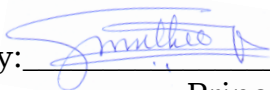
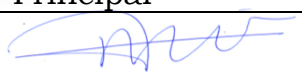


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**MERU NATIONAL POLYTECHNIC**

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**QUALITY MANAGEMENT SYSTEM BASED ON ISO 9001:2015**  
**ICT PROCEDURES MANUAL**  
**MNP/PM/ICT/001**

|   |                                  |
|---|----------------------------------|
| Authorized by: <br>Principal             | Date: 16 <sup>TH</sup> JUNE 2016 |
| Issued by: <br>Management Representative | Date: 16 <sup>TH</sup> JUNE 2016 |



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MNP/PM/ICT/001

**Issue:** 02

**Version:** 0

**Issue Date:** 16-06-2016

### DOCUMENT VERSION CONTROL SHEET

| Issue No.               | Issue Date       | Description of Change  | Authored / Revised by | Approved By |
|-------------------------|------------------|--|-----------------------|-------------|
| Issue 1<br>Version<br>0 | 13-May-2011      | Document creation  | SA                    | Principal   |
| Issue 2<br>Version<br>0 | 16-June-<br>2016 | Overhaul of the Procedure Manual to meet the requirements of ISO 9001:2015 | SA                    | Principal   |
|                         |                  |  |                       |             |
|                         |                  |  |                       |             |



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### **PROCEDURE NUMBER 1: REPAIR AND MAINTENANCE OF ICT EQUIPMENT**

#### **1.0 GENERAL**

#### **1.1 PURPOSE**

This procedure shall apply to ensuring efficiency and effectiveness of ICT equipment repairs and maintenance.

#### **1.2 SCOPE**

This procedure applies to the repair and maintenance of all the ICT equipment in the polytechnic.

#### **1.3 REFERENCES**

- a) Polytechnic's ICT Policy
- b) E-waste management policy
- c) Backup and recovery policy
- d) Respective Manufacturers Manual

#### **1.4 TERMS AND DEFINITIONS**

Refer to the List of Terms and Definitions

#### **1.5 PRINCIPAL RESPONSIBILITY**

The SA shall ensure adherence to this procedure.

#### **1.6 INTERFACES**

- a) Principal-For approvals
- b) Procurement Office-for issuance of specifications and procurement
- c) All users-addressing their requests

#### **1.7 PERFORMANCE TARGET**

The performance shall be measured through the overall performance of the Department based on

| <b>PERFORMANCE TARGET</b>           | <b>MONITORING AND MEASUREMENT</b> |
|-------------------------------------|-----------------------------------|
| 100 % Resolution of reported issues | Analysis of repair request forms  |
| Timely maintenance as scheduled     | Analysis of maintenance reports   |



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### 1.8 RESOURCES

The resources to be used in the process are listed below:-

- a) Blower
- b) Maintenance Kit
- c) Maintenance schedule
- d) Dust Coat
- e) Skilled and unskilled Manpower

### 1.9 INPUTS AND OUTPUTS

| INPUTS                           | OUTPUTS                                 |
|----------------------------------|---|
| Maintenance Schedule             | Maintenance reports                     |
| Repair requisition and Job Cards | Records of repairs & repaired equipment |

### 2.0 METHOD

#### 2.1 Maintenance

2.1.1 This shall start at the beginning of each financial year with the SA preparing a maintenance schedule for ICT equipment.

2.1.2 In preparing of the schedule the SA shall consider:-

- a) Manufacturer's manual,
- b) Equipment not in the current schedule,
- c) Number of ICT equipment, and
- d) Types of the ICT equipment.

2.1.3 The SA shall submit the schedule to the Principal for approval.

2.1.4 In approving the schedule, the Principal shall consider:-

- a) adequacy of the schedule,
- b) cost of maintenance, and
- c) Polytechnic's calendar of activities.

2.1.5 In the event that the schedule is not adequate, the Principal shall give recommendations and return the schedule to the SA for amendment.

2.1.6 On approval, the SA shall ensure implementation of the schedule.

2.1.7 At least a week before the scheduled maintenance, the SA shall as per the internal communication procedure in the Administration



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Procedures Manual inform the ICT equipment user(s) of the maintenance.

2.1.8 In the event that the SA lacks capacity to undertake the maintenance, he/she shall as per the Control of outsourced processes procedure in the Administration Procedures Manual source for the maintenance.

2.1.9 The SA shall then prepare a report and forward it to the Principal for information and necessary action.

### **2.2 Repairs**

2.2.1 This shall start with the SA identifying a need for repairs or receiving a repairs requisition form from an ICT equipment user.

2.2.2 Upon identifying or receipt of the repairs requisition, the SA shall within the same day diagnose the equipment and enter the details of the nature of the problem in the job card.

2.2.3 In the event that there is need for a spare part, the SA shall as per requisition and issuance of stores procedure in the procurement procedures manual request for the part procurement and undertake the repair.

2.2.4 In the event that the SA cannot handle the repair, he/she shall as per the outsourcing procedure in the Administration Procedures Manual source for the repair.

