

**KENYA NATIONAL LIBRARY SERVICE**

**ICT POLICY**

**VER. 2**

**June 2015**

## **Definitions and abbreviations**

Information and Communication Technology	- ICT
Gross Domestic Product	- GDP
Kenya National Library Services	- KNLS
Closed Circuit Television	- CCTV
Radio Frequency Identification	- RFID
Library Management System	- LMS
Local area network	-LAN

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## **Preamble**

Kenya National Library service (KNLS) is a statutory body of the Government of Kenya established by an Act of Parliament, Cap 225 of the Laws of Kenya in April 1965 with a mandate to develop, manage, maintain, promote, establish and equip libraries in Kenya.

The fourth strategic objective of KNLS strategic Plan 2012 - 2017 clearly states that KNLS will enhance availability of information resources through utilisation of modern technologies and strategic partnerships to Government of Kenya's Vision 2030 which covers Kenya's development blueprint for the period 2008 to 2030. It aims to transform Kenya into a newly industrialize, "middle-income country providing high quality life to all its citizens by the year 2030". The Vision is anchored on three "pillars": the economic, the social and the political. Vision 2030 is the successor for another successful plan known as Economic Recovery Strategy for Wealth and Employment Creation (ERS) which has enabled the country's economy revert back to the path of rapid growth since 2002, when GDP grew from a low of 0.6% and rising gradually to 6.1% in 2006 and 6.3% in the first quarter of 2007.

KNLS operates more directly under the Social Pillar. Eight key social sectors are targeted under the social pillar. These are education and training; health; water and sanitation; environment; housing and urbanization; as well as gender, youth and vulnerable groups. Each of the sectors will benefit from the contribution of KNLS as it pursues the objectives in the strategic plan within the context of its mandate.

Simply put, transformation of Kenya will not occur without proper management of information within a sound framework that will ensure KNLS is well coordinated and harnessed.

This ICT policy ensures knls is a hub of information and knowledge for empowerment and transformation of livelihood

## **1. Introduction**

### **1.1 What is ICT?**

Information and Communication Technology (ICT) is defined by KNLS as a diverse set of technologies used internally and externally to gather, communicate, create, disseminate, store and manage information. ICT include but not limited to Computers, Internet, printers, scanners, radio, television, telephone, talking books, software, cellular phones, networks and network devices.

### **1.2 Vision of ICT Policy**

- To use ICT as a dynamic tool of choice in provision of library and information services

### **1.3 MISSION of ICT Policy**

- To enhance access, accurate and relevant library and information services through integration of ICTs.
- To enhance availability of information resources and preservation of national imprint through integration of ICTs in library service.

### **1.4 Objectives of ICT Policy**

It is expected that this policy will help KNLS re-engineer its processes with a view of efficient and effective delivery of library and information services. Specific objectives of the policy include:

- To define the scope of what is ICT in KNLS
- To open up KNLS libraries to new users
- To open up new services to existing users
- To serve as a guideline to KNLS staff and public on what is good or not good ICT practice in terms of usage of Information Systems facilities
- To serve as a guideline for ICT resource allocation
- To serve as a guideline for staff on ICT practice and procedures
- To serve as a guideline for modernizing KNLS services
- To enhance customer satisfaction
- To enhance service integrity and transparency
- To enhance communication speed
- To promote KNLS service through the web.

## 2. Key Policy Areas

### 2.1 Training

Taking cognizance of need to ensure that KNLS retains its competitive advantage in line with KNLS vision, there is need to ensure that employees are well trained and able to use new emerging technologies for service delivery.

To this end ***it is the policy of KNLS to continuously provide training to its members of staff on relevant ICTs in order to ensure that customers get the best service when they need it.***

In order to ensure relevance and ensure that KNLS can effectively use newly acquired ICTs, ***mandatory technical training shall be provided by the contractor. This training will ensure that KNLS is adequately able to operate, manage and use the acquired facility.***

At the same time, departments and branches will be involved in assessing training needs for users. This will then feed into recommendations to Staff Training Committee. However, recommendations to us local trainers will be given priority as a time and cost cutting measure.

