# EGERTON UNIVERSITY

# INFORMATION AND COMMUNICATIONS TECHNOLOGY POLICY

# 2010

*Transforming Lives Through Quality Education*

**Egerton University is ISO 9001:2008 Certified**

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## INFORMATION AND COMMUNICATIONS TECHNOLOGY  POLICY
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## A: INTRODUCTION

Egerton University realises that knowledge based economy is likely to be the dominant economy of the 21st Century. Hence, information and communication technology (ICT) infrastructure will assume great importance. A well-established ICT system will be essential for optimal planning, management and operation of the University functions. The ICT system will enhance Egerton University to leverage on the use of this resource to achieve its vision of being a world class University for the advancement of humanity. Therefore, there is need for a comprehensive ICT policy that will help improve access to quality and cost effective ICT services at the University.

## B: ICT SYSTEMS

### 1. Definition of ICT

ICT is a convergence of information and communications technologies. These technologies include the Internet; telecommunications; computing; media; broadcasting; libraries and data networks; and other related activities. Below is an inventory of specific systems that are required at Egerton University.

### 2. Communications System

Excellent telecommunications infrastructure and computer networks are key to improved communication. These include Internet access, telephone, fax, e-mail, fax-via-e-mail, and courier services. Excellent communication

systems are likely to have immediate and positive impact on the operating environment in the University. Such systems may include inter-campus Private Automatic Branch Exchange (PABX) links that allow toll-free calls to other campuses.

## (a) Computer Networks

University offices shall be inter-connected through campus-wide computer networks, which will allow easy exchange of information and access to record keeping systems across the University. Such interconnection will involve building:

Local Area Networks (LAN) in all major buildings, Campus networks interconnecting these LANs, and Inter-campus wide area networks links using the most appropriate technologies (usually digital leased lines).

## (b) Telephone Networks

Staff and students need easy access to telephone services at the lowest cost possible. Currently, fixed telephone services offer the lowest telephone costs. However, mobile telephones are often more convenient and much easier to access and manage. The University should facilitate access to a mobile phone for every manager in the University. The University PABX system shall provide pooled fixed line services. PABX in each campus can be inter-linked to lower inter campus telephone communication costs.

## 3. Academic and Administrative Records Systems

These are essential academic, human resource and financial records systems that should be networked for easy access.

## 4. Library Systems – Library Automation and Security Systems

A good library system should be able to support automation of acquisitions, cataloguing, and issuing. Such a system should provide Internet based access to library catalogues, current journals and new book titles. The library should also have an electronic security system to reduce book theft.

## 5. Support for Learning

Software and electronic tools such as websites, course-ware, electronic testing, electronic books & journals, multimedia instructional software, video, teaching laboratories for ICT, and electronic instructional resources such as Liquid Crystal Display (LCD) projectors, are important tools for enhancing learning will be required.

## 6. Backup Power Systems

These include standby power generators, uninterruptable power supplies (UPS), and surge suppressors. These protective systems will protect sensitive electronic equipment from power related breakdowns and reduce system down time by providing standby power.

## C: THE OBJECTIVE OF EGERTON UNIVERSITY ICT POLICY

The objective of this policy is to assist the University in the attainment of its mission and vision through improved access to quality and cost effective ICT services.

## D: POLICY STATEMENTS

### 1. General Policy Statement

Egerton University shall provide appropriate ICT systems that are regularly upgraded in support of the realization of its mission of developing quality human resources by providing client-driven education, research, outreach and consultancy services that promote the prosperity of humankind.

### 2. Specific Policy Statements

### (a) ICT Board

Egerton University shall have an ICT Board to provide leadership and co-ordination of its ICT Policy.

The Board shall:

(i)     Formulate University ICT policy and advise the University Management Board on the same .

(ii)    Specify priorities for automation and other ICT initiatives in the University .

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(iii)    Monitor the implementation and maintenance of ICT systems in the University,

(iv)    Mobilise resources to implement and sustain ICT systems,

(v)    Develop an ICT-related Human Resource (HR) policy to attract and retain competent technical staff,

(vi)    Establish and monitor ICT standards for the University, and

(vii)    Monitor and evaluate the impact of ICT systems on administration, teaching, and research in the University.

The Membership of the Board shall be:

(i)    Director, who shall be the chairman of the Board

(ii)    One Faculty representative

(iii)    Chairman Computer Science Department

(iv)    University Librarian

(v)    Two senate representatives

(vi)    One College Campus Representative

(vii)    Head, Computing and Communications Services Department

## (b) Department of ICT Services

There shall be a Department of ICT Services charged with implementing, managing and maintaining of ICT Systems and Services at the University.

