THE STATE OF LEGAL DEPOSIT IN UGANDA: CHALLENGES FOR ELECTRONIC PUBLICATION

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OCTOBER 2012
DECLARATION

I, Elizabeth Nantongo, hereby declare that this work is original; the findings are primarily a collection of people’s views and ideas and have never been submitted to any university/institution for any award.

Signed……………………………… Date: ………………………

Elizabeth Nantongo
2005/HD05/3679U
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APPROVAL

I, Elizabeth Nantongo, carried out the research study, data collection and organization of this dissertation. This study was carried out at EASLIS under the supervision of Prof. I.M.N. Kigongo-Bukenya and Dr. G. W. Kiyengi.

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Supervisor
DEDICATION

This report is dedicated to Brother Deogratious Mugema and my daughter Leticia Nabagereka.
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Special thanks go to all my teachers and lecturers who have helped me reach this far in my journey to attain knowledge, you will always have a special place in my heart. I appreciate my parents Mr. and Mrs. Lukwago for their love and moral support, which they have continuously extended to me. I am heavily indebted to my supervisors, Prof. I.M.N. Kigongo-Bukenya and Dr. G. W. Kiiyingi whose professional and parental support was invaluable in the production of this work. Long live and may the good Lord always bless the works of your hands.

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Thank you all.
ACRONYMS AND ABREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>CDNL</td>
<td>Conference of Directors of National Libraries</td>
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<tr>
<td>CD ROM</td>
<td>Compact Disc Read Only Memory</td>
</tr>
<tr>
<td>ICT</td>
<td>Information Communication Technologies</td>
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<td>IFLA</td>
<td>International Federation of Library Associations and Institutions</td>
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<tr>
<td>IP</td>
<td>Internet Protocol</td>
</tr>
<tr>
<td>MUK</td>
<td>Makerere University, Kampala</td>
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<tr>
<td>NABOTU</td>
<td>National Book Trust of Uganda</td>
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<tr>
<td>NDC</td>
<td>National Document Centre</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa's Development</td>
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<tr>
<td>NLS</td>
<td>National Library Service</td>
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<td>NLU</td>
<td>National Library of Uganda</td>
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<td>ULIA</td>
<td>Uganda Library and Information Association</td>
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<tr>
<td>UMI</td>
<td>Uganda Management Institute</td>
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<tr>
<td>UNCHE</td>
<td>Uganda National Council of Higher Education</td>
</tr>
<tr>
<td>UPBA</td>
<td>Uganda Publishers and Booksellers Association</td>
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<tr>
<td>UPRS</td>
<td>Uganda Performing Rights Society</td>
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<td>USDL</td>
<td>Uganda Scholarly Digital Library</td>
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ABSTRACT

This study examined the legal and regulatory framework of legal deposit in Uganda, with specific interest in gaining an insight about how electronic publications are being preserved in Uganda and how the legal deposit institutions are taking up the new challenges.

The research was guided by the following objectives: to examine the regulatory framework for electronic publications legal deposit in Uganda; to assess the institutional framework of legal deposit institutions in terms of infrastructure, staff and resources; to establish the challenges faced by legal deposit centres in preserving electronic publications in Uganda and to suggest strategies for effective legal deposit of electronic publications in Uganda.

Case study research design was adopted with the study being specifically qualitative. Interview, observation and content analysis were the methods applied for data collection. A sample of twenty nine (29) respondents were involved in the study and these included fifteen (15) staff/librarians, six (6) administrators of the three centres, three (3) publishers, two (2) members of Uganda Publishers and Booksellers Association, one (1) official from NABOTU and two (2) policy makers.

The findings of the study indicate that of the three deposit laws in Uganda, only the National Library Act, 2003 caters for the deposit of electronic materials. However, all the three deposit institutions collect a particular amount of electronic materials. Findings also revealed that the three deposit institutions have the required resources to facilitate electronic materials legal deposit, the staff are qualified and the ICTs and related resources are in place. However some challenges exist and these include lack of government support, inadequate cooperation between publishers and the centres, islandism of the three centres and financial constraints, among others.

Some of the recommendations proposed include mutual collaboration between publishers and the legal deposit institutions, compilation of an electronic national bibliography, network amongst the legal deposit institutions, sensitization of stakeholders about the existence of the laws and capacity building for the staff of the legal deposit institutions.
CHAPTER ONE
INTRODUCTION TO THE STUDY

1. This chapter presents a general overview of the situation of Uganda’s legal deposit institutions. It gives a background of the three depository centres, their provisions for legal deposit and the need to include electronic publications in legal deposit acts. The chapter also elaborates on the statement of the problem, the research questions, and significance of the study, study scope and conceptual framework

1.1 Introduction

The concept and practice of legal deposit is under threat in the digital environment (Muir, 2001). Since the main aim of legal deposit is to ensure the preservation of a nation’s intellectual and cultural heritage over time, many countries are extending legal deposit regulations to cover digital publications in order to maintain comprehensive national archives.

1.2 Background to the Study

Legal deposit is a legal obligation that requires publishers to deposit a copy (or copies) of their publications within a specified period of time in a designated national institution. The institution is usually a library, and includes the National Library (Conference of Directors of National Libraries - CDNL, 2002). Legal deposit in most countries has traditionally applied to print publications because for centuries the traditional means of storage and display of publications was as print on paper. However other media has
emerged in the production and delivery of publications. The number of publications produced in other formats has also increased. As a result some nations have put in place revised legal deposit legislations to take account of the newer publishing media (CDNL, 2002). Electronic materials are beginning to dominate the word’s published output particularly in research publishing. Therefore if the world’s digital cultural heritage is to be preserved, countries must legislate to include electronic works in legal deposit collections (eifl.net, 2011). Larivièere (2006) notes that the advent of powerful new information technologies as a means of publishing and/or disseminating recorded knowledge makes it imperative for legal deposit legislation to ensure that their original objectives are maintained. Even if the media or the information carriers change, the need to record, preserve and make available the content of the material deposited remains, whether in the digital or the printed environment.

According to Zell (2002), reliable statistical information about Africa’s book publishing output is difficult to obtain. The situation is even more difficult to determine with regard to electronic publishing. In an e-mail communication concerning the amount of electronic publishing in Africa, Zell maintained that with the possible exception of South Africa, the volume of electronic publishing in Africa was not significant and was difficult to monitor. Part of the problem concerning statistics for electronic publishing was the fact that what is understood to constitute electronic publishing varies considerably. This is true to Uganda in that the number of electronic publications produced is not known because some legal deposit laws in Uganda do not cater for electronic publications and thus making it hard to properly monitor the electronic collection of the country.
According to CDNL (2002), legal deposit in most countries has traditionally applied to print publications because for centuries the traditional means of storage and display of publications was print on paper. As other techniques have developed for the production and delivery of publications, and as the number of publications produced in other formats has increased, some nations have put in place revised legal deposit legislation to take into account the newer publishing media. This is in response to what Muir (2001) noted that nations that ignore its digital works in legal deposit provisions will find themselves missing a significant and unrecoverable portion of their cultural heritage.

1.2.1 Legal Deposit in Uganda

Legal deposit is the statutory provision, which obliges publishers to deposit copies of their publications at the legal deposit centres in the country of publication origin. According to Kawalya (2009), the first legal act in Uganda appeared in the Ordinance No.26 of 1957 known as the University College of East Africa (Deposit Library ) Act, which was passed by the then Governor Crawford and was to make provision for the deposit and preservation of copies of books printed and published in the protectorate. This act stipulated that the publisher of every book published in the protectorate within one month after the publication had to deliver a copy of a book to the librarian of the deposit section of the library of the university college of East Africa who was obliged to provide a receipt of it. The act postulated that if any publisher failed to comply with any of the provisions of the ordinance he was guilty of an offence and liable to pay a fine of shs.100. This University College of East Africa (Deposit Library) Ordinance, 1958 was revised by an act of parliament to become the Makerere University College (Deposit
Library) Act, 1964 having the same provisions as the earlier act.

Currently, Uganda has three Legal Deposit Laws: The Makerere University College (Legal Deposit) Act (1964), The Deposit Library and Documentation Centre Act (1969), and the National Library Act (2003).

The Deposit Library and Documentation Centre Act, 1969 was assented to on the 22\textsuperscript{nd} October 1969 and commenced on the 24\textsuperscript{th} October 1969. Most importantly the Deposit Library and Documentation Centre was established as a result of the poorly co-ordinated national literature, which necessitated a central centre for the collection of these literatures. The Deposit Library and Documentation Centre Act was therefore enacted to make legal provisions for its establishments, at the Uganda Management Institute then Institute of Public Administration (IPA) in its core functions of training, research and consultancy.

In addition to the legal deposit mandate, the National Documentation Centre also collects copies of bound Newspapers from 1972, district documents from the 1960s, some Uganda official documents from protectorate to present time, dissertations for UMI students, staff and some scholars from the public.

The second legal deposit act is Makerere University (Legal Deposit) Act 1964, which designates the Africana Section of Makerere University as a legal deposit centre. In addition, the materials collected include books and periodicals related to East Africa, books by explorers and travelers plus books and documents on Uganda. The collection is significant for research and as a primary deposit of Uganda’s history. It contains papers, letters, reports and dairies of events, books of history, travel, church memoranda, and
journals from individuals, private and official organizations important to the Uganda heritage. The Africana section also holds important historical documents referring to Kenya and Tanzania during the years of colonization.

The third legal deposit provision is in the National Library Act 2003, which was assented to on 23rd December 2002 and commenced on 17th January 2003. The National Library of Uganda is charged with the role of developing policies, technical support to libraries, and inspection of libraries to ensure that they adhere to standards. The mission of The National Library of Uganda (NLU) is to collect, preserve and disseminate information materials. It is important to note that though all the above acts prescribe the need to deposit copies of all publications in the country, it is only the National Library Act that mentions the electronic publications as one of the materials that ought to be deposited. The other two acts provide for the deposit of only the print materials.

1.3 Statement of the Problem

The development of new carriers for the storage of information, traditionally produced on paper, has brought about a fundamental change in thinking about future collection policies and storage requirements and an awareness that in order to maintain comprehensive collections of national publications for present and future generations of users, it will be necessary to obtain an increasing amount of non-print material (CDNL, 2002).

World over, the trend of publishing is changing from print to electronic publishing. Electronic publishing is increasingly becoming popular by way of making publications available in Uganda with more publications produced electronically. This has
implications for legal deposit institutions and preservation of publications. All types of published materials should be subject to legal deposit regardless of format, if any forms of publications are left out, it should be on grounds of content and not information carriers (Zumer, 2009). According to PADI (2000), legislation in many countries predates the current information age and thus requires a new legal framework in order to encompass digital publications. Legal deposit is not keeping up with the transfer of information from print to digital format. Valuable materials are being lost from the national collections and future researchers (eifl.net, 2011). By law, information producers in Uganda are required to deposit their publications to legal deposit centres. However legal deposit laws seem weak in terms of catering for electronic publications. In addition, there exists lack of enforcement mechanism and lack of enabling environment for their operation. Legal deposit centres need to cater for electronic publications available for national collection preservation.