Departments or functional area within KNLS shall be responsible for ensuring adequate system administration training and capacity exist within the department. This means that functional or departmental heads will be responsible for ensuring that system administrator in their area is adequately trained and competent to manage the system. ***It is also the policy of KNLS that system administrator(s) will provide basic training for new and old users whenever necessary. It is also the policy of KNLS that technical training of ICT staff and system administrators shall be given priority.***

KNLS ***shall endeavour to conduct continuous basic ICT for all employees;*** this shall require significant investment and resources.

### 2.2 Accessibility

***It is the policy of KNLS to make the library reading materials accessible to all customers.***

To this end, KNLS shall use ICTs to enhance access to all categories of users without discrimination. Deliberate effort shall be made to ensure that children, the old and persons with disability customers get access to ICTs for reading and learning purposes.

KNLS shall ensure that all branches have staff trained to support Visually Impaired Persons using the library for reading purposes. ***It is the policy of KNLS that all libraries shall be equipped with available softwares and hardware for user by persons with disabilities.*** KNLS shall also acquire electronic library materials i.e e-books, journals and literature to open up the world of research and learning to the persons with disability.

Most KNLS libraries have sections dedicated to children. So as to make the children part of ICT development; within this policy framework, ***KNLS shall provide digital curriculum and electronic content for all branches for exclusive use by children***

To make ICTs available and accessible in all branches of KNLS, deliberate effort shall be made to ensure that all branches have power supply and Internet. ***It is therefore the policy of KNLS to use alternative source of energy and Internet access in all remote stations.*** These include use of solar and wind power as well as other innovative methods.

### **2.3 Technological Innovation.**

Innovation in organizations can be stifled by lack of adequate framework under which to operate. This means that innovative and hardworking staffs are forced to look for alternative organizations ready to accept and incubate the innovations.

KNLS recognizes the need to provide an enabling framework for its staff to research and innovate. To ensure that this is done in an orderly manner, staff seeking to innovate shall seek approval from Director of KNLS prior to starting such projects. The request must include proposal and associated documentation. KNLS encourages innovations that are self-sustaining with good proof of financial backing from funders.

Where innovations are being done jointly with external entities, proof of partnership credibility and commitment (financial and in kind) shall be provided to Director prior to approval. Where innovation involves Intellectual Property, necessary legal steps must be put in place to safe guard interest of KNLS.

***It is therefore the policy of KNLS to encourage innovations that are in line with KNLS mandate by providing financial backup for innovative ideas and an innovation strategy***

### **2.4 Digital Content/Repositories**

KNLS recognize that most of the information resources shall be in digital form as web resources/ electronic journals, accessible within KNLS Centres or without. ***It is therefore the policy of KNLS to establish digital cloud based virtual libraries/repositories with appropriate content.***

This policy recognizes that KNLS will observe legal regime within the Kenyan laws and International laws governing intellectual property rights and copyrights of digital and electronic materials. ***It is observed that KNLS will not be held responsible for any use or otherwise by its clients other than the purpose intended (education and information repository).*** It is expected that KNLS will continue with use of OPAC in the management of library resources, while providing link to subscribed local and international repositories.



## 2.5 Power supply

KNLS recognize that maintenance of stable power supply is critical for protection of computing facilities. ***It is KNLS Policy therefore to use clean power in all computing devices within the organization.*** Use of fused power extensions shall be used temporally as sourcing for appropriate ***Uninterruptible Power Supply (UPS)*** is underway. ***It is therefore the responsibility of ICT Department to inspect all power points with the purpose of recommending for maintenance or replacement.***

KNLS will a standby generator which should be primed to ensure no damage to computing devices in case of power failure. KNLS shall continue with sourcing for alternative power sources especially for branches and remote areas which has KNLS centres.

## 2.6 Maintenance

***. It is the policy of KNLS to support preventive maintenance ict equipments atleast quarterly using*** KNLS will at all times guarantee to provide prerequisite resources (funds and human) for maintenance to ensure ICT facilities are sustained for provision of library and information services. KNLS will provide the same maintenance to branch and remote offices with continuous evaluation of outsourcing to vetted vendors and support from partners.