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Specifically, they shall have the mandate to:

(i) Maintain and repair all computing equipment in the University,

(ii) Maintain and repair all computer and telecommunication networks in the University,

(iii) Design and install new networks in the University,

(iv) Manage telecommunication and bureau services sustainably,

(v) Facilitate the use of ICT in teaching and research,

(vi) Generate income from computing services

(vii) Coordinate a software production unit with the mandate of developing in-house software systems for the University,

(viii) Provide technical advice to the ICT Board, and

(ix) Enforce software licensing compliance and ICT standards in the University.

**(c) Human Resource Development and Management**

(i) The University shall strive to attract and retain high quality ICT staff.

(ii) The University shall have a training policy on ICT for staff. This policy shall be in line with the overall University Human

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Resources training policy.

**(d) ICT Infrastructure**

(i)     The University shall provide quality ICT Infrastructure and systems in all campuses.

(ii)    The University shall provide standby power systems to ensure that systems such as PABX and computer servers are not shut down or damaged by power supply interruptions and fluctuations.

**(e) Software**

Egerton University shall:

(i)     Select and acquire relevant and cost effective software.

(ii)    Ensure regular updating of all software in use in all campuses

**(f) Hardware**

The University shall only acquire hardware for which spare parts and technical support are available locally.

**(g) Instructional Systems**

(i)     The University shall provide instructional technologies such as computers, projectors, electronic books, fax, e-mail, Internet (World Wide Web) and telephones to enhance the learning environment for increased instructional productivity

and efficiency.

(ii) The University shall provide training and access to instructional technologies to enhance staff effectiveness and efficiency.

## (h) Monitoring and Evaluation of ICT Systems

The University shall have a monitoring and evaluation system for all ICT systems.

## (i) University Website

(I) The University shall establish and maintain a website.

(ii) Establish appropriate establishment for managing the website and coordinating the development and publishing of content for this website.

## (j) ICT Procurement Policy

Procurement of ICT systems will comply with the following:

(i) Establishment of detailed desirable specifications, standards, and features of the product(s) as a means for technical evaluation.

(ii) Inclusion of a comprehensive maintenance policy for the equipment.

(iii) Negotiation of a replacement policy that should preferably

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include a buy-back arrangement.

(iv) Inclusion of arrangements for any necessary upgrade in the technology.

(v) Complying with University ICT standards.

(vi) Use a Certificate of Completion (that is, successful installation and commissioning) as a prerequisite for final payment.

## (k) Software Licensing

The University shall adhere to software licensing agreements. Specifically, the University shall:

(i) Acquire the most appropriate licenses for widely used software.

(ii) Negotiate the best licensing terms possible with software vendors.

(iii) Monitor compliance to license requirements.

(iv) Educate users on the issues surrounding software licensing and copyright protection.

## (l) Pooled ICT Services

The University shall provide pooled ICT services with a view to reducing costs and increasing access. Specifically the University shall have:

(i)     Bureaus and Cyber cafés and resource centres

(ii)    Common computing laboratories

(iii)   PABX-based direct lines

(iv)    Electronic libraries

(v)     Paging services

(vi)    GSM backed messaging systems

## (m) Computing Laboratories

The University shall provide computing laboratories for use by staff and students in all faculties.

## (n) ICT Standards

Egerton University shall maintain the following standards related to ICT:

(i)     All new buildings at Egerton University shall have appropriate networks built-in which shall include computer network wiring, telephone wiring, and video (TV) wiring to all rooms intended for teaching or offices,

(ii)    Where possible, a single network shall carry all the three types of signals to reduce the cost of such wiring

(iii)   Common Operating Systems,

(iv)    Common Local Area Network types and protocols,

(v)     Common Wide Area Network types and protocols,

(vi)    Common Databases and Data File Formats,

(vii)   Common Productivity Software package, and

(viii)  Common E-mail protocols and client systems.

## (o) ICT Guidelines and / or Procedures

Egerton University shall have documented guidelines in place covering the following areas:

- i.    IT security
  - a.   Password management

  - b.   User account management

  - c.   Computer Servers management

  - d.   Data Backups

  - e.   Firewalls

- ii.   Disaster Recovery Planning

- iii.  Computer Networks

- iv.  Website Management

- v.   System Change request management

## (p) Maintenance and Repairs Services

Egerton University shall have a maintenance and repairs and electronic

waste disposal policy for all ICT equipment and infrastructure.

## (q) Funding for Capital Investment and Maintenance

The University shall establish viable funding strategies to increase the success of ICT projects. Specifically the following funding strategies will be considered:

(i)     Budgetary allocations

(ii)    Phased implementation to spread funding requirements.

(iii)   Funding through internal ICT-based income generating activities.

(iv)    Donor funding

(v)     Loans

(vi)    Endowment Funding

By setting a system of priorities and developing funding sources, it will be possible to immediately begin to improve the ICT systems in the University: Priority will be determined considering:

(i)     Urgency of need by staff and students,

(ii)    Sustainability,

(iii)   Total cost (or cost saving),

(iv)    Potential for increasing effectiveness and efficiency of core

University functions, and

(v)     Potential positive impact on the University's corporate image.