Therefore there is need to gain insight into how electronic publications are preserved in Uganda, how the legal deposit institutions are taking up the new challenges and how prepared they are in terms of resources, policies and infrastructure.

1.4 Purpose of the Study

The purpose of the study was to examine the legal and regulatory framework of legal deposit as a strategy of ensuring and promoting proper preservation of the both the print and electronic national heritage.
1.5 Objectives of Study

The specific objectives of the study were to;

1. Examine the regulatory framework for legal deposit of electronic publications in Uganda.

2. Assess the institutional framework of legal deposit institutions in terms of infrastructure, staff and resources.

3. Establish the challenges faced by legal deposit centres in preserving electronic publications in Uganda.


1.6 Research Questions

The study answered the following research questions;

1. What are the legal and regulatory frameworks of legal deposit institutions in Uganda?

2. What is the institutional framework for legal deposit of electronic publications in Uganda?

3. What are the institutional challenges faced by legal deposit centres for electronic publications in Uganda?

4. What can be done better to effectively manage the legal deposit of electronic publications?

1.7 Significance of the Study

The study findings will benefit the staff, specifically librarians, dealing with legal deposit because it provides techniques on how to handle and preserve electronic publications.

Policy makers and the government will benefit for they will be able to realize the role they have to play in ensuring that electronic publications are catered for in legal deposit.
The legal deposit institutions in Uganda will be more equipped with techniques on how to handle and build the electronic collections for preservation and retrieval. In addition, the study provides useful information about the changing trends in legal deposit.

1.8 Scope of Study

1.8.1 Geographical Scope

Geographically the study covered three legal deposit institutions in Uganda; National Library of Uganda, (located at Buganda Road Plot 33 Kampala opposite Buganda Road Primary School), Africana Special Collection Section of the Makerere University Main Library and the National Documentation Centre at the Uganda Management Institute (located on Plot number 44-52, Jinja Road, Kampala).

1.8.2 Conceptual Scope

In terms of content, the study focused on regulatory framework and management of electronic legal deposit in Uganda, for example the legal deposit acts, institutional framework and the challenges that these institutions face in collecting and preserving electronic publications.

1.9 Conceptual Framework

1.9.1 Definition of Operational Terms

Electronic Publishing

The study adopted the Longman Dictionary of Contemporary English (2011) definition of electronic publishing as a generic term for the production and distribution of information, which is stored, transmitted and reproduced electronically. It is the publication of
information materials in a format accessible by computer. It may also refer to distribution of written information digitally through diskettes. E-publishing includes the e-books, e-commerce and any other form of electronic publication.

**Heritage**

Heritage is what we receive from the past, it shapes our present identity and provides insight for our future. It includes a range of activities such as stewardship, preservation, research, education and engagement. It encourages sensitivity to the indigenous natural environment, to the impact of human activity on the natural environment, as well as to differing perspectives regarding objectives, ideas, places and traditions (Ahmed, 2006). Uganda has three forms of heritages; artifacts, textual and electronic, three separate laws were designed to protect these heritages. By law publishers are required to deposit three copies of their publication for preservation and listing into the National Bibliography.

**Legal Deposit**

Legal deposit is a government provision which compels producers of all types of publications to deposit a certain number of copies of each publication in a designated or similar institution Jasion (1991) cited by Kawalya (2009).

**1.9.2 Relationship between Concepts**

The heritage of a country comprises of artifacts, textual or electronic. Specifically, this study focuses on the electronic heritage of the country. The existence of legal and regulatory framework influences the preservation of the electronic heritage. In addition, the institutional framework for example availability of qualified staff and resources also has an impact on the preservation of the national heritage. This will result in the national electronic heritage being preserved through publication of national bibliography of
electronic publications, creation of a database of electronic publications and thus increased awareness of existence & use of electronic publications. However, there are some challenges that inhibit the achievement of the expected outcomes and these include lack of priority of e-resource legal deposit among the legal deposit institutions because of other priority activities, lack of financial resources, lack of cooperation from publishers and limited electronic publications.
Figure 1: Diagrammatic Representation of the Conceptual Framework

**Dependent Variable**

NATIONAL HERITAGE
(Artifacts, textual and electronic)

**Institutional Framework**

Infrastructure, resources, staff, furniture, equipment

- Growing collection of electronic publications
- Publication of national bibliography of electronic publications
- Increased awareness of existence & use of electronic publications
- Creation of database of electronic publications
- Electronic networks of e-publications

**Independent Variables**


**Challenges**

- Lack of priority
- Lack of resources
- Non cooperation from publisher
- Limited e-publications

**EXPECTED OUTCOMES**

Source: Researcher 2009

**EXTRANEOUS VARIABLE**
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

Legal deposit helps to ensure that the published record of human memory, creativity and discovery are acquired by the nation so that it can be preserved and made available to future generations. This chapter presents a review of relevant literature that has been documented on the study area. The researcher draws major themes from the objectives of the study. The chapter first discusses the main functions of legal deposit. It draws attention to some of the common electronic publications. It then discusses the global perspective of legal deposit of electronic publications, where it gives examples of how some countries have handled the legal deposit of electronic publications. It then discusses some important issues that need to be considered in legal deposit of electronic publications, the challenges and strategies. The chapter concludes with the stipulation of the research gap.

2.2 Functions of Legal Deposit

Most national libraries have traditionally built up their published collections through legal deposit, a statutory provision which puts a legal requirement on publishers to deposit their works in designated repositories. Legal deposit refers to a statutory provision which obliges publishers to deposit copies of their publications in the country in which they are published. In Uganda, the deposit libraries are three; National Documentation Centre at UMI, Makerere University Library and National Library of Uganda.
According to eifel.net (2011), Legal deposit legislation serves a clear national public interest by ensuring the acquisition, the recording, the preservation and the availability of a nation’s published heritage. Such a national collection is undoubtedly one of the major components of a country’s cultural heritage and should also be considered as the foundation of a national policy of freedom of expression and access to information. The role of a legal deposit system is to ensure the development of a national collection of published material in various formats. It should also support the compilation and the publication of a national bibliography in order to ensure bibliographic control over a comprehensive deposit collection. Effective legal deposit legislation guarantees, to citizens and researchers within the country and abroad, access to a research collection of the country’s published material (eifel.net, 2011).

According to Elize (2011) the purpose of legal deposit is to collect, preserve and make available to present and future users the documents that contain the intellectual and cultural heritage of the country. The preservation of the documentary heritage facilitates access to all published material generated within their country. Thus legal deposit is one of the pillars of freedom of information. She continues that it enables a country to fulfill two fundamental moral obligations to mankind as a whole. These are: to record everything the country has produced and to ensure that at least one copy of every published document is preserved and available for consultation by scholars, potentially from all over the world. Elize continues to explain the specific benefits that legal deposit offers for creators and publishers or producers:

- It ensures that a creator’s work is not lost for posterity and that it is available for
future research.
- It has the potential to make all users of places of legal deposit aware of what has been published or produced.
- It forms the basis for the compilation of national bibliographies and other databases that alert potential users nationally and internationally to the existence of books and other documents and thereby promote their distribution and sales.
- It forms the basis for the collection of international book production statistics by UNESCO which is a valuable source of business information to the book trade. It can also develop into such for other media.

2.3 **Electronic Publications**

Electronic publishing may be described as the use of electronic means of communication to make information available to the public. Electronic publications are the information outcome of electronic publishing and are stored in computers and may be displayed for viewing either on a computer screen or as a print-out. Electronic documents may be described as the use of electronic means of communication to make information available to the public. There are two main categories of electronic publications that should be legal (legally) deposited. The first is “off-line” or tangible publications, which are made available on a physical data carrier such as diskettes and CD-ROMS. They are sometimes also identified as “packaged electronic publications” or intangible publications (Vickery, 2008). Vickery continues to highlight the common categories of electronic publications below:

- Electronic equivalents of print publications such as books, journals, pamphlets
etc.

- Interactive databases containing, for example, bibliographies, statistics, spatial data, image data or text.
- Interactive multimedia such as games
- Software and expert systems
- New publication forms such as bulletin boards, discussion lists and electronic pre-prints which are available through electronic networks.

These may be made available as individual physical items on diskette, CD-ROM or other off-line media, or they may be made available through on-line host systems or directly to the user via computer networks. They may appear in electronic form only or they may be published in electronic form and as print on paper, in parallel. There are also retrospective publication which converts the record of the past to electronic form for better access, preservation of content and the production of new works.

2.4 **Legal Deposit of Electronic Publications: Worldwide Perspective**

If the world’s digital cultural heritage in the 21st century is to be preserved, countries must legislate to include electronic works in legal deposit collections. PADI (2000) provides detailed information about legal deposit of digital publications relating to 20 countries and the general worldwide progress on legal deposit of electronic works. Canada, France, Germany, Iran, Italy, Japan, Sweden and the United States have specifically identified off-line electronic publications as being subject to legal deposit by referring in their legislation to the necessity of depositing a physical item or a publication in a fixed format.
Other countries, such as Denmark, Finland, Norway and South Africa, are including on-line material as well, through a definition that accommodates current new publishing formats and those of the future and through eliminating from the definition any reference to a physical format.

2.4.1 Legal Deposit Provisions on Electronic Publications

Scientific journals are more and more published electronically, gradually the amount of e-books increases and on Internet a vast amount of digital information is being published (Mackenzie & Walle, 1996). This concurs with what Ezema (2010) notes about electronic scholarly publishing currently changing the pattern of global scholarly publishing to the extent that he fears that the death of print journal publishing is imminent. African countries are gradually accepting electronic journal publication with the advent of the Internet and other information and communication technologies. Electronic publishing offers major opportunities for dissemination and for access but at the same time imposes new challenges on National Libraries and other deposit institutions in charge of preserving countries cultural heritage. The challenges that have to be addressed are preservation of the electronic publications. In the past years, national libraries have taken the lead in developing practical solutions for digital preservation. This means that national library and deposit institutions should form a uniting body with information creators in order to make a lasting solution of electronic publications deposit. This is applicable to Uganda in that more journals are being published electronically for instance institutions such as universities, government ministries and non government boards publish their journals electronically. Just as Kanyengo (2006) notes that today scholarly information is increasingly being produced in digital formats.
Almost everyone involved in the knowledge production process, prefers the electronic form.