It is the responsibility of knls staff to ensure that the ict equipments are managed prudently i.e switching them off when not in use inclu

In terms of maintenance, ICT Department shall be expected to ensure critical systems are covered by:

- Service contracts
- Software system contracts with vendors
- Detailed inventory of ICT facilities and maintenance log

This policy recognize that various levels of maintenance shall be used from time to time

- On demand: handled on daily course of routine help desk management of issue escalation
- Preventive maintenance scheduled
- Local support provision for branches

***It is the policy of KNLS to provide for outsourcing through a structured framework that allows for proper vetting of vendors, management of escalation issues to outsource (including response times) and documentation of outsourcing contracts.***

## **2.7 E-mail use**

KNLS e-mails are provided for to all staff on prefix @knls.ac.ke. The format shall follow the convention shown below unless stated otherwise. Knls reserves the right to suspend, delete or wipe knls data/emails stored on private devices for staff .

{firstname.lastname@knls.ac.ke}

***It is the policy of KNLS to have e-mail recognized as official means of communication. E-Mail archiving regime shall also be maintained in line with government policy on disposal of government documents.***

## **2.8 Website and web portals**

**It is the policy of KNLS to update the website frequently** with a view of embracing new trends and online web services to attain an integrated information hub. The respective departments are expected to forward information to the Communication and Public relations Office for vetting before ICT Department uploads the information to the website. KNLS will work out a framework that allows respective departments to manage their own content on the website.

***It is the policy of KNLS to use website as a key marketing tool for its services and provide virtual library services on the platform.*** Hosting and website development shall be outsourced so as to ensure that KNLS gets best designed and stable website.

**It is the policy of knls to encourage application development as a vehicle for content dissemination.** Digitised information /materials shall be availed using different formats i.e mobile apps, portals

## **2.9 Bandwidth management**

Access to Internet shall be provided to all staff for official use on research and collaboration. KNLS however reserve the right on the content accessed and the users allowed to access Internet. ***For access to blocked sites, necessary permissions can be sought in writing to Head of ICT Department for consideration.***

*It is the policy of knls to provide WIFI hotspot infrastructure. Knls envisages to provide internet access points and wireless hotspots within the library for online access to information.*

ICT Department shall be expected to facilitate installation of tools for bandwidth monitoring, downloads and report generation for decision making on Internet usage.

## **2.10 System Integration**

***KNLS policy is to have all systems integrated for ease of data sharing and minimize on data duplication within its systems and inconsistency.*** Where possible all systems will be evaluated to check on common ground that will ***enable use of a single database for ease of data interchange amongst systems.*** KNLS will build internal capacity of its staff to ensure database administrators are trained on maintaining integrated database system.

## **2.11 New Systems Changeover**

With increasing automation and modernization of KNLS processes for efficient service delivery, systems will be integrated and new systems developed. This necessitates the need for this changeover policy to allow the organization, for smooth adoption of the systems with minimal disruption of library and information services.

This policy proposes use of changeover strategies such as parallel runs, integration testing, and acceptance testing amongst others. ***It is the policy of KNLS therefore that before any major system changeover, a changeover strategy must be in place and agreed with end users and stakeholders before changeover.*** Parallel runs and testing shall run for a period agreed on with all concerned.

## **2.12 Acceptable use**

While KNLS provides ICT facilities for use by staff for research and access for library or information services, the right to access and use such facilities shall be controlled by ict policies. KNLS shall avail ICT facilities on a timed schedule for equitable access.

***IT is the policy of knls to encourage library users/staff to bring their own devices for content access in the library. knls shall provide designated power points and user networks***

External devices brought to the KNLS shall be prohibited unless adequate measures are taken in consultation with ICT Department to ensure safety of library and information services.

The following guidelines shall apply:

- a) So as to protect KNLS integrity and guard against liability due to improper use of Internet, children (defined as below 17 years) shall need permission from a parent or guardian to access the Internet from KNLS cybercafé.
- b) Material that are offensive, pornographic, hate material or promoting tribalism, sexism and so on shall not be accessed or distributed through KNLS network.
- c) Users shall be made aware of terms and conditions set out in this Acceptable Use Policy. User who do not agree with this policy shall not be allowed to use ICT facility.
- d) **Children Acceptable Use**

The following information apply for children under the age of 17 years with reference to use of ICT facility. This information shall made available on a notice board in all branches:

- You will need to have permission from your parents or guardian to use the Internet
- KNLS will provide permission form which must be signed and returned back to the library before you're allowed to use the Internet
- Depending on number of people waiting to use computers, the Librarian will allow you to use the computer for a period of 1 hour.
- KNLS Internet accessed is filtered meaning some websites are not accessible.
- Instant Messaging or inappropriate social networking sites are not allowed.
- Kindly ask for help to save your work on a USB stick or other form of external drive. This must be checked for viruses before use.
- Foreign software must not be installed onto the library computers.
- Do not use software that creates noise or distracts other users.

