Government of the People's Republic of Bangladesh Office of the Project Director Sustainable Forests & Livelihoods (SUFAL) Project Bangladesh Forest Department Ban Bhaban, Agargaon, Dhaka-1207, Bangladesh



# Terms of Reference (TOR)

Selection of Individual Consultant: Maintenance Engineer - IT

(Package no: SD-20-1)

**Bangladesh Forest Department** 



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## Terms of Reference of Maintenance Engineer-IT

(Package: SD 20-1)

### 1. Background

Bangladesh Forest Department (BFD) under the Ministry of Environment, Forest and Climate Change has received IDA loan of US\$175.00 million and GoB contribution of US\$3.85 million for a period of 6 years 6 Months (01 July 2018 to 31 December 2024) to implement Sustainable Forests & Livelihoods (SUFAL) Project. The overall objective of the project is to improve collaborative forest management and increase access to alternative income generation activities for forest-dependent communities in targeted sites. This will be achieved by: (i) improving public sector management of forest resources and increasing participation of communities in forest conservation and restoration and, (ii) reducing direct dependence and exploitation of forest resources by offering alternative livelihood sources to dependent communities and improving the enabling environment for trees outside forests. Together, these will result in the eventual improvement of forest cover and ecosystem functions, coastline protection and increased employment opportunities for some of the poorest and most vulnerable communities, including women and small ethnic communities. Project will implement a number of activities which are grouped under following four components:

Component-1: Strengthening Institutions, Information Systems and Training

Component-2: Strengthening Collaborative Forests and Protected Areas Management

Component-3: Increasing Access to Alternative Income Generating Activities (AIGAs) Forest Extension Service & Trees Outside Forests (ToF)

Component-4: Project Management, Monitoring, and Reporting

This project is designed to contribute in improving organizational effectiveness by adopting improved policy and regulatory framework including infrastructural development, management information system upgradation, and capacity building of BFD officials and investing in degraded and denuded forest restoration and building green belt along the cost. This project will finance tree cover improvement in the ToF areas technology transfer, training, research and innovation support and engage forest dependent communities in collaborative forest management practices. By and large the project will enhance wildlife and PA management practices and thereby improve forest conservation and wildlife protection in the country.

### 2. Objectives of the Assignment

The main objective of this consultancy is, as a member of a team of experts, to ensure that the entire ICT system, including the hardware and software at the Resource Information Management System (RIMS) and the National Forest Inventory Unit functions smoothly.

### 3. Scope of Services

Under the supervision of the Head of the Resources Information System, the consultant will undertake the following tasks, but not limited to:

- Overall supervision and implementation of the ICT structure (hardware and software) of forest department;
- Monitor and maintain computer systems and network.
- Review and develop the design and deploy the network management, suggest provisioning and improvement of tools, in line with the Network Systems and Operational Systems strategies and the priorities of Network & Infrastructure.

- Develop a blue print of Head office network.

- Monitor the Company Network infrastructure, Servers (Active directory, Firewall, Switch, Router, Database, Mail server, NAS, CCTV System)

- Manage the security and disaster recovery aspects of the system. Ensure backups of all data and software in shadow server, coordination etc.

- Identify opportunities in terms of management and use that can improve efficiency of the Bangladesh Forest Information System (BFIS) processes
- Maintain security of standard network, including adherence to the Protection Act

- Control access permissions and privileges

- Investigate and resolve application functionality related issues and provide first level support and troubleshooting.
- Troubleshoot system and network problems and diagnose and solve hardware or software faults.
- Collect and review comprehensively all existing forms of record keeping systems and relevant documents.
- Support all the information and other related systems, maintenance of the hosting server, database software, database management, hardware management, ICT design preparation and implementation for FD;
- Support and maintenance of Network in the field divisions
- Support the installation of the software and hardware system in FD field offices.
- Install and configure computer hardware operating systems and applications in BFD HQs.
- Testing and evaluating new technology in order to make them fit for purpose
- Refine the logical design to transfer into a specific network model and refining the physical design to meet system requirements;
- Configure & troubleshoot Mikrotik Router, Cisco Switch, Router, Access point, UTM & Servers as when required.
- CPE configuration and installation, configure wireless router, establish new connection at end user.
- Fine-tuning of the informatics system taking into consideration the national context and capacities.
- Upgrade Server operating system as and when required.
- Upgrade Firewall, NAS, Cisco, Mikrotik IOS as when required.
- Arrange training on open-source software for field data collection and calculation etc.
- Conduct periodical maintenance of server of the Department.
- Write technical procedures and documentation for the applications including operations, user guide, etc.

### 4. Transfer of knowledge (training) Where appropriate

Training of local staff in database management and forest inventory information system

### 5. Reporting Arrangement

The consultation will work under the supervision of PD SUFAL. The PD/Project Manager/Head NFI Unit will provide necessary information as per requirement of the consultant. PD will also inform all cost centres to provide necessary data and documents as needed for the tasks assigned to the consultant.

### 6. Institutional Arrangement

The consultant will be based at the RIMS unit within the BFD in Dhaka and will report directly to the Head of the RIMS Unit. S/he will have a parallel reporting line to the PD, SUFAL Project. The Individual Consultant will work closely with other consultants working at the PMU. The consultant is expected to undertake the activities (scope of services) mentioned in the TOR in order to achieve the stated objectives. Under this consultancy travels are being envisaged. However, travels necessary for the exigencies of services to achieve the desired objectives, may be undertaken but with prior permission of the PD and in such cases only the actual costs will be reimbursed.

### 7. Facilities to be provided by the Client

Project will provide appropriate office space and other associated logistics necessary to carry out the assignment. Data, Personnel, Facilities and Local Services to be provided by the client.

PD will also inform all cost centres to provide necessary data and documents as needed for the tasks assigned to the consultant.

### 8. Deliverable:

The consultant will need the following reporting requirements/deliverables, but not limited to:

- Inception Report, indicating the details of his methodology, work plan, etc. with a clear time frame;
- Monthly progress report, at the end of each calendar month with time sheet;
- At the end of the assignment recommendation and report
- Any other report, as required.

### 9. Duration

The duration of the assignment will be 12 months.

### 10. Qualification and experience

- Bachelor degree in computer science, electrical engineering, or other related IT field is required;
- Valid Certificate of MikroTik Certified Network Associate (MTCNA) or Cisco Certified Network Associate (CCNA) and Microsoft Certified Solutions Associate (MCSA) preferred.
- Should have a minimum of 5 years of technology experience as maintenance engineer or Network and System administrator and with at least 5 years' hands-on technical roles in the field and relies on experience and judgment to plan and accomplish goals;
- Extensive knowledge of data processing, hardware platforms, server maintenance and enterprise software applications;
- Experience in support and configure network devices. Must understand operating system architecture, troubleshooting tools, internet connectivity challenges and application internet service problem solving skills;
- Good knowledge of the MS Office applications, Internet and office technology equipment and Linux operating systems
- Strong analytical and problem-solving skills.



- Experience in the development and implementation of standards, procedures and guidelines to support operational processes.
- Self-motivated with the ability to prioritize, meet deadlines, and manage changing priorities;
- Proven ability to be flexible and work hard, both independently and in a team environment, in a high-pressure on-call environment with changing priorities.
- Willingness to work occasionally outside of normal business hours.
- Excellent English oral and written communication skills.