Electronic publications are a major and integral component of a nation’s documentary heritage, and therefore must be included in legal deposit arrangements, including content produced and shared by Internet users. Digital technologies provide opportunities for facilitating legal deposit through rapid transmission, and better enabling the complex tasks of cataloguing, indexing and recording, managing, and providing access to deposited material. However, as the Internet widens the possibilities for all users to publish content online, comprehensiveness may not be possible for such publications; instead representative selections would fulfill this requirement. Digital technology also creates new concerns about unauthorized alteration, copying and dissemination of deposited material. Publishers and librarians must work together to ensure that the legitimate needs of both users and owners of deposited materials are accommodated in this evolving environment. (http://www.ifla.org/en/publications/ifla-statement-on-legal-deposit)

It is very important that the deposit library be in a position, both legally and technically, to store and control the electronic publications as deposited. Legal deposit of electronic publications means the permanent transfer for retention by the library, not just temporary access from the library to a remote source. Simply allowing access is not equivalent to establishing a permanent store, and is insufficient for deposit purposes. National legal deposit institutions should resist the temptation to leave publishers with the responsibility of archiving and preserving electronic publications. As stated by
Drimmelen (2002),

“Are the publishers going to take care of long-term availability?”
They did not in the case of printed material, so why should they in the case of electronic publications?”

He continues to note that the publishers’ primary concern lies with the continuity of their business operations, and rightfully so. Since publishers have no economic incentive to develop an expensive infrastructure to preserve electronic material on a long-term basis, it is much better to let the deposit library play the role of a last-resort source for publications that for economic reasons would otherwise not be preserved. Kawalya (2009) in connection to this notes that publishers find it expensive to deposit to the three deposit institutions in Uganda putting into consideration that they are doing business and therefore aim to maximize profits and thus avoid to deposit copies. Electronic formats tend to have a short life span unless action is taken to ensure that they are maintained in a form which can be reformatted or refreshed. It is important that legal deposit provisions be worded in such a way that repositories have permission to copy, reformat, refresh or transfer deposited publications for preservation purposes. Electronic publications received through legal deposit must be identified, acquired, registered, catalogued, stored and maintained. They must also be recorded in the national bibliography, preserved and made available to researchers.

Zell (2002) states that enacting of an Act does not necessarily imply partial or complete implementation, as evidenced by both the South African and Namibian experiences. In South Africa a number of reasons can be advanced for the partial implementation of the Legal Deposit Act (Act No 54 of 1997). While the Act was being updated it became quite obvious that the National Library of South Africa (NLSA) would not be in a
position to implement all the stipulations of the Act at once. As a result, a conscious decision was taken to phase the implementation. Initially regulations were promulgated for printed materials, certain audiovisual material and static electronic documents such as CD-ROMS. Zell continues that these are handled in a similar manner as books, for example, in instances where a publisher working in this market they would receive a letter of reminder from deposit institutions. Besides lack of capacity there are issues of consultation with the relevant industry before implementation can take place. Consultation is necessary for instance to look at copy right/licensing issues. These consultations would clarify how access is to be provided and under what conditions, who will be responsible for long-term preservation. Such consultation takes time and may be complicated. This is also similar to the National Library Act which is being implemented partially.

Letshela & Lor (2002) draw the example of Namibia where the legal deposit legislation is part of the Namibian Library and Information Services Act which was passed in 1996. This was necessary because after independence no authority was made responsible for library services. Because there was no existing legal deposit legislation, Namibia had an opportunity to enact a modern legal deposit act as recommended by UNESCO. In a nutshell, the legal deposit provisions of the Namibian act have been written to cover all existing and to be created media. The legislation borrowed heavily from the Norwegian act, which is considered to be one of the most modern and comprehensive from the developed world. They continue to note that in Namibia, lack of resources has delayed preparation for the implementation of legal deposit of electronic
publications. The phased approach is necessitated by factors which face both South Africa and Namibia. These include, but are not limited to, lack of technological, financial and staffing capacity. Both the South African and Namibian National Libraries do not presently have the technological capacity to fully implement their new legal deposit acts. Acquisition of the technology needed to capture, store and make accessible online electronic documents would make serious inroads upon the budgets of the two libraries.

2.6 Challenges Faced in Legal Deposit of Electronic Publications

Preserving digital information is becoming an increasingly urgent challenge for both libraries and publishers of books and journals, as the amount of digital information is growing quickly and preservation policies and techniques for this format remain unsettled. The need is pressing. While the costs of long-term archiving are high, the cost of doing nothing would be disastrous (Letshela & Lor, 2002). National libraries and publishers should work together to save the nations heritage at the same time guarding their copyright without denying nationals the right to access information.

Green (2008)’s view is that the legal deposit institutions face a challenge of the need to limit what publishers produce and acquire. In an effort to try to be selective, they need to come up with some way of ensuring that personal bias does not unduly influence what they acquire. Selection criteria might include a requirement for standardized metadata that the recording be available elsewhere on the internet or that it be deposited only in certain accepted formats.
Zell (2002) states that another challenge is that posed by demographics, he notes that musicians frequently change residences, or have no permanent address at all. In addition, with most people releasing independent recordings being quite young, they are often not particularly concerned about making sure that their music is preserved for the future. The response of publishers to a legal deposit request can vary significantly. Most publishers deposit their publications, eventually, although they often will ignore the request until they have received two or three reminders. Legal deposit institutions in Uganda should not sit back and wait for publishers; instead they must get involved as electronic publications are different from print and can be produced and changed within no time. Another important point to note is a lot of publications can be made however without registering them hence losing on nation’s heritage. Therefore the creators of such works should be compelled to deposit them with legal deposit institutions.

Letshela & Lor (2002) indicate that given the lack of expertise within the staff over archiving electronic publications, the relatively low quantities of incoming electronic items is to be welcomed, and it is for this reason that the deposit centres still prefer to acquire conventional paper mapping over its electronic equivalents. However, such a situation undoubtedly means that some current electronic products are being lost for future generations.

Green (2008) notes some challenges that the legal deposit institutions will face, include availability of the appropriate equipment (hardware and software) to make electronic publications available to users, the appropriate expertise to make the publications available and the ability to receive all the technical information it requires from
publishers in order to make its publications available.

In addition, Letshela & Lor (2002) note that more significant is lack of human resources, not only to do the necessary research and development work, but also to operate systems once they have been installed. Lack of properly trained staff to work in the new environment is not unique to developing countries.

Lariviere (2006) notes that one problem related to legal deposit of electronic or digital material is related to the deposit process itself. The legal deposit of electronic publications necessitates the reproduction of protected works. (Exceptions are the off-line carriers, where deposit procedures are quite similar to those for print material, and the cases where publishers/producers of digital documents “deposit” their documents themselves by sending them through the network at the national legal deposit institution.) Since digital material might have to be collected through downloading from the master copy on a server, the process raises the issue of permission to reproduce a protected work. Again, national copyright legislation or legal deposit legislation should provide legislative permission to reproduce documents for legal deposit purpose.

2.7 Strategies for Effective Legal Deposit of Electronic Publications

Several authors have suggested some strategies that can be put in place to ensure effective legal deposit of electronic publications, these are discussed below.

2.7.1 Description of Materials

The first issue to look at is the definition of the material to be deposited. The definition has to be as inclusive as possible to ensure that electronic publications are covered regardless of the type of carrier. If the current law of a country does not include them, it
should be amended in order to clearly specify that they are covered. Because information technology evolves rapidly, it is essential to make sure that the definition is worded in such a way that amendments will not be necessary each time a new mechanism or technique for providing information is made available. The best definition of material to be deposited is undoubtedly the South African one, which defines a “document” as “any object which is intended to store or convey information in textual, graphic, visual, auditory or other intelligible format through any medium, and any version or edition of a document which is significantly different from that document in respect of its information content, intelligibility or physical presentation, is considered to be a separate document; a medium means any means of recording or transmitting information intended for subsequent reading, listening or viewing (Vickery, 2008).

Lariviere (2006) notes that whereas in a print environment it has been relatively easy to define what should be considered as a “publication” for legal deposit purposes, including material such as compilations, the definition ends up being a bit more complex in a digital environment. A publication is generally defined as a document consisting of sequential text and/or other data such as images, sound, etc., which is structured or organized and edited as an independent unit. It exists on a physical support that is made available to the public in multiple copies and can be acquired by anyone. Within a digital environment, a publication is a document that is produced, distributed and stored in electronic form, available either in a tangible format, such as a diskette or a CD-ROM, or on-line, such as databases or Internet documents. It is a combination of information content and software that provides search capabilities not available within a print
environment. Just like a print publication, an electronic publication could be an independent and well-structured entity, or it could include bits and pieces of information not necessarily linked together, such as a GIS database or a statistical database. The way the information is organized, accessed and managed within a digital environment creates specific legal deposit problems, such as the one related to listservs.

2.7.2 Reformatting the Materials

International Federation of Library Association (IFLA 1999), states that it is important that legal deposit provisions be worded in such a way that repositories have permission to copy, reformat, refresh or migrate deposited publications for preservation purposes. If this permission is not granted, it will not be possible to maintain materials for posterity. This means that the legal deposit library should have power on electronic publications to copy, reformat and refresh deposited publications for preservation purposes of the future generations. This study seeks to establish whether the legal deposit laws in Uganda have provisions for the above.

2.7.3 What to deposit

Drimmelen (2002) cites that since electronic publications are distributed as individual physical objects, their legal deposit process is quite similar to that of printed products. But the legislation should specify that they are to be deposited together with any associated software, manuals and accompanying material needed to enable them to be used. It should be made clear that any new version or update to the original diskette or CD should be deposited and that access levels are stipulated so as to guard copyright and misuse of works. Hackers should be taken as a serious issue as they are used to posting
publications on works that are not their own and tarnishing the credibility of the owners. The deposit institutions should know that the on-line publication have viruses which can damage documents any time. There is need to have updated anti-virus and good environment for technologic appliances and machinery. Drimmelen continues to note that whereas in the printed and off-line environment, one of the conditions of legal deposit is the existence of multiple copies available for public distribution, in the online environment, there is one single copy owned, stored and controlled by the publishers/producers. The real challenges for legal deposit libraries lie with the on-line media.

Drimmelen (2002) concludes that publications which cannot be acquired as an independent, self contained and coherent entity (in general documents, which cannot be downloaded from the network but only accessed) should not be selected for deposit. Providing access to such documents is not a task for the deposit institution. It is very important that the deposit library be in a position, both legally and technically, to store and control the electronic publications as deposited. Solely providing access is not sufficient and does not meet the objectives of legal deposit. Therefore legal deposit of electronic publications means “the permanent transfer for retention by the library”, not just temporary access from the library to a remote source. Simply allowing access is not equivalent to establishing a permanent store, and is insufficient for deposit purposes.