e) **Unacceptable Use**

- KNLS prohibit use the ICT facilities in any way which may result in a breach of the:
  - i. Kenya Copyright Act
  - ii. Protection of Children Act;

iii. Sexual Offences Act;

iv. Public Order Act;

v. Any other Act prohibited by Parliament.

f) **Downloading and Copyright Issues**

- You can download material from the Internet in accordance with copyright restrictions. .
- Copyright restrictions relating to the scanning of books, journals and magazines apply to all materials in KNLS library. A member of KNLS library staff shall be in position to help in case of doubt. The following rules apply:
  - i. Photocopying or scanning of complete works is prohibited
  - ii. Permitted extracts can be photocopied or scanned for private use.
  - iii. Only a single copy of a given page can be made
  - iv. No more than one article per journal/magazine issue may be copied

### **2.13 Infrastructure**

This policy stipulates that KNLS shall put in place measures that ensure privacy, safety of information and data and equitable access to ICT resources. Appropriate configuration shall be put in place to ensure Computing devices do not expose user's identity and information to unauthorized persons. Whereas ICT Personnel with administrative rights can access any computing facilities, this policy will ensure such privileges are under control.

This policy empowers KNLS to apply filtering tools in order to block unsolicited content which could harm staff in using computing facilities. Blocking shall employ strategies not limited to blocking of file downloads exceeding set size threshold, monitoring general e-mail attachments and downloads, and employing content monitoring tools.

KNLS policy also is to expand the use of networked computing facilities to enhance data and information sharing and common use of scarce resources such as printers and scanners. Local Area Networks (LAN) shall be expanded in all branches, use of virtual private networks (VPNs) to ensure remote locations (branches) access services at the headquarters.

To ensure infrastructure components deliver intended purpose, ***it is the policy of KNLS that specifications used by procurement department shall be updated from time to time but at***

***a maximum every six (6) months by ICT Department to ensure currency and value for money on acquisition.*** This policy therefore requires that vetting of pre-qualified vendors shall be done collaboratively by ICT Department, Procurement and Administration to ensure trustworthy, quality of procurement process and integrity in the acquisition of ICT facilities.

KNLS shall take into consideration trends in technology and use the LMS in conjunction with emerging technologies such as Smartcard and RFID (Radio Frequency Identification tags) in order to make best use of ICT in delivery of services.

KNLS will put in place security systems i.e book detection, IP based cameras (CCTV), biometric entry, rfid tags, motion detectors, body scanner, baggage scanner among others to help monitor ensuring safety of knls .

#### **2.14 Disposal, acquisition and e-waste management**

While KNLS recognize that all staff needs a one-on-one access to computing facilities, it also recognizes that ICT facilities have lifespan to which optimum performance can be expected. ***This policy therefore stipulates that new computing facilities shall be deemed old if usage exceeds 4 years or needs replacement.*** Disposal shall be based on set criteria in conformity with Public Procurement and Disposal Act of 2009 and recommendations of the KNLS Disposal Committee.

KNLS recognize that donated ICT facilities pose a challenge of disposal as some are unserviceable and costly to repair. ***This policy therefore requires that all ICT donations accepted shall be based on prescribed guidelines of KNLS with minimum specification developed by ICT Department used at all times. Minimum specifications shall be developed by ICT department continuously and circulated to relevant departments.***

This policy also requires the ICT Department, Finance and Procurement Departments to maintain an up to date inventory showing the age limits of each computing facility to guide acquisition process for replacement.

***It is the policy of KNLS to undertake thorough test before acceptance of all devices acquired to conform to the specifications.***

***Knls will work with authorized government organization to dispose all out-dated electronic equipment's as per set standards. Knls will discourage careless disposition of used tonners and other ICT consumables***

#### **2.15 User support**

It is the policy of KNLS to have a helpdesk manned by a qualified ICT expert for purpose of recording and scheduling all calls, status and recommendations received through the

Helpdesk. All user requests for assistance shall be properly logged using support forms. Strategies that could be explored include:

- Provision of a common e-mail which allows all ICT personnel to receive the issues raised by [ict@knls.ac.ke](mailto:ict@knls.ac.ke)
- Support form to be made online, which could enable users to fill the requests online
- Dedicated telephone numbers and extensions for the helpdesk.
- Emergency numbers to be used during non-working hours.
- It is a policy of knls to automate its help desk support system

KNLS also proposes various sensitization sessions to make users aware of escalation process as well as troubleshooting skills of simple faults not only covering hardware but also software including specialized systems developed.

