the Bank, the bidder is required to carry out the implementation and testing of solution.
  - The bidder should provide a detailed project plan in terms of activity and phase timelines indicating the number of days required for executing the project with the details of deliverables and milestones including the delivery of the server and storage components.
- The bidder shall be responsible for generation and submission of necessary documents required during various phases of project. These would include planning, installation, commissioning, rollout, acceptance testing, project diagrams, technical drawings and configuration

documentation. All such documents shall only be accepted after the same is approved by the Bank.

- The successful bidder shall be responsible for Design, Supply, Installation, Configuration, Testing and Commissioning of the proposed server, storage and VDI Infrastructure solution at the Bank's production and secondary sites.
- Vendor shall install, configure, integrate and test all hardware and software components proposed in response to this RFP.
- Vendor will migrate existing virtualized servers to the new environment
- Vendor shall migrate data from existing SAN to new SAN solution
- Vendor shall provide operation, troubleshooting and technical manuals for the proposed solution.
- Vendor shall label all interconnections including, but not limited to: network, fibre, and power cables; network and fibre channel switch ports; etc.
- Vendor shall perform an initial setup drill test as a partial requirement of user acceptance testing.
- Vendor shall provide hands-on training for Bank IT staff in the management and operation of each solution component and the solution as a whole. Vendor must include an outline of the training plan provided. Training should cover topics related to technical as well as administrative aspects of the solution to enable the Bank to operate, modify and optimize the solution.
- Three years 24/7 support for the proposed hardware and software.
- The proposed solution must be supported for a period of five years (three years as warranty support plus two years of maintenance which would be at the same service level of warranty) as per RFP and the Bank's requirement.
- The bidder must analyze, review and gather performance metrics and ensure it performs optimally.
- The bidder shall be responsible for installing, configuring of all patches, updates and upgrades required for the offered solution such that the system(s) are at the latest revisions as at the time of hand-over to the Bank.

#### **4.3.3 Documentation**

The successful bidder must provide:

- Installation/ layout plan and connectivity Diagram
- Technical write up of the:
  - System design
  - System and connectivity architecture diagram
  - Detailed active components configuration details
  - Security implementation for installed infrastructure components
- Operator manual for shutdown/start of the active resources
- Draft Acceptance test plan and procedure document
- Acceptance test reports, performance test reports of the components.
- As built system documentation

#### **4.3.4 Acceptance Test Procedure**

The User Acceptance Test procedures should:

- Demonstrate all aspects of the proposed solution, including switches, cabling, computer and management of servers, storage, etc., work as per the Bank's specification and expectation.
- Demonstrate the solution meets or exceeds the requirements outlined in the RFP, e.g. 60TB available storage, the VDI to support 100 active users, etc.
- Demonstrate the integrated working of all installed software.
- Physical component and inventory check: All the hardware and software should be checked properly.
- Functional test: All the functionality of the proposed solution should be tested including, cluster management, running tools/ programs, and testing capability of system.
- Performance test: Performance of individual components to be tested/demonstrated as per the specification of entire cluster.

## **5. Evaluation Criteria and Vendor Selection**

### **5.1 Proposal Evaluation Weightings**

Proposals will be evaluated based on the following weights (100%):

- Project Understanding and Proposed Solution – 25%
- Implementation Methodology and Approach – 20%



- Solution Cost (Implementation and Annual Recurring) – 20%
- Vendor Background, Experience & References – 15%
- Solution Support and Maintenance – 10%
- Quality, Clarity, and Responsiveness of Proposal – 5%
- Results of interviews and demonstrations – 5%

The bidder with the highest combined total points will be selected.

**5.2 Rating and Scoring**

Proposals will be evaluated and ranked according to the outline below. The evaluation will be based on a 0 to 10 scale. The score of each criterion will be determined by multiplying the criteria weight by the rating. The sum of all scores will be the total score.

Rating	Description
10	Exceeds expectations; Proposal clearly addresses and exceeds requirements, excellent probability of success.
8	Somewhat exceeds expectations; Proposal addresses all requirements, very good probability of success.
6	Meets expectations; Proposal addresses basic requirements, good probability of success.
4	Somewhat meets expectations; minor weakness or deficiencies, Proposal partially addresses requirements, fair probability of success.
2	Does not meet expectations or demonstrate understanding of the requirements, low probability of success.
0	Lack of response or complete misunderstanding of the requirements, no probability of success.

**5.3 Planned Evaluation Steps**

The Bank plans to use the following multi-tiered process:

- Initial screening; see [Section 5.3.1](#).
- Preliminary evaluation of the written proposals and reference checks.
- Final evaluation of proposals.