2.2.5 Once the equipment has been repaired, the SA shall ensure that the user signs the repair form after verifying that the equipment is functioning and as per the filing procedure number 4 in the Administration Procedures Manual file the completed job card.

### **3.0 LIST OF APPLICABLE RECORDS**

3.1 Repairs requisition form.

3.2 Maintenance schedule.

3.3 Maintenance report.

3.4 Job cards.



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### PROCEDURE NUMBER 2: DATA BACKUP AND RECOVERY

#### 1.0 GENERAL

#### 1.1 PURPOSE

This procedure shall apply to consistency in data backup and recovery.

#### 1.2 SCOPE

This procedure applies to all activities of data backup and recovery within the polytechnic.

#### 1.3 REFERENCES

Current Polytechnic's data backup and recovery policy.

#### 1.4 TERMS AND DEFINITIONS

Refer to the List of Terms and Definitions

#### 1.5 PRINCIPAL RESPONSIBILITY

The Systems Administrator (SA) shall ensure adherence to this procedure.

#### 1.6 INTERFACES

- a) Service Providers
- b) Procurement Office
- c) All users

#### 1.7 PERFORMANCE TARGET

The performance shall be measured through the overall performance of the Department based on

| PERFORMANCE TARGET                  | MONITORING AND MEASUREMENT      |
|-------------------------------------|---------------------------------|
| 100 % Backup of critical data       | Analysis of backup record sheet |
| Timely recovery of critical systems | Analysis of recovery reports    |

#### 1.8 RESOURCES

The resources to be used in the process are listed below:-

- a) Backup and recovery policy
- b) E - services policy



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- c) Storage media
- d) Offsite backup service

### 1.9 INPUTS AND OUTPUTS

| INPUTS                     | OUTPUTS              |
|----------------------------|----------------------|
| Backup and recovery policy | Backup record sheets |
| Backup media               | Backed up data       |

### 2.0 METHOD

- 2.1 This procedure shall start with the SA identifying critical data that need backup as per the Polytechnic's data backup and recovery policy.
- 2.2 On identifying such data, the SA shall determine the type of backup to be performed guided by the data backup and recovery policy and ICT policy of the polytechnic.
- 2.3 All MIS database backups shall be done at least once every day as required in the data backup and recovery policy.
- 2.4 The following backup media shall be used.
  - a) Off site backup service
  - b) On site backup media
- 2.5 The SA shall then properly rename (where applicable) all backed up data, ensure the size of backed up data is the same as source data and put remarks on backup record sheet.
- 2.6 Where the backup media is an external device, at the end of a backup operation, the media set shall be removed and kept in a secure and lockable safe by the SA.
- 2.7 Whenever there is need for data recovery to be done, the SA shall be guided by the data recovery procedures as outlined in the data Backup and recovery policy.
- 2.8 Access of backed up data shall be as per the data backup and recovery policy.

### 3.0 LIST OF APPLICABLE RECORDS

- 3.1 Backup record sheet.





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### **PROCEDURE NUMBER 3: NETWORK ADMINISTRATION AND MAINTENANCE**

#### **1.0 GENERAL**

#### **1.1 PURPOSE**

The purpose of this procedure is to ensure consistency and effectiveness in network administration and maintenance.

#### **1.2 SCOPE**

This procedure shall apply to all activities of network administration and maintenance within the polytechnic.

#### **1.3 REFERENCES**

Current Polytechnic's ICT Policy.

#### **1.4 TERMS AND DEFINITIONS**

- a) SA – System Administrator.
- b) LAN – Local Area Network
- c) ISP – Internet Service Providers

#### **1.5 PRINCIPAL RESPONSIBILITY**

The SA shall ensure adherence to this procedure.

#### **1.6 INTERFACES**

- a) Service Providers
- b) Procurement Office
- c) All users

#### **1.7 PERFORMANCE TARGET**

The performance shall be measured through the overall performance of the Department based on

| <b>PERFORMANCE TARGET</b>                   | <b>MONITORING AND MEASUREMENT</b>   |
|---|-------------------------------------|
| Zero incidences of network failure reported | Analysis of Network Repair job card |

#### **1.8 RESOURCES**

The resources to be used in the process are listed below:-



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- a) e- services policy
- b) Budget
- c) Requisition forms

### 1.9 INPUTS AND OUTPUTS

| INPUTS                           | OUTPUTS           |
|----------------------------------|-------------------|
| Network Repair requisition forms | Efficient network |

### 2.0 METHOD

#### 2.1 Network administration

2.1.1 This shall start with the SA receiving a request from a user department or identifying a need to have a new LAN.

2.1.2 Upon 2.1.1 above, the SA shall forward a request and a budget to establish the LAN to the Principal for approval.

2.1.3 In approving the request and the budget, the Principal shall consider:

- 
- a) urgency of the request,
- b) Departmental budgetary allocation,
- c) Cost implications, and
- d) Availability of funds.