## **2.16 Partnership**

For KNLS to fully empower all staff and its branches, it will take involvement of various partners offering training, facilitating acquisition of ICT facilities and resources (human and funds). As recognized from past, some of the partners have brought to KNLS equipment of suspicious quality, some non-functional.

***It is therefore KNLS policy to guard against any dumping from any partner by ensuring all assistance is in conformity with KNLS acceptable specifications and standards and right to choose what is taken from any consignment.***

Whereas partnership is not limited to donations, KNLS commits to take advantage of partnerships that could empower its staff and branches. Notably, KNLS recognize that branches which are resource centres could also be used as part of digital villages or learning centres, and hence get support on equipment and connectivity from partners.

## **2.17 Security**

Information is a critical asset. KNLS generates, stores and provides access to its clients. This resource attracts varied threats ranging from hacking, unauthorized access, vandalism and alterations. ***It is therefore the policy of KNLS to ensure information is safeguarded while in storage, transit or being accessed or used by any of its staff and clients.***

KNLS shall use filtered Internet service in order to block access to inappropriate websites. In order to ensure that research and education is not curtailed by filtering, KNLS shall release blocked websites once verified as not harmful.

Appropriate strategies shall be applied to ensure security of information:

- Password use to access computing devices including sensitive documents. KNLS shall develop appropriate guidelines to ensure the Password use is understood and that staff changes the passwords periodically to enhance security.
- KNLS staff shall be responsible for their username and password and not reveal to other user(s).
- Logging on to the network with another person's details is punishable offence.
- Passwords shall expire every 6 months if not changed within that period.
- The length of the password shall not be less than six (6) characters.
- Knls shall maintain a Firewall system shall to ensure high availability of services offered to KNLS clients. knls provide redundancy and diverse tools for monitoring performance and threats.
- ICT will ensure staff use cloud backup integrated on their emails for their individual data backup  
Systems backup will be done bi-weekly and maintain and offsite cloud based backup system
- Backup shall be facilitated to ensure KNLS is prepared for recovery from any form of disaster on its information and communication infrastructure. Staff shall also be trained on backup strategies so as to safeguard any loss of data and information resources within KNLS computing devices.
- All computers shall have running anti-virus software but KNLS cannot guarantee total protection from viruses when using the library computers. E-mails sent to and from KNLS mailboxes will be scanned for viruses.

## **2.18 knls Strategic System**

**It is a policy of knls that systems will conform to e-government policy, Industry standards and guidelines.**

knls will ensure integration of its system for centralized management



## **2.21 Licensing policy**

**It is the policy of knls to use licensed software systems,** KNLS however recognize that alternative software shall be evaluated from time to time to ensure organization use cost-effective products, including opportunities offered by open source software.

## **3. Disaster Recovery and Preparedness**

Knls will have a disaster recovery and business continuity plan for every strategic information system, which is properly documented and maintained to ensure that in event of failure of the system or destruction normalization will be maintained.

***It is the policy of knls to use off-site Data Centres for back up of critical organisations data.***

## **4. E-waste**

**It is a policy of knls to manage the lifecycle of all IT assets from acquisition to disposal in a way which conforms to sound environmental norms as detailed by NEMA e-waste guidelines.**

knls to where applicable extend the useful life of IT assets to postpone / minimize generation of E-Waste and collaborate with the governmental organization who are authorized e-waste recyclers and to enter into appropriate agreements to execute all aspects of the E-Waste disposal.

## **IMPLEMENTATION OF THE POLICY**

It shall be the responsibility of the knls Board and management to implement this policy.

## **REVIEW**

The policy shall be reviewed at such intervals as the management may determine and when need arises.

## **EFFECTIVE DATE**

This policy comes into effect on this day of .....

Signed by.....

**BOARD CHAIRMAN**

Date.....