### **5.3.1 Initial Screening**

The Bank will conduct an initial screening step to verify bidder compliance with submission requirements. A proposal that fails to satisfy the minimum standards shall be considered nonresponsive and disqualified from the proposal evaluation process.

### **5.3.2 Evaluation of Written Proposals**

The Bank will establish a Proposal Evaluation Committee composed of Bank employees and inclusive of subject matter experts to evaluate proposals received in response to this RFP.

### **5.3.3 Final Evaluation**

The Bank will conduct final evaluations as a culmination of the entire process of reviewing bidder proposals and information gathering.

## **5.4 Proposal Evaluation**

In evaluating the proposals submitted, the Bank will apply the "Best Value" standard based upon the criteria and standards contained in this RFP and from applying the weightings listed in [Section 5.1](#) above as well as the considerations listed below. Purchase price is not the only criteria that will be used in the evaluation process. Any award resulting from this RFP will be made to that vendor whose offer conforms to the RFP and it is determined to be the most advantageous, of "best value" to the Bank, in the sole judgment of Bank.

1. The quality and range of services the firm proposes to provide.
2. The extent to which the goods or services meet the Bank's needs.
3. The firm's overall experience, reputation, expertise, stability and financial responsibility.
4. The vendor's past relationship with the Bank, if any.
5. The experience and qualifications of the staff that will be assigned to implement the solution and service the Bank's account. This should be accompanied with evidence of the relevant industry certifications.
6. The ability to provide service in an expedient and efficient manner.
7. Quality and range of management and performance reports.
8. Vendor's financial terms offered to the Bank.
9. The training options available and the supported delivery formats.

10. The total, long-term cost to the Bank to acquire the vendor's goods and services.
11. The ability to demonstrate how the solution will meet the requirements outlined.
12. Service Level Agreement (Triage and Response Times)
13. Any other relevant factor that the Bank would consider in selecting a supplier.

Reference checks will be used to refine and finalize preliminary scores.

#### **5.4.1 Converting Costs to Points**

The lowest cost proposal will receive the maximum number of points allocated to cost. The point allocations for cost on the other proposals will be determined through the methodology set out below. In the generic example below, cost is weighted as 25 percent (25%) of the overall total score.

##### *Example - Formula Used to Convert Cost to Points*

[STEP 1] - List all proposal prices

- Bidder #1 - \$140,000
- Bidder #2 - \$142,750
- Bidder #3 - \$147,500

[STEP 2] - Convert cost to points using this formula.

$$\frac{[(\text{Price of Lowest Bidder}) \times (\text{Maximum Points for Cost})]}{\text{(Cost of Each Bidder Proposal)}} = \text{POINTS}$$

The RFP allotted 25% (25 points) of the total of 100 points for evaluation.

**Bidder #1 receives 25 points.** The reason they receive that amount is because the lowest cost proposal, in this case \$140,000, receives the maximum number of points allocated to cost, 25 points.

**Bidder #2 receives 24.52 points,** i.e.,  $\$140,000 \times 25 = 2,800,000 \div \$142,750$

**Bidder #3 receives 23.73 points,** i.e.,  $\$140,000 \times 25 = 2,800,000 \div \$147,500$

## **6. Standard Proposal Information**

### **6.1 Assignment**

The contractor may not transfer or assign any portion of the contract without prior written approval from the Bank.

### **6.2 Disputes**

Any dispute arising out of this agreement will be resolved under the laws of the Commonwealth of The Bahamas. Any appeal of an administrative order or any original action to enforce any provision of this agreement or to obtain relief from or remedy in connection with this agreement may be brought only in the Supreme Court for the Commonwealth of The Bahamas.

### **6.3 Severability**

If any provision of the contract or agreement is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected; and, the rights and obligations of the parties will be construed and enforced as if the contract did not contain the particular provision held to be invalid.

### **6.4 Supplemental Terms and Conditions**

Proposals must comply with [Section 3.7: Right of Rejection](#). However, if the Bank fails to identify or detect supplemental terms or conditions that conflict with those contained in this RFP or that diminishes the Bank's rights under any contract resulting from the RFP, the term(s) or condition(s) will be considered null and void.

After award of contract:

- a. If conflict arises between a supplemental term or condition included in the proposal and a term or condition of the RFP, the term or condition of the RFP will prevail.
- b. If the Bank's rights would be diminished as a result of application of a supplemental term or condition included in the proposal, the supplemental term or condition will be considered null and void.

### **6.5 Clarification of Offers**

To determine if a proposal is reasonably susceptible for award, communications to clarify uncertainties or eliminate confusion concerning the contents of a proposal are permitted between the Bank or the Proposal Evaluation Committee and a bidder.