Legal deposit institutions must resist the temptation to leave publishers with the responsibility of archiving and preserving electronic publications for example the Uganda Performing Artists Association should not be left to house personal collections of music.
2.7.4 Institutional Framework

In addition to specific equipment, technology and procedures for digital preservation and long-term access, preserving the digital cultural heritage requires political and organizational measures at national and international level. Deposit institutions, like National Libraries, Archives and Museums, will have to adapt their business processes and develop new skills. This shows that there is need for co-operation between information creators and the government if preservation of electronic heritage is to be effective. At national level the development of digital deposits has to be supported and coordinated, as these essential deposits are not only expensive, but also difficult to realize and to maintain. Moreover, one must keep in mind that achieving digital preservation is in the end not a local but a global problem (IFLA, 1999). Therefore there is need for international co-operation to develop standards and achieve a link between digital deposits of publications, scientific data, software and elements of the digital culture heritage.

2.7.5 Access and Retrieval

Lariviere (2006) notes that electronic publications need to be accessed before the user is able to get to the information available, whether it is an off-line or on-line material. For the user to have access to the material, there are both technical and legal considerations to be taken care of. From a technical point of view, it is important to make sure that the information is accessible both currently and retrospectively. The legislation must include provisions ensuring the deposit of any associated software, manuals and accompanying material needed to currently consult the deposited electronic publications.
It is just as important that the legislation also includes provisions allowing conversion to
new formats and/or migration to new operating environments without infringing other
laws, such as copyright. The obsolescence of technology is another major concern when
considering the legal deposit objective of long-term availability for researchers. As
recommended by the Working Group on Legal Deposit of electronic publications of the
Conference of Directors of National Libraries,

“It is important that legal deposit provisions be worded in such a
way that repositories have permission to copy, reformat, refresh or
migrate deposited publications for preservation purposes. If this
permission is not granted, it will not be possible to maintain materials
for posterity.”

Geist (2006) states that access must be provided to electronic publications received
through legal deposit although in certain cases there may be a period, agreed with the
copyright holder before which access would not be permitted. Each library should work
within its own copyright and fair dealing laws but should otherwise make electronic
publications as widely available as possible. There should be levels of access, period and
observance of copyright such that in case of misuse there are penalties to be
administered.

2.7.6 Licensing

A sensitive issue related to access is licensing. While there seems to exist a consensus
among the deposit libraries that access to deposit electronic materials should be
controlled, the information producers still fear that a statutory obligation to provide
access to their electronic material could jeopardize their revenues and compromise their
ability to compete in the international market of information. Mutual understanding of the
concerns and objectives of both parties should help to resolve the issue. It is necessary for
the publishers to understand that the national deposit institutions have a public interest duty to preserve and safeguard the authenticity and integrity of publications for future generations and to ensure that any citizen of a country has access to the entirety of the national intellectual production regardless of the format in which it is available. On the other hand, the legislator should recognize the financial and human resources investment required to develop digital products. Considering that a single copy stored at a single location on the Internet could serve the whole planet, it is understandable that publishers need to know that their commercial interests are respected by deposit institutions. As presented by Drimmelen (2002),

“The question is, how should legitimate access be defined in order to restrict access to last resort use only?” But there is also a legitimate need to define legitimate access in terms of equal accessibility for everyone, a principle that cannot be sacrificed.”

Legal deposit legislation should therefore provide that a site license be granted with the deposited electronic material, both off-line and on-line, in order to allow researchers to search the electronic sources for private and non-commercial use. For off-line publications, the license should cover both use through a local area network and stand-alone access. The legislation should determine the number of concurrent users, as in the print environment, where legislation determines the number of copies to be deposited. With the encrypted password mechanism and the IP (Internet Protocol) address of workstations, publishers should be less concerned with the protection of their intellectual property rights. It is obvious that the national deposit institutions would also have to put security measures in place to avoid abuses. For remote access, the legislation should include provision for at least one registered user at a time to access the material as long as he/she has demonstrated through a signed agreement that he/she is performing private
and non-commercial research.

2.7.7 Network between Libraries and Publishers

IFLA (1999) states that in many nations, there is still a long way to go to establish an acceptable level of understanding and mutual trust between national libraries and publishers especially in as far as legal deposit and electronic transmission of published works are concerned. Libraries cannot proceed without the support of publishers and will need to demonstrate to publishers that they will gain from legal deposit through wide publicity of their works and also long-term care and maintenance of them. This will most likely involve not just giving assurances that the content of publications will not be changed in any way, but also that access will only be permitted under very clear and strictly applied circumstances. Documentation will be required to describe the terms of agreement between libraries and publishers.

2.7.8 Ethics, Security and Copyright

IFLA (1999) states that violation of copyrights, patents, trade secrets and the terms of license agreements are prohibited by law in most circumstances. Even when software is not so protected, such violations are contrary to professional behavior. Copies of software should be made only with proper authorization. Unauthorized duplication of materials must not be condoned. The fast growing copyright-related industry in Uganda is the performing arts, music in particular in which there are complaints especially from the up coming musicians for theft of their music by the celebrities. This is evident with the continuous fights between the artists because they cannot use the law, thus the need for more sensitization about property rights and the existing dispute resolutions mechanisms.
2.7.9  Proper Credit to Intellectual Property

IFLA (1999) goes on to indicate that computing professionals are obligated to protect the integrity of intellectual property. Specifically, one must not take credit for other’s ideas or work, even in cases where the work has not been explicitly protected by copyright, patent, National ICT Policy, Copyright and Neighboring Rights Act, Freedom of Information Act among others. On a global scale, the law should take into account initiatives such as Declarations of the World Summit on the Information Society; and the actions of African and world bodies such as NEPAD, AU, IFLA and others. This implies that legal deposit provisions must take into consideration the intellectual property rights to ensure that the rights of information creators are respected. This is very common in Uganda especially amongst the musicians where they are always fighting for the music. However Copyright Act does not provide for protection of neighboring rights; many copyright works can be improved or diversified into many more interesting things for instance novels into plays and movies or songs into musical drama.

2.7.10  Respect the Privacy of Others

An important observation notes by IFLA (1999) is that computing and communication technology enables the collection and exchange of personal information on a scale unprecedented in the history of civilization. Thus there is increased potential for violating the privacy of individuals and groups. It is the responsibility of professionals to maintain the privacy and integrity of data describing individuals. This includes taking precautions to ensure the accuracy of data, as well as protecting it from
unauthorized access or accidental disclosure to inappropriate individuals. Furthermore, procedures must be established to allow individuals to review their records and correct inaccuracies. This implies that only the necessary amount of personal information be collected in a system, that retention and disposal periods for that information be clearly defined and enforced, and that personal information gathered for a specific purpose not be used for other purposes without consent of the individual(s). These principles apply to electronic communications, including electronic mail, and prohibit procedures that capture or monitor electronic user data, including messages, without the permission of users or bonafide authorization related to system operation and maintenance.

2.7.11 Honor confidentiality

The principle of honesty extends to issues of confidentiality of information whenever one has made an explicit promise to honor confidentiality or, implicitly, when private information not directly related to the performance of one’s duties becomes available. The ethical concern is to respect all obligations of confidentiality to employers, clients and users unless discharged from such obligations by requirements of the law or other principles of this code.

Despite all the problems related to the legal deposit of on-line publications, they should be included in the definition of material to be deposited. This will ensure that as problems are solved, the depository library is in a position to request these publications and enforce the legislation. At this point it is important to make a clear distinction between a number of concepts within the legal deposit of electronic publications environment. What should be deposited are the separate and complete “intellectual” units that are stored either
separately or as part of a database. Whenever a database is made up of separate and complete units – such as a legal database that includes cases, journal articles, etc. – it should be an object of deposit. But when a database is made up of raw data (i.e. unorganized data that could be selected and gathered on order by an individual to create a separate and complete “intellectual” unit for his/her own private use), it should not be subject to legal deposit. While there is a need to preserve those raw data, it is not within the normal mandate of a national legal deposit institution to be responsible for collecting and preserving them. But that same institution could play a leadership role in convincing governments that such valuable information and/or material should be preserved for future generations. As Mackenzie & Walle (1996) state, publications which cannot be acquired as an independent, self-contained and coherent entity (in general documents, which cannot be downloaded from the network but only accessed) should not be selected for deposit. Providing access to such documents is not a task for the deposit function.

All in all, before legal deposit of on-line electronic publications becomes fully implemented in most countries, there are still a number of technical problems to be resolved and legal issues to be clarified. But it is important for any country wishing to include electronic publications in its legal deposit scheme to make sure that the appropriate legislation is properly amended, even if the scheme would not be fully operational. As with copyright legislation, legal deposit legislation within the electronic environment should be the result of a compromise based on the balance of rights between citizens and publishers. Whereas including a provision for unlimited free access for the users of a national legal deposit institution would be abusive, not providing at least one access to the registered users of such an institution would be as unreasonable.
2.8 Research Gap

Although a considerable amount of literature exists on the legal deposit of electronic publications, there exists no documentation concerning the framework of legal deposit of electronic publications in Uganda. The literature reviewed in this chapter shows the effort that some countries have done in ensuring the collection of electronic publications but no information on Uganda’s perspective is provided; that is whether its legal deposit laws cater for electronic materials and the challenges that the legal deposit centres are facing in collecting electronic materials. This research therefore was intended to fill this gap.
CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the research design, area of study, population of the study, sampling strategy, data collection methods and instruments, data analysis and presentation, ethical issues, data quality control and limitations to the study.

3.2 Research Design

The design applied for the study was case study. Shuttleworth (2008) defines a case study as an in depth study of a particular situation rather than a sweeping statistical survey. It is a method used to narrow down a very broad field of research into one easily researchable topic. The researcher used case study since it is a flexible design which enables the achievement of realistic results. The researcher took a qualitative approach in the study and this was applied in exploring issues of depositing of electronic publications at the three legal deposit institutions in Uganda. Qualitative research is about exploring issues, understanding phenomena and answering questions (Neuman, 2006). This approach utilizes data-gathering techniques that are focused on the significance of observations made in a study rather than the raw numbers themselves. The researcher used this because qualitative research enables one gain insight into people's attitudes, behaviors, value systems, concerns, motivations, aspirations, culture and lifestyles (Sarantakos, 2005).

3.3 Area of Study

The study was carried out at the Africana Section of Makerere University Deposit
Library, the Deposit Library and Documentation Centre at Uganda Management Institute located on plot 44-52 Jinja road Kampala and the National Library of Uganda located on plot 33 opposite Buganda Road Primary School. This is because the three are legal depository institutions in Uganda. These three deposit centres are located in Kampala District, the capital of Uganda.

