**Maintenance of Information Technology Systems, Equipment and Accessories**

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**Background:**

The Nile Basin Initiative (NBI) is an intergovernmental institutional arrangement that seeks to achieve cooperative development of the resources of the Nile by the Nile Basin countries. Countries that share the Nile Basin are Burundi, D R Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda. The Secretariat of the Nile Basin Initiative is hosted by the government of Uganda and is located on Plot 12 Mpigi Road, Entebbe. The Nile Secretariat has been given the privileges and immunity of a diplomatic entity in Uganda.

The Nile Basin Initiative Secretariat maintains Information Technology systems which include data & voice communication systems, computing hardware & software and office automation machinery. For the Secretariat to run smoothly the systems need to be in a good working condition through regular maintenance and upgrades.

The aim of this document is for the provision of maintenance services for the Information Technology systems of the Secretariat.

**The Services**

System maintenance is considered to be services required for:

1. **Remedial maintenance -**  to correct faults and return the system to operation in the event a hardware, system software or network component of the system fails; and
2. **Preventative maintenance -**  to undertake scheduled maintenance tasks to keep the hardware and/or system software in good operating condition.

 **System categories**

The systems can be categorized as follows.

1. **Category 1**
* LAN & Data Network Infrastructure
* Desktop & Mobile Computing Hardware ( Desktop Computers & Laptop computers)
1. **Category 2**
* Telephone & Voice Network Infrastructure
1. **Category 3**
	1. Office Automation Equipment ( Printers, Faxes, Copiers, Projectors)
	2. Office Automation Equipment ( GIS Printers, Scanners & Plotters)
2. **Category 4**
* Electrical Connections & Power backup systems

***A list of equipment is attached as Annex A***

**Service Levels**

The Nile-SEC and the service provider will jointly develop a support plan and the appropriate service level and response times for each of the components of the system. Those components that have a high impact on the system will require a premier support service to minimise the business risk.

**Scope of Work/Duties and responsibilities:**

Preventative service will include:

* hardware maintenance to keep electromechanical equipment correctly operating (fans, filters, back up batteries, adjustments, alignments, etc)
* replacement of hardware components to keep the equipment up to current specifications (e.g. engineering changes)
* updating of system software (bug fixes, new versions, etc)
* testing and analysis of system reports (error logs, self tests, system parameters, performance measures, etc)
* Maintenance of system service documentation.

 Remedial service will include:

* maintaining a Help Desk function that will log and action any calls from the Nile-SEC in the event of a system problem
* investigating the problem (on site or via remote login)
* resolving the problem directly or managing the resolution if a third party service is required
* restoring and/or returning the use of the system to the customer
* Updating documentation with respect to the problem and its resolution.

***Additional work to be performed in order to resolve issues is attached as Annex B***

**Schedule**

* The schedule of all preventative maintenance will be on a quarterly basis or as specified in specific service level agreements
* Remedial maintenance will be on call or when the IT department escalates a problem to the service provider. The service provider will as a matter of importance deploy the required manpower to solve the issues in as short a time as possible

**Annex A**

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|  | Equipment Type | Description | Location | Available documentation | Remarks |
| Group 1 | Telephone & PABX Equipment & receivers |  | PABX in server room & receivers in offices |  |  |
| Group 2 | Maintenance of Security Doors: | Security door software in server room (server 1) 5 security doors & 9 modules | Main building & entrance of Block D | System manual ( hard copy) |  |
| Group 3 | Servers | 7 HP servers , 1 Dell, 6 IBM | Server room | Manuals & CDs |  |
| Group 4 | Desk top s & workstations | 23 Lenovo, 21 Dell computers, 3 HP | Different offices | Manuals & CDs |  |
| Group 5 | Laptops & tablets | 6 HP, 7 Lenovo, 2 Dell,4 Sony , 1 Asus | Different officers | Manuals & CDs |  |
| Group 6 | Printers & Photocopiers | Heavy duty printer/copier:1 IR Canon 5055, 1 Canon IR 20202, 1 Kyocera , 3 Ricoh Printers: 2 HP 16060, 4 HP 2050, 2 HP 2600, 2 HP 4050 | Different offices  | Manuals & CDs |  |
| Group 7 | Plotters & Scanners | 1 OCE Plotter, 1 OCE B0 Scanner, 4 HP A4 Scanner, 2 Canon A4 Scanners | Different offices | Manuals & CDs |  |
| Group 8 | Storage Equipment | 1 Buffalo NAS, 1 Acer NAS | Server room |  |  |
| Group 9 | Network Equipment (active Equipment | 12 Cisco Switches ( 2600 series) 2 3COM, 2 Dlink, 1800 Series cisco router, Pix 505 Firewall, 6 cisco/dlink wireless routers | Server room & closets in block D & Library | Manuals & CDs |  |
| Group 10 | Network equipment (passive components | CAT 6 cabling & fibre link between 3 buildings | Whole building |  |  |
| Group 11 | Power Backup Systems | 24 200 AH free maintenance batteries & three full sine wave inverters | Office B10 |  |  |

**Annex B**

**Maintenance tasks and schedule**

1. **Hardware**
* Check the condition of cables, components, and peripherals. Clean components to reduce the likelihood of overheating. Repair or replace any components that show signs of damage or excessive wear.
* Use the following tasks as a guide to create a hardware maintenance program:
1. Identify & replace faulting components
2. Remove dust from fan intakes.
3. Remove dust from the power supply.
4. Remove dust from components inside the computer.
5. Clean the mouse and keyboard.
6. Check and secure loose cables.
7. **Software**
* Verify that installed software is current. Follow the policies of the organization when Installing security updates, operating system updates, and program updates.
* Use the tasks listed as a guide to create a software maintenance schedule that fits the needs of your computer equipment:
* Review security updates.
* Review software updates.
* Review driver updates.
* Update virus definition files.
* Scan for viruses and spyware.
* Remove unwanted programs
* Scan hard drives for errors.
* Defragment hard drives.