Clarifications may not result in a material or substantive change to the proposal. The evaluation by the Bank or the Proposal Evaluation Committee may be adjusted as a result of a clarification under this section.

#### **6.6 Discussion with Bidders**

The Bank may conduct discussions with bidders for the purpose of ensuring full understanding of the requirements of the RFP and proposal. Discussions will be limited to specific sections of the RFP or proposal identified by the Bank. Discussions will only be held with bidders who have submitted a proposal deemed reasonably susceptible for award by the Bank. Discussions, if held, will be after initial evaluation of proposals by the Proposal Evaluation Committee. If modifications are made as a result of these discussions, they will be put in writing. Following discussions, the Bank may set a time for best and final proposal submissions from those bidders with whom discussions were held. Proposals may be reevaluated after receipt of best and final proposal submissions.

If a bidder does not submit a best and final proposal or a notice of withdrawal, the bidder's immediate previous proposal is considered the bidder's best and final proposal.

Any oral modification of a proposal must be made in writing by the bidder.

Bidders with a disability needing accommodation should contact the Bank prior to the date set for discussions so that reasonable accommodation can be made.

#### **6.7 F.O.B. Point**

All goods purchased through this contract will be F.O.B. final destination. Unless specifically stated otherwise, all prices offered **must** include the delivery costs, inclusive of all taxes, shipping and duties, to the Bank's main office in Nassau, The Bahamas. The Bank will **not** be responsible for storage fees prior to installation and commissioning of the solution.

#### **6.8 Contract Negotiation**

After final evaluation, the Bank may negotiate with the bidder of the highest-ranked proposal. Negotiations, if held, shall be within the scope of the request for proposal and limited to those items, which would not have an effect on the ranking of proposals. If the highest-ranked bidder fails to provide necessary information for negotiations in a timely manner, or fails to negotiate in good faith, the Bank may terminate negotiations and negotiate with the bidder of the next highest-ranked proposal. If contract

negotiations are commenced, they may be held at the Bank's main office in Nassau, The Bahamas.

If the contract negotiations take place in Nassau, The Bahamas, the bidder will be responsible for their own travel and per diem expenses.

### **6.9 Failure to Negotiate**

If the selected bidder:

- a. fails to provide information required to begin negotiations in a timely manner.
- b. fails to negotiate in good faith.
- c. indicates they cannot perform the contract within the budgeted funds available for the project.
- d. and the Bank, after a good faith effort, simply cannot come to terms, then the Bank may terminate negotiations with the bidder initially selected and commence negotiations with the next highest-ranked bidder.

### **6.10 Notice of Intent to Award**

After the completion of contract negotiation, the Bank will issue a written Notice of Intent to Award (NIA) to the successful and send copies to all bidders. The NIA will set out the names of all bidders and identify the proposal and supplier selected for award.

## **7. Standard Contract Information**

### **7.1 Contract Approval**

This RFP does not by itself obligate the Bank. The Bank's obligation will commence when the Governor of the Central Bank or the Governor's designee, in accordance with internal procedures approves the contract. Upon written notice to the Contractor, the Bank may set a different starting date for the contract. The Bank will not be responsible for any work done by the contractor, even work done in good faith, if it occurs prior to the contract start date set by the Bank.

### **7.2 Proposals as Part of the Contract**

The RFP and the successful proposal may be incorporated into the contract agreement.

### **7.3 Additional Terms and Conditions**

The Bank reserves the right to add terms and conditions during contract negotiations. These terms and conditions will be within the scope of the RFP and will not affect the proposal evaluations.

### **7.4 Proposed Payment Procedures**

The Bank will make payments based on a negotiated payment schedule. Each billing must consist of an invoice and progress report. Payment will only be made after the Bank's project manager approves the progress report and invoice. The Bank will not pay in full for hardware, software or services until received by the Bank.

### **7.5 Retainer**

A withholding (retainer) of 15 percent (15%), will be taken off every invoice amount paid to the supplier under this contract. This accumulated balance will be paid at the end of the project, as defined in the final contract.

### **7.6 Contract Payment**

No payment will be made until the contract is approved by the Governor of the Central Bank or the Governor's designee. Under no conditions will the Bank be liable for the payment of any interest charges associated with the cost of the contract.

The Bank is not responsible for and will not pay taxes. All costs associated with the contract must be stated in Bahamian currency.

### **7.7 Contract Personnel**

Any change of the project team members named in the proposal must be approved by the Bank's project manager, two weeks in advance and in writing. Personnel changes that are not approved by the Bank may be grounds for the Bank to terminate the contract.