2.1.4 In the event that the project is not viable, the Principal shall advise the SA as appropriate.

2.1.5 Once the approval has been made the SA shall either:-

- a) as per the requisition and issuance of stores procedure in the Procurement Procedures Manual request for the materials required from the store and undertake the work, or
- b) in liaison with the PO procure for the services as per the purchasing procedure in the Procurement Procedures Manual

#### 2.2 Network maintenance

2.2.1 This shall start with the SA receiving information from a user or identifying a malfunction of the network.



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- 2.2.2 Upon 2.2.1 above, the SA shall take measures to correct any such anomaly.
- 2.2.3 In case of an external internet connection breakdown the SA shall as per the external communication procedure in the Administration Procedures Manual liaise with the ISP to identify and rectify the situation.
- 2.2.4 Where a system breakdown requires a reconfiguration of a computer device and/or its peripherals, and such configurations demand the involvement of an expert, the SA shall as per the Control of outsourced processes procedure in the Administration Procedures Manual source for such expertise.

### LIST OF APPLICABLE RECORDS

- 2.3 Approved request and budget.



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### PROCEDURE NUMBER 4: USER SUPPORT

#### 1.0 GENERAL

#### 1.1 PURPOSE

The purpose of this procedure is to ensure effectiveness and efficiency in user support.

#### 1.2 SCOPE

This procedure applies to all user support activities related to the use of the institution's ICT equipment and other computer accessories.

#### 1.3 REFERENCES

Current polytechnic ICT Policy.

#### 1.4 TERMS AND DEFINITIONS

Refer to the List of Terms and Definitions

#### 1.5 PRINCIPAL RESPONSIBILITY

The SA shall ensure adherence to this procedure.

#### 1.6 INTERFACES

All users

#### 1.7 PERFORMANCE TARGET

The performance shall be measured through the overall performance of the Department based on

| <b>PERFORMANCE TARGET</b>            | <b>MONITORING AND MEASUREMENT</b>        |
|--------------------------------------|--|
| Timely resolution of reported issues | Analysis of Repair Requisition job cards |

#### 1.8 RESOURCES

The resources to be used in the process are listed below:-

- a) Applicable policies
- b) User manuals
- c) Repair Requisition cards



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### 1.9 INPUTS AND OUTPUTS

| INPUTS                       | OUTPUTS              |
|------------------------------|----------------------|
| Repair requisition job cards | Resolved user issues |

### 2.0 METHOD

- 2.1 This procedure shall begin with a user requesting for support.
- 2.2 The SA shall assign an SS to attend to such a request.
- 2.3 The officer assigned the task shall troubleshoot and isolate the problem and subsequently fix the problem.
- 2.4 In fixing any identified fault, and whenever such a device is a user PC, the SS shall first take precautionary steps to backup all important data within the PC in order to avoid data loss.
- 2.5 Where the SS cannot give the support required, he/she shall refer the matter to the SA for advice.
- 2.6 Where the reported fault turns out to be maintenance and repair issue, the SA shall act as per the procedure on repair and maintenance of ICT equipment procedure number 1 in this Manual.

### 3.0 LIST OF APPLICABLE RECORDS

- 3.1 User support requisition form.



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### PROCEDURE NUMBER 5: WEBSITE MANAGEMENT

#### 1.0 GENERAL

#### 1.1 PURPOSE

The purpose of this procedure is to ensure efficiency in website management.

#### 1.2 SCOPE

This procedure applies to all activities related to website management in the Polytechnic.

#### 1.3 REFERENCES

Current Polytechnic ICT Policy.

#### 1.4 TERMS AND DEFINITIONS

Refer to the List of terms and Definitions

#### 1.5 PRINCIPAL RESPONSIBILITY

The SA shall ensure adherence to this procedure.

#### 1.6 INTERFACES

All users

#### 1.7 PERFORMANCE TARGET

The performance shall be measured through the overall performance of the Department based on

| PERFORMANCE TARGET             | MONITORING AND MEASUREMENT                        |
|--------------------------------|---|
| Timely updating of the website | Analysis of Website update request form & website |

#### 1.8 RESOURCES

The resources to be used in the process are listed below:-

- a) Internet
- b) Website update request form



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### 1.9 INPUTS AND OUTPUTS

| INPUTS                      | OUTPUTS            |
|-----------------------------|--------------------|
| Website update request form | Up to date website |

### 2.0 METHOD

- 2.1 This shall start with any member of staff/department identifying a need to have new information added to the website or edit existing information.
- 2.2 upon identifying the need, the staff/department shall fill the website update request form and forward the information to the Principal for approval.
- 2.3 In approving the information, the Principal shall consider the following:-
  - a) Relevance of the content, and
  - b) Timing of the need to communicate to the public,
- 2.4 In the event that the information is not suitable/adequate, the principal shall advise the originator as appropriate.
- 2.5 Upon approval, the originator shall forward the approved information to the SA for updating of the website.
- 2.6 Upon receipt of the information, the SA shall within the same day update the website appropriately and as per the filing procedure in the Administration Procedures Manual file the approved form.

### 3.0 LIST OF APPLICABLE RECORDS

- 3.1 Website update request form.