3.4 Population of the Study

Neuman (2006) defines population as the specific pool of cases that the researcher wants to study. The population of study included forty (40) staff and these included twenty (20) staff from the Africana Special Collection Section of Makerere University Main Library, ten (10) from the National Documentation Centre of Uganda Management Institute and ten (10) from NLU. The Staff of these institutions were part of the population since they are involved in the implementation of the legal deposit laws. The population also included the twenty two (22) registered publishers in Uganda and these were included in order to establish whether they deposit their collections with legal deposit centres. In addition, the researcher included other individuals as key informants and these were policy makers, specifically the Chairman of Uganda Performing Rights Association, and an official from Ministry of Justice, Department of Standards since this department is in charge of intellectual property under which legal deposit falls. The population also included officials from National Book Trust of Uganda (NABOTU) which is a major stakeholder in the information industry and the Uganda Publishers and Book Sellers Association because they are involved in the implementation of the deposit law.
3.5 Sample Size

Neuman (2006) defines sample size as the number of participants to be selected from the universe to constitute a sample. The sample size of the study was 29 participants who included fifteen (15) staff, who were librarians of the three deposit centres and specifically those that deal with issues of legal deposit, six (6) administrators of the three institutions and two (2) policy makers. In addition, three (3) publishers, one (1) official from NABOTU and two (2) members of UPBA were also targeted in order to establish whether they deposit electronic materials and the challenges they face. Table 1 below shows the details.

Table 1: Showing the Sample Size

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publishers</td>
<td>3</td>
</tr>
<tr>
<td>Uganda Publishers Association</td>
<td>2</td>
</tr>
<tr>
<td>Staff of UMI</td>
<td>5</td>
</tr>
<tr>
<td>NLU Staff</td>
<td>5</td>
</tr>
<tr>
<td>Africana Section Staff</td>
<td>5</td>
</tr>
<tr>
<td>Administrators</td>
<td>6</td>
</tr>
<tr>
<td>Policy Makers</td>
<td>2</td>
</tr>
<tr>
<td>NABOTU</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

*Source: Researcher*
3.6 Sampling Method

Shuttleworth (2008) defines sampling as the process of selecting units (e.g. people, organizations) from a population of interest so that by studying the sample, one may fairly generalize results back to the population from which they were chosen. The researcher used purposive sampling and convenience methods to draw the sample.

3.6.1 Purposive Sampling

Purposive sampling is where the researcher chooses subjects who in his/her opinion are thought to be relevant to the research study (Sarantakos, 2005). The aim of applying this method was to achieve the research purpose of identifying and involving participants in the study who are information rich. Purposive sampling provided the researcher with the opportunity to select a high quality of key informants. The library and administrative staff of the three deposit centres were purposively selected on the basis of their experience and long service in their respective institutions. 15 library staff from the three deposit centres were sampled and these included 5 out of the 20 in Africana Section, 5 from Documentation Centre of Uganda Management Institute and five (5) from NLU. In addition, two administrators were purposively selected from all the three institutions. The 15 staff were selected because they were in charge of legal deposit and the administrators were the heads of sections that deal with legal deposit.

The policy makers were purposively selected and included one person from Ministry of Justice and Constitutional Affairs, Department of Standards because legal deposit falls within their docket. Another policy maker was the Chairman of Uganda Performers and Artists Rights Association because he was very knowledgeable concerning the background of copyright and legal deposit in Uganda, and he had been involved in the
drawing up of the act. One official from NABOTU was purposively selected because NABOTU is a major stakeholder in the information industry and was partly involved in implementation and supervision of the Legal Deposit Act.

3.6.2 Convenience Sampling

The researcher used convenience sampling to select the publishers and the policy makers. In convenience sampling, the subjects are selected just because they are easiest to recruit for the study and the researcher does not consider selecting subjects that are representative of the entire population. Many researchers prefer this sampling technique because it is fast, inexpensive, easy and the subjects are readily available (Shuttleworth, 2008). This method was used to sample three (3) out of the twenty two (22) registered publishers in Uganda and these were Wavah Books Limited, located in Jinja Road, Fountain Publishers Located on Nkrumah Road and Kamalu Longman in Old Kampala. These were sampled because they have existed in the industry for a long time and because they were conveniently situated and easy to approach. In addition, two members of the UPBA were also sampled in order to provide their views on legal deposit in Uganda. Since they are involved in supervision and managing of the publishing industry in Uganda, they would provide vital information on that state of deposit in the legal deposit institutions.

3.7 Data Collection Methods

To collect data, the researcher used three main methods; interview method, observation method and content analysis methods.
3.7.1 Interview Method

An interview is a person-to-person verbal communication in which one person or a group of persons asks the other questions intended to elicit information or opinions (Neuman, 2006). The researcher conducted one-on-one interviews with respondents in their respective library or deposit centres. The interviews were preferred for reliability and effectiveness in capturing views, attitudes, perceptions and expected outcomes and thus leading to the capturing of in-depth information, knowledge and data concerning the study. The researcher interviewed the staff of the three deposit centres, both the staff that deal with legal deposit and also the administrators. The researcher also interviewed the two policy makers, the official from NABOTU and the representatives from UPBA.

3.7.2 Observation Method

Observation is one of the oldest methods of data collection that employs vision as its main means of data collection. This method was used to supplement and complement interviews in data collection. The researcher observed the current status of the available resources, the current process of accessing, retrieving and storing of electronic publications, the system components that are currently used in managing electronic publications and the storage capacity, which houses the collection. The researcher also observed the general institution infrastructure of the deposit institutions in terms of resources, staff and information communication technologies.

3.7.3 Content Analysis Method

Content Analysis seeks to describe, summarize, evaluate, clarify and/or integrate the content of primary data. It discusses published information in a particular subject area, and sometimes
information in a particular subject area within a certain time period. Neuman (2006) defines content analysis as a technique for gathering and analyzing the content of text. This method was used as a supplementary source of data. The researcher reviewed literature on preservation and legal deposit of electronic publications. These documentary sources included but were not limited to minutes, reports, books, journals, conference proceedings, as well as other communication. This data enabled the researcher to get an overall perspective of legal deposit of electronic publications and enabled the researcher to establish the policies and decisions that have been taken in ensuring legal deposit of electronic publications.

3.8 Data Collection Instruments

3.8.1 Interview Guide
In the study, an Interview Guide was used as a reminder to ensure that all the basic issues for research were covered. It was used to guide the researcher in order to collect the necessary data concerning legal deposit of electronic publications. According to Oso & Onen (2008), an interview guide lists questions, topics and issues to cover while collecting data. This instrument covered questions to establish the regulatory framework of legal deposit, the existing institutional framework in the legal deposit institutions, the challenges that these institutions face and some of the measures that they have put in place to handle such challenges. See Appendix A and C for a sample.

3.8.2 Observation Guide
This instrument contained several aspects that the researcher took into consideration while observing the activities in the three deposit centres. Results from this instrument
were of much help for the researcher to complement results from the observation and the interview method.

An observation guide was developed and used for collecting the data that couldn’t be collected using other instruments. The observation guide acted as a checklist for the researcher. It was constructed on key topical issues, on what to observe. The guide was used by the researcher to observe the infrastructure, resources like information communication resources (Computers, CD-ROMS, CD-Video, and DVD), diskettes, tapes etc. Appendix B is a sample observation guide.

3.8.3 Content Analysis Guide

A Content analysis guide was used to collect secondary data. This instrument guided the researcher and enabled her to remain focused on the area of study; it enabled the researcher to obtain wider knowledge on the subject and to get to know the research gap.

The researcher was able to analyze official documents like minutes, reports, statistics, letters, notices, books etc. The content analysis guide was used to select particular data that could be provided from the above documents. Appendix D provides a copy of the guide.

3.9 Data Quality Control

Data quality control was used to achieve content validity and reliability through triangulation of methodologies, rigorousness and objectivity.

3.9.1 Validity

Validity refers to the quality that a procedure or an instrument (tool) used in the research
is accurate, correct, true, meaningful and right. Validity therefore, implies that the research tool (instrument), research procedure (techniques) and research findings (report) are comparable with results of other studies. The instruments were pretested and necessary adjustments were made relating to the objectives of the study. Validating information was obtained through interviews and observations, by checking documents and other written evidence to ensure they corroborate with what respondents reported.

3.9.2 Reliability

Reliability refers to the ability of an instrument to produce consistent results. The researcher employed more effective forms of reliability, for example through an increase in the variability of perspectives in research and by setting up a list of possible errors or distortions, which the results endeavored to avoid.

Reliability also depends on how heterogeneous the subjects are which is likely to increase reliability. The researcher therefore used professional staff and administrators of both institutions. Reliability also depends on clarity of instruments given to those using the instruments. The research has therefore used clear instructions to answer the questionnaires because the clearer the instructions, the higher the reliability of the responses.

3.9.3 Triangulation of Methods and Instruments

According to O’Donoghue and Punch (2003), triangulation is a method of cross-checking data from multiple sources to search for regularities in the research data. The theory involves using more than one theoretical scheme in the interpretation of the phenomenon.
Triangulation is usually applied in order to confirm or challenge the findings of one method with those from another. Triangulation has been recommended by many authors as a good way to obtain multiple answers to specific questions from different respondents. In this research, triangulation was applied through the use of data from several sources (both primary and secondary) and using different methods of data collection and analysis. Triangulation of instruments and methods was used in order to ensure that the different instruments could complement each other and thus ensure the best results.

3.9.4 Objectivity
There was observance of objectivity in procedures and process of data collection. Collecting the data at different times from different sources, using three different methods ensured that data collected was objective and of high quality. Data generated using three different methods was analyzed to eliminate bias and inaccuracies and to ensure true and credible findings.

3.10 Data Analysis and Presentation
Editing the data during and after fieldwork was done to enable the researcher get familiar with the data. Coding and categorization of the data into themes and sub themes were done (coding categories). Presentation of the data is in form of responses, explanations, tables, quotations and discussions. Whilst frequencies were calculated, explanations were provided to justify them and their limitations in the analysis of the data.

3.11 Ethical Issues
According to Oso & Onen (2008) the issue of ethics is very important in research. The major ethical issues of concern according to them include; informed consent, privacy and
confidentiality, anonymity and the researcher’s responsibility. To this effect, the major ethical issue in this study was privacy and confidentiality of the respondents. There was no element of coercion of participants, the researcher explained about the study, its purpose and why the participants were chosen. There was no invasion of personal privacy of the participants during the study. In addition, the respondents were made aware and with their consent that their responses were recorded. All works cited in the study was recognized using the University recommended APA style.

