

## **TERMS OF REFERENCE**

### **APPOINTMENT OF A SERVICE PROVIDER FOR PROVISION OF INTERNET CONNECTIVITY SERVICES (ISP), VIRTUAL HOSTING SOLUTION, FIREWALL SOLUTION, HOSTED PBX SOLUTION AND MIMECAST SOLUTION FOR NATIONAL HOUSING FINANCE CORPORATION FOR A PERIOD OF FIVE (5) YEARS**

#### **1. Introduction**

National Housing Finance Corporation (NHFC) seeks to appoint a suitably qualified and licenced service provider for the provision of internet connectivity services, virtual hosting solution, hosted firewall solution, hosted PBX solution and MIMECAST solution for its offices, located in Johannesburg, Cape Town and Port Elizabeth. NHFC will be replacing its current service provider's Fibre and Wi-Band Internet connectivity services, Fibre solution (PE) and Cape Town office connectivity solution with an upgraded bandwidth of 100 Mbps for the Johannesburg office and 50 Mbps for the Cape Town and Port Elizabeth offices. The three sites would need to be interconnected through MPLS solution (at minimum) or any latest networking solution (e.g. SD WAN, ME, etc). The equipment and software must be continuously upgraded to the latest version for the duration of the contract at no cost to NHFC. The service provider will additionally be required to provide virtual hosting solution, hosted firewall solution, hosted PBX and MIMECAST solution for Microsoft 365. NHFC seeks to conclude a service contract, supported by a Service Level Agreement, for the detailed design, supply, installation, configuration, commissioning and maintenance of a logically and administratively single, resilient, scalable solution, for a period of five (5) years. The anticipated contract commencement date is 01 October 2020.

#### **2. Background**

Currently NHFC utilises a primary 30 Mbps link and 10 Mbps Wi-Band for Internet connectivity in the Johannesburg office. The Cape Town and Port Elizabeth branches utilises 10 Mbps fibre and 10 Mbps Wi-Band respectively. Bundled on the service catalog from the current service provider(s), are the firewall, MIMECAST, domain hosting and connectivity services. The hosted PBX is provided by another service provider. Both service contracts terminate by the 30 September 2020. National Housing Finance Corporation plans to upgrade the current bandwidth to 100 Mbps on the primary link and 50 Mbps on the secondary link, 50 Mbps on the links at the Cape Town and Port Elizabeth sites with an appropriate service level agreement with guaranteed Quality of Services, to cater for additional growth requirements. The solution should guarantee fail-over capability for all sites. There is one datacentre at the Johannesburg office and the two other sites connect via secure VPN. The successful bidder will be responsible for the solution in totality. The solution will be dedicated to internal business requirements. Business requirements include, but not limited to: reliable connectivity to Internet, the hosting facility, reliable hosted PBX (telephony and call centre solution), stable connectivity to Azure, Exchange Online and Mimecast. Constant and reliable connectivity will be required to the hosting facility. One of the major requirements of NHFC is the availability of internet facility that has efficient capability to access electronic data and information from different sources. Considering the above, NHFC deemed it necessary to invite service providers to provide comprehensive solution for the above-stated services that shall provide NHFC with efficient, reliable and cost-effective

internet connection services, communication, and hosting services. The service provider should ensure a smooth transition of the existing services.

### **3. Purpose of the RFP**

NHFC requires virtual hosting, voice and connectivity services that will facilitate flow of information between the Johannesburg, Cape Town and Port Elizabeth offices, and the Internet. The services will also assist NHFC to communicate electronically with external parties and stakeholders. Further, these services allow users to access NHFC information on the NHFC ICT systems remotely. NHFC has its own server environment on the LAN at the Johannesburg Site supported with only routers by the current service provider. Applications running on these servers are accessed via a Local Area Network (LAN) by users located at the NHFC head office and via secure VPN and APN by users located at regional offices.

