ANNEX A

TERMS OF REFERENCE

Consultancy Contract for the Design and Development of a Network Monitoring Portal (NMP) - MIDAS in Nigeria

NATURE OF THE CONSULTANCY

Short Term Expert

IOM PROJECTS TO WHICH THE CONSULTANCY IS CONTRIBUTING

Under the supervision of the IBM project manager and in close coordination with the Immigration and Border Management unit, the successful candidate will work as a consultant on the IOM Immigration and Border Management (IBM) project portfolios. “The IBM projects are implemented in collaboration with the Nigeria Immigration Service (NIS).

Through IOM managed actions to-date funded by the EU, Japan, Switzerland, Norway, Denmark and Germany the Migration Information Data Analysis System (MIDAS) has been installed at eighteen (18) land and sea border control posts around the country. IOM is continuing MIDAS deployment through its projects, to additional NIS border control posts.

The main objective of this contract is to engage the services of an expert/firm for the design and development of a network monitoring portal for MIDAS sites in Nigeria;

TASKS TO BE PERFORMED UNDER THIS CONTRACT

1. Real-time network monitoring – Should be able to monitor health and critical metrics such as packet loss, latency, speed, errors and discards and analyses performance bottlenecks.
2. Physical and virtual server monitoring – Monitors CPU, memory and disk utilizations of windows and Linux servers. Should also be able to monitor the performance of Host and VMs of VMWare, Hyper-V and Xen virtualization platforms
4. Customizable dashboards – Access default dashboards to create your own dashboard(s) by making use of available performance widgets, as well as ability to view performance of your network at a glance.
5. WAN Link/ RRT Monitoring – Monitor key metrics such as WAN link availability, latency, jitter, RRT, packet loss, and performance leveraging on Cisco IP SLA technology, to eliminate network issues. View hop-by-hop performance to find what’s causing latency with possibility of fixing it. Continuously monitors WAN link availability, latency and performance leveraging Cisco IP SLA technology.
6. **Affordable and easy to set up** – Requiring no costly consultation or training for installation and user education.

7. **Accessibility medium** – The tool should be available via web browser and desktop applications.

8. **Network performance monitoring** – Capable of monitoring a network with 2000+ performance metrics along with intuitive dashboards, instant alerts and intelligent reporting.

9. **Router/ Firewall Monitoring** – Give critical insights on router/ firewall performance with metrics like errors and discards, voltage, temperature, buffer statistics, etc.

10. **Switch Monitoring** – Switch port monitoring with port-wise traffic control and switch port mapping to identify devices connected to a port.

11. **Network Mapping** – Automatic L1/L2 network mapping to visualize and pinpoint network outages and performance degradation.

12. **Installation edition** – Preferably the **enterprise model**, with capabilities for network devices monitoring, physical server monitoring, virtual server monitoring, multi-site/ distributed network monitoring, hardware monitoring, alarms and notifications, workflow automation, custom and user specific dashboards, business views, failover/ high availability, etc.

**TANGIBLE AND MEASURABLE OUTPUT OF THE WORK ASSIGNMENT**

- Successful design and deployment of an operational network monitoring portal
- Managing and maintaining the network, as well as network performance monitoring
- Identifying, installing and maintaining upgrades to the network
- Troubleshooting and extensive knowledge transfer on the NPM
- Overseeing user access to the network
- Develop a backup/disaster recovery plan for a network emergency
- Planning network infrastructure for new applications and services
- Training network staff to provide support to end users
- Comprehensive report and user manual for the whole tasks carried out under this contract.

**5. Expertise:**

a. Evidence of having deployed similar platforms in the last 12 months and client contact

b. Detailed list of team/ individual resume to be involved in this task. Team members for this task must possess a degree from an accredited academic institution preferably a Master’s degree in computer science or a related field, such as information technology or engineering. Professional credentialing, such as Cisco Certified Entry Networking Technician (CCENT) or Cisco Certified Network Associate (CCNA) certification is an added advantage.

c. Evidence of experience working in a domain/ active directory environment.

d. Analytical and detail-oriented with good troubleshooting and problem-solving ability

e. Must understand various operating and database management systems

f. Ability to provide solutions in a fast-paced environment, whether working independently or as part of a team

g. Good working knowledge of Law Enforcement principles and practices in the use of Information Technology
h. Excellent customer service skills
i. Extensive knowledge and ability to draft and produce high-quality written reports
j. Excellent social and inter-cultural skills.
k. Ability to work with colleagues from varied cultures and professional backgrounds.
l. Personal commitment, efficiency, empathy, flexibility, drive for results, respect for diversity, creative thinking, and organized.
m. Minimum of five years of relevant experience in required field
n. Proficiency in English.

PERFORMANCE INDICATORS

- Adherence to agreed schedule of activities
- Timely production of reports
- Respectful and cooperative approach with NIS and other concerned counterparts

DURATION OF THE CONTRACT AND PAYMENT

The window for this work is from October 2019 to March of 2020. This contract is anticipated to require at most 50 working days, excluding travel to and from the field sites.

The consultancy fee for this contract (including purchase of relevant licenses) shall be USD 400 (NGN 144,952) per day for maximum 50 Days to a total of USD 20,000 (NGN 7,247,600). This is payable in naira based on IOM’s exchange rate during the month of payment. IOM will be responsible for arranging and funding travel costs for each field trip.

Submission deadline: Wednesday 16th October 2019. At No. 11 Haile Selassie Street Asokoro. Submission is via hard copy on the tender box provided at the gate.