The content analysis method of data collection required the researcher to access different documents and reports which to some extent were confidential though meant to be availed for public use by all stakeholders, the researcher inclusive. Data collection through this study was made possible with mutual collaboration of the researcher with all target respondents of this study. Consent of participants (respondents) in this study was sought before data collection using a research authorization letter. The participants of the study were made aware and informed about the study, the researcher asked for their permission to collect data.

3.12 Limitations of the Study

1. The participants were so busy due to different work schedules since most of them were always in for meetings and when they were at their desk, they had limited time to answer questions. The researcher fixed appointments with respondents which majority of the study participants accepted because in most cases it was during their free time.

2. Some of the participants did not want to be interviewed, in what they called a premature assignment because they were giving excuses for example; we need
more time to see how the system works. The researcher informed the participants that they had enough information to give but all they needed was the public to get to know how electronic information is handled. This then prompted them to accept to be interviewed. Sometimes the interviews were interrupted by phone calls, and visitors. In this way, time was consumed as the researcher had to wait while the respondent attended to the phone call.
CHAPTER FOUR
PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents and discusses the findings of the study. The findings are presented based on themes which are derived from the objectives of the study. The objectives of study were to: examine the regulatory framework for electronic publications legal deposit in Uganda; assess the institutional framework of legal deposit institutions in terms of infrastructure, staff and resources; to establish the challenges faced by legal deposit centres in preserving electronic publications in Uganda and to suggest strategies for effective legal deposit of electronic publications in Uganda.

The study sought to answer the following research questions: the legal and regulatory framework of legal deposit institutions in Uganda; the institutional framework for legal deposit of electronic publications in Uganda; the institutional challenges faced by legal deposit centres for electronic publications in Uganda and what can be done better to effectively manage the legal deposit of electronic publications.

The methods that were used for data collection were interview, observation and content analysis. A total of 29 respondents were used for the study and these included the staff of the three legal deposit institutions, the administrators, policy makers, publishers, one (1) person from NABOTU and two (2) representatives from UPBA. An observation guide was used by the researcher to observe how electronic publications are handled in the three legal deposit institutions. The analysis and interpretation of data in this chapter is in accordance with the research objectives and research questions.
4.2 Description of the Respondents

The importance of this section is to provide an understanding of the characteristics of the respondents. This will in turn provide an overall picture of the kind of respondents that were used and the role of the different respondents in the study.

4.2.1 Response Rate

The research targeted a total of 29 respondents and was able to reach the whole sample since the researcher ensured that she made appointments with them and using the instruments was able to collect the data, this makes it a 100% response rate. Details are presented in table 2 below.

Table 2: Response Rate and Composition of the Respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Targeted</th>
<th>Actual Response</th>
<th>% Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publishers</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>Uganda Publishers Association</td>
<td>2</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Staff of UMI</td>
<td>5</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>NLU Staff</td>
<td>5</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Africana Section Staff of Makerere University</td>
<td>5</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Administrators of 3 deposit centres</td>
<td>6</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>Policy Makers</td>
<td>2</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>NABOTU</td>
<td>1</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
<td><strong>29</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Primary data, 2008
Table 2 above also shows the composition of the respondents. It was relevant to determine the composition of the respondents because the findings would represent the different views from different categories of respondents. Findings reveal that the highest response was from the staff/librarians of the three deposit centres, that is Africana section who were 5, staff from NLU were 5 and staff from UMI were also five (5). The administrators were six (6) from these three centres. Publishers were only three (3), two (2) officials from Uganda Publishers and Booksellers Association, one (1) from NABOTU and two (2) policy makers. The staff of the three deposit centres were the majority because they were thought to be key informants for the study and thus would enable effective achievement of the objectives of the study.

4.3 The Legal and Regulatory Framework of Legal Deposit Institutions in Uganda

Objective one was to examine the legal and regulatory framework for electronic publications legal deposit in Uganda. In order to achieve this, the researcher sought to establish whether the three legal deposit acts cater for electronic publications and whether these three institutions make an effort to preserve electronic materials.

Results from respondents and documentary records reviewed indicate that there are three legal deposit laws in Uganda separately designed to handle legal and regulatory framework of publications published in Uganda and they are; the National Library Act 2003, the Deposit Library and Documentation Centre Act, 1969 and Makerere University College (Deposit Library) Act, 1964.
4.3.1 National Library Act, 2003

Part IV, Section 1 of the National Library Act provides for the deposit of 3 copies of a book or document or one copy of the videogram of film and 10 copies in case of any government department. This implies that the law provides for the deposit and preservation of sound fixation, film video grams, electronic documents and a combination of them. However results from the interviews conducted show that only the print collections are deposited. By the use of the content analysis method, the researcher established that the National Library Act is not clear about copy and reformat of electronic publication, making it difficult to handle them. This is contrary to what IFLA (1999) states that legal deposit provisions must be worded in such a way that repositories have permission to copy, reformat, refresh or migrate deposited publications for preservation purposes.

The National Library of Uganda (NLU) is required, as the National Bibliographic Control Agency; to periodically publish a national bibliography, which is a listing of all publications issued in the country and deposited at the three legal deposit centres namely the National Library of Uganda; Makerere University and the Uganda Management Institute. However the electronic publications are not listed in the National bibliography, yet there are some materials that are deposited. To comprehensively develop a National Bibliography there is need for National Library as the agency responsible to work out means of building a bibliography for electronic deposits.

4.3.2 Makerere University College (Deposit Library) Act, 1964

Interviews held with the staff of the Africana Special Collection Section in the Makerere
University Main Library indicate that the university has a policy where all graduate students are supposed to deposit a soft copy of their theses to the graduate school. This implies that even though electronic materials are not mentioned in the Makerere University Legal deposit act, there are efforts to ensure that electronic publications are preserved by ensuring that electronic versions of the theses of graduate students are deposited.

4.3.3 Deposit Library and Documentation Centre Act, 1969

Using content analysis method, the researcher found out that at Uganda Management Institute, dissertations too are deposited electronically. Students are required to deposit a soft copy of their dissertation to the institute as per institute policy. These dissertations are brought on disks in Microsoft Word program using any windows, and then they are converted into Portable Document Format (PDF) using Windows XP they are transferred to the Intranet for access at Uganda Management Institute.

Interviews also revealed that even though UMI operates without a policy on deposit of electronic publications, there are efforts to collect electronic publications. For example electronic publications on the websites of ministries like the National Budget, speeches by ministers are downloaded using PDF and are uploaded on to the National Documentation Centre database. The copyright of these publications remains to the ministry from which the document was downloaded. These can be accessed on the Intranet at the Uganda Management Institute. However, this is a limitation for accessibility by the international community thus the need for this study to provide
strategies to handle such challenges.

In addition, there are musical tapes deposited electronically at the National Documentation Centre in form of disks with albums which contain different musical versions at the National Documentation Centre and they can be accessed. These tapes are deposited like books and the depositors are given a receipt for each deposit they make. Results also indicate that UMI also produces the Accession Bulletin, which is a type of bibliography, similar to the National Bibliography which the National Library of Uganda produces.

The above findings indicate that even though the Deposit Library and Documentation Centre Act, 1969 and the Makerere University College (Legal Deposit) Act, 1964 do not mention electronic publications, there are efforts in these institutions to ensure that electronic publications are preserved. What needs to be done is the amendment of these laws to cater for electronic publications since information creators take the advantage of this gap in the law not to deposit their publications.

4.4 Awareness of the Legal Deposit Laws

In order to establish the legal framework of legal deposit, it was important to establish whether the publishers of electronic publications are aware of the legal deposit laws in order to know the impact it has on the implementation of the law. These respondents were asked if they were aware of any of the three legal deposit laws. Results indicate that all (100%) of the publishers interviewed were aware of the law in place. When directly asked what particular law they were familiar with, 80% were more
versed with the National Library Act, 2003 and 20% were not aware of it.

Concerning the Makerere University College Act, 1964, and Deposit Library and Documentation Centre Act, 60% of the publishers were not aware about these other two acts. In addition, some of these respondents were not even aware that they had to deposit copies at each of the institution or one of the institutions.

4.5 **Institutional Framework of Legal Deposit of Electronic Publications**

Objective two was to assess the institutional framework of legal deposit institutions in terms of infrastructure, staff and resources. To collect this data, interview guides and observation guide were used. The main issues sought out were the competencies and qualifications of the staff, availability of ICTs and availability of funds, to ensure that electronic publications are deposited and managed.

4.5.1 **Trained and Competent Staff**

Interviews reveal that the current staff that handle legal deposit issues are trained on how to input information obtained electronically onto the computers, retrieve it for the users and preserve it for future use. Concerning their level of education, the study established that majority of the staff of the three deposit centres held Bachelor’s Degrees (45%), those holding Masters’ Degree were 25%, 2% held PhD, 15% and 13% held Diplomas and none held Certificates. Table 4 below shows more details.
To explain the table above, out of the 20 staff in the Africana Section, BLIS holders are the highest qualified. Out of the 10 in NLU, BLIS is the highest qualification and also at UMI, Bachelors are the majority qualifications. In Africana Section, there is one (1) PhD holder. This indicates that there is a high level of professionalism in the three legal deposit institutions in Uganda especially in the sections that deal with legal deposit. This shows that these staff are qualified to handle issues of legal deposit. These
professionals can easily learn new skills of collecting, preserving and disseminating of information. From the observations made, these experienced professionals show a higher level of competence in their respective responsibilities. According to the respondents, there is high level of professionalism with majority of the staff at least holding a Bachelor’s Degree and can thus do their work with minimal difficulty.

4.5.2 Resources Needed to Facilitate Electronic Legal Deposit

The researcher sought to establish the state of resources and their capacity to facilitate electronic publication legal deposit. Observations show that there is a computer at the work points for librarians in each deposit centre. For example, at the Deposit Library and Documentation Centre the librarian has a computer on her desk where electronic deposits and access can be made on the intranet. By using observation method, the researcher found out that Makerere University Africana Special Collections Section has several computers where electronic deposits can be made and at the National Library of Uganda, there are networked computers in the processing room for legal deposit work. However the researcher established that all the three deposit centres use different software and procedures for inputting and retrieving these materials. There is therefore need for compatibility of software in the three different institutions to enable sharing and retrieving of materials.
Table 5: Resources Needed to Facilitate Electronic Legal Deposit

<table>
<thead>
<tr>
<th>Resources</th>
<th>Africana Section of Makerere University Library</th>
<th>National Library of Uganda</th>
<th>Deposit Library and Document Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Website</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Professional staff</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Wide Area Network</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Local Area Network</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Post Office Box</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Telephone</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Internet</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Field Data 2008

It was observed that the three legal deposit institutions in Uganda have resources to facilitate legal deposit of electronic publications. However, these institutions exist in isolation of each other i.e., they lack networking and coordination to share resources and facilities.