NHFC seeks to appoint a service provider to design, supply, installation, configuration, commissioning and maintenance of a logically and administratively single, resilient, scalable Internet Connectivity Service, Virtual Hosting of the ICT infrastructure, Voice, firewall and MIMECAST solution at its Johannesburg, Cape Town and Port Elizabeth offices, for a period of five (5) years, including a commensurate Service Level Agreement. The successful service provider will thus be required to provide NHFC with the following:

- a. Provide internet uplink between NHFC (Johannesburg, Cape Town and Port Elizabeth offices, and hosted facility) and the internet through a dedicated bandwidth which does not share bandwidth with the WAN links.
- b. Internet connectivity will be shared by NHFC offices and the hosted NHFC systems in the recovery data centre and the virtual hosted facility;
- c. Primary hosting solution and secondary backup hosting solution located at a different geographical area.
- d. Ensure provided services are monitored 24/7/365 from operations centre that is manned by competent technical staff;
- e. Enable NHFC nominated staff access into a comprehensive monitoring (e.g. utilisation, status, quality, uptime and performance) dashboard that have clear indicators and all the probes that are being monitored;
- f. Alert the NHFC nominated staff of any warnings, faults and alarms via SMS, e-mail, etc.;
- g. Monthly reports must be provided to NHFC's ICT staff. The reports must include as a minimum: uptime; utilisation; and performance against Service Level Targets;
- h. A service manager and account manager must be allocated to NHFC to handle all service related queries and escalations; and
- i. Transfer and management of all DNS records for NHFC owned domains from the current service provider(s).

The Bidder is expected to plan and conduct the installation of the project with minimal impact to daily operations and staff.

## 4. Scope of the Services

The service provider will provide full TCP/IP Internet Service Provision for the NHFC offices in Johannesburg, Cape Town and Port Elizabeth. The service is expected to be highly available and reliable, with overall uptime of no less than 99%.

The bidder shall provide the necessary hardware and other services required to setup the internet connectivity. It involves the following:

- 4.1. A dedicated, fibre of a minimum bandwidth of 100 Mbps internet breakout from bidder's network, complete with 50 Mbps backup for the Johannesburg office; the 50 Mbps internet breakouts for the Cape Town and Port Elizabeth offices with 10 Mbps backup. These connections will primarily be used for hosting of corporate applications, data replication requirements to connect to the data centre, sending and receiving of emails, hosted VoIP PBX solution calling, video conferencing, CCTV surveillance and internet browsing.
  - 4.1.1. The following options are acceptable (**indicated in order of preference**): (a) Fibre optic; (b) Copper (DSL or cable); Cellular (LTE or Wireless)/Radio Link; (d) Satellite.
  - 4.1.2. For redundant connections, the bidder should provide a separate connection to different international gateway than primary connection through fibre optic connection.
- 4.2. No limitations on traffic/ports; bandwidth capacity should be ensured through direct IP connection; no mandatory proxy servers and firewalls.
- 4.3. The provided bandwidth must be dedicated (CIR 1:1)
- 4.4. Internet service should not have additional payment or limitation by (a) traffic amount or (b) time.
- 4.5. Provide a router for each datacentres to provide connectivity to your network. They must be configured with link failure detection and automated failover.
- 4.6. MPLS at minimum or latest networking solution (e.g. SD WAN, ME, etc) connectivity between the NHFC head office, Cape Town and Port Elizabeth sites and the virtual hosted facility is required;
- 4.7. The bidder must supply and manage the network connectivity equipment (excluding LAN equipment for the NHFC offices).
- 4.8. Service reliability must be ensured. Overall uptime should not be less than 99%.
- 4.9. Data confidentiality guarantee; Provider may not scan traffic (if this should be done for finding problems in the network a prior UNDP agreement must be obtained).
- 4.10. All necessary hardware, cabling and software (if required for Internet service and voice service) should be provided and set up cost should be included in the offer.
- 4.11. Latency shall be no more than 35 ms.