### **7.8 Inspection and Modification**

The contractor is responsible for the completion of all work set out in the contract. All work is subject to inspection, evaluation, and approval by the Bank's project manager.

The Bank may employ all reasonable means to ensure that the work is progressing and being performed in compliance with the contract. Should the Bank's project manager determine that corrections or modifications are necessary in order to accomplish its intent; the Bank's project manager may direct the contractor to make such changes. The contractor will not unreasonably withhold such changes.

Substantial failure of the contractor to perform the contract may cause the Bank to terminate the contract. In this event, the Bank may require the contractor to reimburse monies paid by the Bank (based on the identified portion of unacceptable work received) and may seek associated damages.

### ***7.9 Termination for Default***

If the Bank's project manager determines that the contractor has refused to perform the work or has failed to perform the work with such diligence as to ensure its timely and accurate completion, the Bank may, by providing written notice to the contractor, terminate the contractor's right to proceed with part or all of the remaining work.

### ***7.10 Schedule Delay Penalty***

The Bank will include scheduled delay penalty in this contract to assure the timely completion of all major milestones. For the purposes of this contract, the Bank and bidder will agree to a set penalty rate. If the contractor fails to complete the milestone by the scheduled date identified in the approved project plan, the Bank retains the right to assess this daily penalty for each day that each milestone is late. In the event the delays are associated with the bank's resources, the contractor will not be penalized.

### ***7.11 Contract Changes – Unanticipated Amendments***

During the course of this contract, the contractor may be required to perform additional work that is not currently included in this RFP. That work will be within the general scope of the initial contract. When additional work is required, the Bank's project manager will provide the contractor a written description of the additional work and request the contractor to submit a firm time schedule for accomplishing the additional work and a firm price for the additional work. Cost and pricing data must be provided to justify the cost of such amendments.

The contractor will not commence additional work until the Bank's project manager has secured any required Bank approvals necessary for the amendment and issued a written contract amendment approved by the Governor of the Central Bank or the Governor's designee.



### **7.12 Contract Invalidation**

If any provision of this contract is found to be invalid, such invalidation will not be construed to invalidate the entire contract.

## **8. Appendix A: Supplemental Information**

The Bank seeks to upgrade and enhance its server, storage, and virtualization platform. To enable the Bank to evaluate such factors, the items listed below are the required minimum qualifications for judging responsiveness of a proposal to this RFP. A proposal that fails to satisfy the minimum standards detailed in this section shall be rejected without further consideration.

1. **Proposal Response** - Bidders must provide a proposal using the format described in [Section 3.14: Proposal Format](#). Proposals that do not meet the required format will be rejected.
2. **Bidder Implementation Experience** - The prime bidder must have completed a similar solution implementation for a regulatory agency in the same or related industry within the last five (5) years. The implemented solution must be described in the proposal, including descriptions of the hardware, software and services delivered.
3. **Transmittal Letter** - The response must include a Transmittal Letter as described in [Section 3.15.2: Transmittal Letter](#).
4. **Pricing Worksheet** - A 3-Year Total Cost of Ownership pricing worksheet ([Section 9](#)) must be completed.

### 9. Appendix B: Pricing Worksheet

For all available deployment models, bidders must provide an itemized listing of all hardware, software and services required to meet the specifications outlined in this request for proposal. Costs must include any and all taxes (e.g. Value Added Tax), shipping and duties. Additionally, bidders must provide a 3-year cost summary using the table displayed below.

Price Description	Non-Recurring (Base)	Recurring (Annual)	3-Yr Extended Cost
Product Costs			
Hardware Cost			
Software Licensing			
Other Licensing & Per Feature Cost			
Maintenance/Support			
Implementation Services			
Project Management			
Documentation & Training			
Additional Costs <i>(Attach description)</i>			
<b>TOTAL</b>			

**Hardware:** List, describe, and record the cost of each piece of hardware that is required.

**Software:** List, describe, and record the licensing, implementation, maintenance, support, and training fees associated with your proposed solution.

**Documentation & Training:** List, describe, and record the cost of developing/delivering the required technical, administrative and end-user documentation for the proposed solution. Please also include all training fees associated with your proposed solution.

**Support/Maintenance:** List, describe and record the ongoing costs associated with the maintenance, support and operation of your proposed solution.

**Implementation:** Describe any labor, equipment, supplies, or other costs associated with installing your proposed solution.

**Project Management:** If there are project management fees associated with your proposed solution, list and describe them here.

**Miscellaneous:** List and describe any other costs associated with your proposed solution.