Findings from the interview revealed that the staff of the National Library of Uganda do not know what the Deposit Library and Documentation Centre and the Africana Section of Makerere University Library holds and administrators have not considered any formal cooperation which would enhance depositing and accessing of electronic materials. According to table 5 above, the three centres do not have a Wide Area Network and thus lack cooperation and sharing of information resources. Findings indicate that the three deposit centres have or can access the basic resources which include computers, the internet, post office, and telephones.
4.5.3 Electronic Collections

In order to address objective two, it was necessary to establish whether the three deposit centres had electronic collections at that time. Table 6 below shows details of the electronic collection. These findings were collected using observation and interview methods.

Table 6: Electronic Collection in the Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>Collection Content</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Library of Uganda</td>
<td>• UNESCO publications</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>• Documents from National Council for Higher Education (2000-2008)</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>• Audio Visuals (CD-ROM, Tapes) e.g. Telecentre tapes, road safety tapes, recordings of Late Musaazi.</td>
<td>32</td>
</tr>
<tr>
<td>Africana Special Collection Section</td>
<td>• Dissertation collection</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>• Academic Staff Publications</td>
<td>250</td>
</tr>
<tr>
<td>Deposit Library and Documentation Centre</td>
<td>• Dissertation of UMI students (2001-2008)</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>• Ministry Speeches Downloaded from Internet Sites of Ministries (2000-2007)</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Field Data 2008

Table 6 above indicates that there are individuals (for example students) and organizations (for instance UNESCO, NCHE) which have started depositing electronic publications at the three deposit centres. Africana Section enjoys the largest percentage of electronic deposits because of
the USDL where the academic staff deposit the results of research undertaken and the graduate students also deposit softcopies of their theses and dissertations. This is also so for the Documentation Centre at UMI which because it is an academic institution, it also requires their students to deposit their dissertations and theses in electronic form.

Majority of the publications for NLU are coming from government units, which means that much as the law is seemingly popular, the rate of deposits of electronic publications from private publishing firms is unsatisfactory. This phenomenon is common across the board. For the three institutions, the researcher notes that even though some electronic publications are being deposited those are not even half of the electronic publications in Uganda and so many are still not being deposited.

4.6 Challenges Faced in Legal Deposit of Electronic Publications in Uganda

Objective 3 was to examine the challenges faced by legal deposit centres in collecting and preserving electronic publications in Uganda. Interview and observation were the methods used to collect this data. Results were solicited from publishers, the staff of the legal deposit institutions and policy makers in order to get an overall view.

Below are the major challenges that were mentioned by the respondents;

4.6.1 Selection Criteria

This is very true to the Legal Deposit institutions in Uganda in that they have no choice but to acquire everything published electronically. The challenge is the need for standards to be followed. Respondents from the National Library of Uganda said that at the moment, they just accept all electronic materials that are deposited and they do not
follow any standards. This could lead to the deposit of sub-standard or unnecessary work.

4.6.2 Budgetary Constraints
Inadequate funding from the central government limits Legal Deposit centres to carry out the functions of a deposit library. This has resulted into inadequate staffing, equipment and communication facilities to support effective storage and retrieval systems, organization of information material and respond effectively to different day–to-day enquiries. Deposit Library and Documentation Centre and Makerere University deposit library depend solely on the support of the Uganda Management Institute and Makerere University Library respectively. This has a lot of implications on the performance of these centres, ranging from poor documentation services and thus limiting the confidence of users in these institutions.

4.6.3 Provisions of Punitive Measures
These acts have been overtaken by the trend of events and there is need to revise them for example; section 2 of NDC and section 3 of MUK DL states that,

“If a publisher or author fails to comply with any of the provisions he/she shall be guilty of an offence and liable on conviction to a fine of one hundred shillings”

Part IV, Section 1, of the National Library Act, 2003 states that if anyone contravenes the law, they are liable to fine not exceeding 10 currency points (ten thousands shillings) or to imprisonment not exceeding six months, which is such a low penalty.

Respondents said that this is too small given the fact that the shilling has gone through several changes although it may have been appropriate at the time of enactment; due to
changes in the economic trends and currency value there is need to revise penalties for
the law defaulters. The current punitive action may instead encourage information
producers to prefer to default the law and pay the fine since it is far cheaper than
depositing a more expensive publication. Perhaps as a result, materials have not been
deposited.

4.6.4 Lack of Coordination

The Makerere University College Deposit Library Act 1964, Documentation Centre Act
1969 and National Library of Uganda Act 2003 were all designed independently from
each other without any form of coordination. Neither one repeals the other. They are
three parallel tools for the same sector of legal deposit. One of the respondents
had this to say,

“The three legal deposit institutions exist in isolation of each other; these centres do not know the collection content of each other and there is no consideration of co-operation of any form even with the modern technology whereby they could use ICTs for the electronic publications.

Because there is no cooperation between the institutions, it becomes hard for proper
control and implementation of the law and this brings about duplication. This is in line
with Kawalya (2009)’s observation that there is duplication or wastage of the limited
resources among the three institutions as they collect the same documents and do not
even know what the other institution collects.

4.6.5 Institutional Framework

Respondents revealed that the establishment of these legal deposit centres does not
state/provide the required standards of a legal deposit centre. The Acts do not provide for
means of how legal deposits can be handled in terms of staffing, equipments, furniture to enable the acquisition, capture, registration, verification, description, storage, preservation and access. This has left the staff working in these centres with a challenge of implementing the acts and maintaining the materials that they collect. In support of the above findings, Kawalya (2009) notes that these deposit institutions lack transport, funding and staff and space to store the national memory. She notes that although the NLU receives three copies, it is still in its infant stage to venture into such an expensive project putting into consideration that it has not yet got a home of its own. Letshela & Lor (2002) also note that more significant is lack of human resources, not only to do the necessary research and development work, but also to operate systems once they have been installed. Lack of properly trained staff to work in the new environment is not unique to developing countries.

4.6.6 Enforcement of Laws

Legal deposit centres lack terms of mutual understanding on how to enforce the Act to the expectations of legal deposit stakeholders. This has become a stumbling block because the law is just in the mention other than in action. This is an alarming situation where information exists in abundance within a country but it cannot be collected together in an organized manner to benefit those who require it. Kawalya (2009) notes that lack of library policy to guide the lawmakers during the process of their legislation, in addition, she adds that the acts do not have the mechanism to ensure that the laws are adhered to by the publishers. Ikoja-Odongo (2010) supports these findings by saying that the National Library Act 2003, The Makerere University Legal Deposit Act, 1964 and
Institute of Public Administration Library Deposit and Documentation Act 1969, are weak and exist in book only. No publisher has ever been accused in court for defying them. The question is how do these institutions handle the above mentioned challenges in managing the rapidly growing electronic publications?

4.6.7 Poor Relationship between Publishers and Legal Deposit Centres

Results revealed that there was lack of an acceptable level of understanding and mutual trust between the legal deposit institutions and publishers on legal deposit of electronic publication, especially where transmission of publishers’ works is concerned. This is contrary to what Drimmelen (2002) notes that it is necessary for the publishers to understand that the national deposit institutions have a public interest duty to preserve and safeguard the authenticity and integrity of publications for future generations and to ensure that any citizen of a country has access to the entirety of the national intellectual production regardless of the format in which it is available.

Findings reveal that some publishers feared to deposit their materials and instead thought that they stand to loose if they deposit their materials. For example some musicians are not particularly concerned about making sure that their music is preserved in the national collection. Some cite financial burden, others are opposed simply because the National Library of Uganda is a government department. Some call it an invasion of their privacy. The Uganda Performing Artists have an organization through which the National Library is still negotiating with regard to the deposits of music. So far the Artists demand for subscription, as opposed to the legal deposit right of National Library of Uganda. An
official from the Uganda Performing Rights Society (UPRS) noted that,

“Government of Uganda needs to intervene in reducing the pirating of Uganda music to ensure the development of the industry, because many musicians do not trust the law and do not think that it works in their favour.”

Worse still, the three laws state that the cost of sending a document to the three legal deposit centres shall be born by the person depositing so there is no incentive for publishers to deposit their materials. This was noted by Kigongo-Bukenya (2000) who said that the laws places responsibility for deposit on publisher and not the author or printer and yet in Uganda, the author might be his own printer and publisher thus the need to encompass both publisher, author and printer in case of multiple roles.

4.6.8 Uniqueness of Electronic Publications

Participants also noted that electronic publications received through legal deposit must be identified, acquired, registered, catalogued, stored and maintained. They must be recorded in national bibliography, preserved and made available to researchers. These processes also apply to print publications but they are more complicated in their application to electronic publications since electronic media do not have the same life expectancy as high quality paper. At NLU, one of the respondents had this to say:

“We have electronic collections but even managing them is a problem because for example we find it hard to store and maintain the tapes.”

The above statement implies that even the maintenance of the electronic resources is an important issue that should be addressed by legal deposit acts.

4.6.9 Lack of Compatibility

Respondents said that compatibility of documents is still a challenge in that documents
are brought in formats different from that of the deposit libraries in which case some of these documents fail to open and hence access is denied.

4.6.10 Security of Information

Respondents said that some of the diskettes are brought in with viruses which can destroy the whole computer or erase parts of the document. For the case of Africana Special Collection Section in the Makerere University Main Library and UMI, the staff is faced with a dilemma when saving a single dissertation which could have a virus and thus destroy the entire database of the dissertations that are already required.

4.6.11 The Acts are Silent on Electronic Publications

Respondents noted that the Deposit Library and Documentation Centre Act 1969 and Makerere University College (Deposit Library) Act, 1964 are still limited because they do not provide for deposit of electronic publications. The National Library Act on the other hand in section A (II) mentions the deposit of electronic publications.

4.5.12 Demand for Payment to Deposit Information Resources

The publishers demand that they should be paid by the government just like their counterparts in the developed world to deposit their electronic materials. In other words they see no gain in free deposits to the national deposit centres. The publishers sampled said that since their companies are privately owned, they see no value in depositing their collections in the deposit centres. They would rather sell them to these centres since their main aim is to make as much profit as possible. This is stressed by IFLA (1999) which noted that there is need for co-operation
between information creators and the government if preservation of electronic heritage is to be made effective.

4.7 Suggestions to Improve the Problem Area

To address the fourth objective, the staff, policy makers and publishers were asked to make suggestions to improve on legal deposit of electronic publications and below are their submissions.

4.7.1 Keep track with Information Communication Technology

Legal deposit centres should take advantage of ICTs to build electronic databases, networks and web-based linkages of electronic resources. This will ensure reduced storage space, more networking and avoiding the duplication of resources.

4.7.2 Modern Technology

Respondents noted the need to keep up to date with the technology since it keeps evolving. Therefore more funding on the infrastructure and physical resources and continuous training of staff is needed to move with the changing technology.