- 4.12. Redundant, dedicated point to point links to the Internet
- 4.13. The prioritization of network traffic according to NHFC's business requirements.
- 4.14. Differentiated classes of service that manage traffic types effectively, ensuring that mission-critical traffic receives the required bandwidth throughput and performance;
- 4.15. Technical support and active network management, such as traffic usage statistics, network status and performance visibility, etc.;
- 4.16. Scalability as business requirements change and develop;
- 4.17. Provision of Virtual Hosting solution for NHFC Systems and Applications
  - 4.17.1. Domain services,
  - 4.17.2. Managed hosting of Hyper-V server infrastructure with redundancy,
  - 4.17.3. Veeam Cloud Backups,
  - 4.17.4. VPN Services for remote connectivity to primary and secondary hosted environment,
  - 4.17.5. On-Demand provisioning of services.
- 4.18. Provision of Microsoft 365 Business Voice solution or similar.
  - 4.18.1. 5 X Yealink MVC300,
  - 4.18.2. 160 X Yealink MP56,
  - 4.18.3. 9 X Yealink VP59,
  - 4.18.4. 1 X Yealink MVC800,
  - 4.18.5. 3 X Yealink MVC500,
  - 4.18.6. 10 X Yealink Headsets.
- 4.19. Addition Services – To be provided on an ad-hoc basis (NHFC may opt to add these services anytime during the contract):
  - 4.19.1. Provision of Disaster Recovery As Service.
  - 4.19.2. Provide internet hotspots as a service (provide wireless internet access using 802.11bgn/ac) for conferences away from the NHFC precinct.

## 5. Technical Specifications

### 5.1. Managed Internet Services

Depending on the chosen solution these services should include:

- 5.1.1. Reliable and sustained Internet service provision;
- 5.1.2. Business continuity;
- 5.1.3. Reliable monitoring of services and reporting;
- 5.1.4. Anti-virus and anti-malware management except for in-house desktops, note books and servers
- 5.1.5. A firewall which screens all inbound and outbound traffic (internet breakouts)
- 5.1.6. Anti-manipulation management
- 5.1.7. Usage monitoring, vulnerability (penetration) tests and reporting through a variety of tools;
- 5.1.8. Content filtering;
- 5.1.9. Capacity monitoring;
- 5.1.10. Email archiving;
- 5.1.11. Reliable and quality voice connectivity;
- 5.1.12. Security management both network and physical infrastructure; and
- 5.1.13. Formally documented and approved user account management policy standards and procedures.

### 5.2. Router

- 5.2.1. Must be compatible with the NHFC lines speed and lines equipment to manage Quality of Service (QOS) for video, voice and data.
- 5.2.2. The system must support: Network interfaces
  - Copper 10/100/1000 Ethernet
  - Optical 10 Gigabit Ethernet

## 6. Service Level Agreement

Maintenance must be included in the Service Level Agreement for a period of sixty (60) months, which must cover all aspects of the solution including hardware, software, data and engineering time. Software must be assured, hardware warrantied, and maintenance on hardware and software should apply for a period of sixty (60) months for the proposed solution.

The commencement date is 01 October 2020.

**The SLA must as a MINIMUM make provision for the following:**

- 100 Mbps dedicated uncontended internet access (minimum 50% international guaranteed bandwidth) for NHFC Johannesburg office, 50 Mbps for Cape Town and Port Elizabeth offices;
- Access to a 24/7/365 call centre;
- 24/7/365 monitoring of all services supplied to NHFC;
- 24/7/365 access to the Virtual hosted facility;
- SMS and e-mail notifications to alert NHFC IT staff of any errors, faults, warnings and alarms;
- Allocated account and service manager;
- Fault reporting procedures with contact details;
- Escalation procedures with contact details;
- Required uptime for provisioned services; and
- Response and resolution times for events and service requests.

**6.1. Required Uptime**

Service		Up Time
a.	Internet and virtual hosted facility connectivity	99.99%

**6.2. Response and Resolution Times Required**

Ref	Description	Response Resolution	
		Time	Time
a.	Any fault that impacts on connectivity services (electrical supply, physical security breaches, lightning)	2 hrs	4 hrs
b.	Any fault that impacts both WAN links (excluding cable breaks)	2 hrs	4 hrs
c.	Any fault that impacts one of the WAN links (excluding cable breaks)	2 hrs	8 hrs
d.	Any non-emergency change request (excluding network design related changes)	4 hrs	8 hrs
e.	Any emergency change request (excluding network design related changes)	1 hr	2 hrs
f.	Any non-emergency change request relating to network design changes	8 hrs	5 days
g.	Any emergency change request relating to network design changes	4 hrs	8 hrs

h.	Account related queries	8 hrs	5 days
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### 6.3. Minimum Requirements

The Service Levels outlined within the SLA which refer to service provider commitment to resolve the Service Requests within the applicable response time, unless stated otherwise must be conducted.

The SLA/Warranty must cover repair or replacement for fair wear and tear of devices or the repair or replacement of inherently faulty devices listed in the product schedule, as provided by the Bidder.

- The new solution must present a ubiquitous (being or seeming to be everywhere at the same time) single system image with total system-wide transparency between all NHFC buildings locations.
- All equipment furnished, but not limited to: routers, switches, phone equipment, software, shall be warranted for a period of five (5) years after final acceptance and shall include parts, labour and installation. Telecomm and network equipment warranty shall be by manufacturer. Proof in writing will be required and delivered to NHFC.
- All equipment furnished shall be new, unused and not refurbished.
- **Responsibility Matrix and Project Schedule** - A master project schedule must be included, along with a work responsibility matrix, identifying the tasks the vendor will perform and the tasks NHFC is expected to perform to successfully implement the new system.
- **Requirements** -The successful bidder is required to conduct end-user training on the NHFC premises, tailored specifically to NHFC's particular requirements (e.g., console operator, secretary, and professional, technical support). A proposed plan for training should include follow-up training for NHFC personnel who will continue to train others.
- **Training Manual** - Bidder shall provide a training program (with support and follow-up) and training materials for designated NHFC personnel who will train future employees. Manual shall be delivered in hard copy and electronically.
- **A complete maintenance and warranty agreement** must be included as part of the bidder's proposal to support NHFC between 08:00 and 17:00, Monday through Friday. The proposed agreement must include a bidder technician providing on-site service to diagnose and provide solutions. Remote access service may be acceptable depending on NHFC's stated urgency of repair and shall be determined by NHFC. Replacement parts should be available for at least 5 years. Replacement parts must be readily available for prompt replacement - it is not acceptable to not have service for a day while parts are "on order".
- **Three Year Warranty** - The telephone system, installation and all associated equipment but not limited to routers, switches, phone equipment, software, workmanship shall be warranted by the bidder and by the manufacturer to be free of defects for a period of at least three years following system cutover.
- **Defective Parts** - During the warranty period and any subsequent maintenance agreement, any defective components shall be repaired or replaced at no cost to NHFC and within a 48-hour period.

- **Repair Commitment** - The bidder must include a description of the bidder's repair commitment from time of trouble discovery through the time the trouble is cleared.
- **Response Time** – NHFC is guaranteed a vendor technician on-site response time of no more than two (2) hours for all major system problems where phone service is lost and a maximum of 24 hours' response to other system problems. Failure to comply will result in monetary compensation to NHFC. The triggers to start and stop the "clock", compensation amount, and time increment are to be negotiated. This compensation will be credit on the account.
- **Major/Minor Problems** - Bidders must describe their definitions of major and minor problems.
- **Replacement Time** - Explain the amount of time required for full replacement of the central operating hardware/software of the system, assuming a suitable site exists for locating the replacement components in case of a disaster.
- **COVID 19 Compliance** – Bidders must be mindful of COVID 19 regulations and compliance should the project delivery timelines fall within the lockdown periods.

#### 6.4. **Support**

Bidders are required to 24/7/365 support. Please include your Services Level Agreement (SLA) for remote and onsite response times.

#### 6.5. **Ad-hoc Requests**

NHFC will procure ad hoc services, hardware and software from the successful bidder for the duration of the above-mentioned Service Level Agreement. The ad-hoc services, hardware and software includes, but is not limited to, additional IP PBX software, licenses, IP handsets and modules, server or networking components, and on-site technical support or assistance.

**NB:** There is a high possibility that NHFC will relocate offices within the next twelve (12) months. Bidders must be mindful that they will be requested to relocate the data lines and related equipment.

#### 6.6. **Reporting**

A "Service Level Performance Report" will be required quarterly in electronic format to a designated representative of NHFC. The following minimum reporting requirements will be required to be reported on:

- number of Incidents and Service Requests logged which is summarized by entitlement, priority and whether the Service level was met or breached;
- system resource utilization and availability; and
- Detailed analysis of all down time.