4.7.3 Introduction of Creator’s Association

Information creators (Publishers, Authors, and Librarians) should have an association with strong objectives of preserving Uganda’s heritage. The Uganda Publishers Association should be strengthened so that those informed about the existence of legal deposit provision on electronic publications can inform others about the benefits of the law such as wide publicity of their works and also long-term care and maintenance of their publications.
4.7.4 Amendment of Acts

Majority of the respondents suggested that the two acts; Deposit Library and Documentation Centre Act 1969 and Makerere University College (Deposit Library) Act 1964 should be revised to allow deposit of electronic publications from the creators of information. This is just as Vickery (2008) noted that since more and more material is being made available only in electronic format, it’s important to ensure that electronic publications are covered in legal deposits regardless of the type of carrier. If the current law of a country does not include them, it should be amended in order to clearly specify that they are covered to avoid losing track of valuable material forever.

4.8 Chapter Summary

This chapter established that there are three institutions in Uganda in charge of legal deposit. These institutions are making an effort to ensure legal deposit of the national heritage but the legal deposit of electronic publications still leaves a lot to be desired. These institutions are collecting electronic collections but they are not as vigilant as they are with the print collection. The next chapter (chapter five) will make some recommendations on how the challenges realized in this chapter can be addressed.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the study.

The purpose of the study was to establish the legal and regulatory framework of legal deposit in Uganda, with specific interest on gaining insight into how electronic publications are being preserved in Uganda and how the legal deposit institutions are taking up the new challenges.

To attain this, the study set out to achieve the following objectives which were; examine the regulatory framework for electronic publications legal deposit in Uganda; assess the institutional framework of legal deposit institutions in terms of infrastructure, staff and resources; to establish the challenges faced by legal deposit centres in preserving electronic publications in Uganda and to suggest strategies for effective legal deposit of electronic publications in Uganda.

The study was qualitative and utilized three main data collection methods which were; interview, observation, and content analysis. The population of the study was diverse, involving the staff of National Library Uganda, Makerere University Main Library, Africana/Special Collections Section, staff of National Documentation Centre and other stakeholders like publishers, and policy makers. A sample of twenty nine (29) respondents were involved in the study and these included the fifteen (15) staff/librarians of the centres, six (6) administrators of the three centres, three (3) publishers, two (2) members of publishers associations, one (1) official from NABOTU and two (2) policy
5.2 Summary of Findings

5.2.1 Legal and Regulatory Framework of Legal Deposit in Uganda

Results indicate that there are three legal deposit laws in Uganda separately designed to handle legal and regulatory framework of publications published in Uganda and they are; the National Library of Act 2003, the Deposit Library and Documentation Centre Act, 1969 and the Makerere University College (Legal Deposit) Act, 1964.

Of these three acts, only the National Library Act, 2003 provides for the deposit of electronic materials.

For Makerere University, Africana Section and Uganda Management Institute have taken effort in preserving electronic materials, by ensuring that the students of both institutions deposit their theses and dissertations. In addition, electronic publications on the websites of ministries like the National budgets, speeches by ministers are downloaded using PDF and are uploaded on to the National Documentation Centre data base. Further to the above, there are musical tapes deposited electronically at the National Documentation Centre in form of disks with albums which contains different musical versions. These are available for access to the general public.

Results also indicate that the publishers were aware of the laws in place, but they were more familiar with the National Library Act, 2003 and a few knew about the other two acts. Some of the respondents were not even aware whether they had to deposit copies at each of the institution or one of the institutions.
5.2.2 Institutional Framework of Legal Deposit

The current staff in the three institutions are trained on how to input, retrieve and preserve electronic information. The researcher also established that majority of the staff are qualified with a large percentage being holders of BLIS Degree 45%, followed by Masters Degree (25%), PhD were 2%, DRAM and DLIS were 13% and 15% respectively, there were no certificate holders.

This shows that there is a high level of professionalism in the three legal deposit institutions in Uganda. In terms of resources, findings show that all the three centres are fully equipped with computers which are connected to the Internet. However, they all lack the WAN and thus unable to network between the three institutions. In addition, the three deposit centres use different software and procedures for inputting and retrieving these materials so there is need for compatibility of software in the three different institutions to enable sharing and retrieving of materials. Findings also show that all the three legal deposit institutions were receiving deposits of electronic publications.

5.2.3 Challenges Faced in Legal Deposit of Electronic Publications in Uganda

The challenges mentioned by the publishers and staff included lack of standards in the selection of materials, lack of coordination between the institutions and lack of a good relationship between publishers and the institutions. In addition, respondents mentioned outdated laws, which lack adequate enforcement mechanisms, lack of compatibility of documents deposited, lack of security of information and the continuous lack of Government support.
5.2.4 Strategies for Improvement

Some of the strategies for legal deposit of electronic publications include keeping track with Information Communication Technology, use of modern technology; information creators (publishers, authors and librarians) should have a joint association to promote the preservation of Uganda’s heritage. Respondents also suggested that the Uganda Publishers and Book Sellers Association be strengthened. Legal deposit laws should be amended to incorporate new publishing trends, include electronic publications and push for more tough punitive measures of law defaulters.

5.3 Conclusion

It is very clear from the study that the legal deposit of electronic publications in Uganda still leaves a lot to be desired. This is because out of the three legal deposit laws, only the National Library Act provides for the deposit of electronic collections, the other two have no provision for electronic publications. Yet even this National Library Act, which provides for their deposit, it is not clear about the handling of these publications for example provision for copy or format of these publications.

The study established that even with the above, the three institutions have made an effort to collect and preserve electronic materials. But most of these are from the students (academic documents) and the others are from government institutions. This means that the institutions lack electronic deposits from the privately owned institutions. In Uganda, there are over 22 registered publishing companies and over 1000 printing companies and these are privately owned, yet none of their collections are included in the national collection. This is because these publishers do not know about the legal deposit laws and
what it requires and they do not realize the benefit that these laws can provide for them.

The researcher therefore concludes that a lot needs to be done to ensure that the legal deposit institutions are amended in order to cater for electronic publications. In addition, the stakeholders in the information industry, that is the authors, publishers and information institutions should work together and thus the need for the recommendations in the next section to address these issues.

5.4 Recommendations

The following recommendations are suggested in order to ensure that electronic resources are provided for in the legal deposit Acts.

a. **Legal Deposit Institutions should adopt ICTS**

Legal deposit institutions should realise the need for utilization of ICTs in their work and thereon appreciate the existence of electronic collections. When choosing these information communication technologies, integrity and authenticity should be established to ensure that information kept on electronic record keeping systems can be preserved for future.

b. **Collaboration between Publishers and the Legal Deposit Institutions**

The legal deposit institutions need to forge partnerships and collaboratively work with publishers and also demonstrate to them the benefits of legal depositing of electronic publications. There is need for the publishers to trust and appreciate the work that legal deposit institutions play in preserving the national heritage and ensuring access to the published works.
c. Compilation of an Electronic National Bibliography

The legal deposit centres, in addition to the print collection, should also collect and preserve electronic publications. The NLU, specifically should ensure that an electronic national bibliography is compiled so that a record of electronic publications in the country is collected.

d. Publicity of the Legal Deposit Laws

The three deposit centres should make an effort to publicize the existence of the three legal deposit laws to the stake holders. The publishers should be made aware of the laws and the provisions for these laws. This will enable them deposit both the print and electronic publications in the deposit centres.

5.4.5 Amendment of Laws

Through stakeholder consultations, workshops, seminars and other related forum, the three deposit laws should be reviewed and amended to make explicit the need to deposit electronic publications, The Ministries that are concerned with information and national heritage should play a lead role in the reviewing of these laws, specifically the Ministry of Education and Sports, Ministry of Information and National Guidance and the Ministry of Gender, Labour and Social Development.

5.4.6 Access Policy

There is need for the legal deposit laws to provide clear provisions and terms of agreement between the legal deposit institutions and authors/publishers so that the publishers and authors can know what the laws requires of them and the issues
of access to information.

5.4.7 Network among Legal Deposit Institutions

The legal deposit institutions should cooperate and work together in order to ensure that electronic materials are deposited and that deposit is consistent. They can compare notes with each other, exchange bibliographies and find means of learning from each other.

5.4.8 Training

Legal Deposit centres should sensitize and train the different stakeholders on the value of legal deposit. These include the artists, publishers, editors, and authors on what legal deposit is and its role in preserving the national heritage.

5.5 Areas of Further Research

The study was able to establish the state of legal deposit of electronic publications in Uganda. However, due to constraints of time and finances, the researcher failed to address some key issues to do with legal deposit of electronic publications and therefore suggests the following areas that are worth exploring:

- Strengthening the electronic collection in legal deposit institutions
- Sustainability of electronic publication legal deposit
- The role of copyright in use and access of electronic resources.
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APPENDIX A: Interview Guide for Staff of Africana Special Collection
Section Makerere University Main Library, National Library of Uganda and
National Documentation Centre

Dear respondents,
I am Elizabeth Nantongo, a bonafide graduate student of EASLIS, COCIS, Makerere University. I am required to undertake a study entitled “the state of legal deposit in Uganda: Challenges for Electronic Publications”, with a case study of Africana Special collection section Makerere University Main Library, National Library of Uganda and National Documentation Centre at Uganda Management Institute”, as part of the requirements for the award of Master of Science in Information Science. The purpose of this instrument is to collect data for this study. The data you are about to give will be confidential and used for this study only. Your identity is not required.

1. Bio data (optional):
   - Gender.
   - Job title/specification
   - Job activities

2. What legal deposit laws do you know in Uganda?
3. Are you satisfied with the legal deposit provisions of Uganda?
4. What role do you play in legal deposit? How have you tried to carryout this role?
5. What are the current legal practices on electronic publications?
6. What resources (ICTs and other equipment) are required to facilitate a successful depositing and management of electronic publications?
7. How do you acquire electronic publications for preservation/legal depositing?
8. How do you ensure that ethics, security and copyrights of electronic publications are protected?
9. How are the electronic acquisitions/collection disseminated to the general public?
10. How do you organize the digital collection for preservation?
11. Have you attended any training relevant to your specific field?
12. What skills do you need to do your job better?
13. How do you maintain the value of electronic publications that is without
tempering with the content, authenticity and integrity?

14. What challenges do you face in acquiring and managing electronic publications for preservation/legal depositing?

15. What has the Africana Section of Makerere University Main Library/NLU/National Documentation Centre of UMI done so far to deal with the challenges of preserving/depositing of electronic publications?

16. Is there any collaboration/corporation between your institution and other legal deposit institutions in terms of legal deposit collections? Please mention the areas of cooperation.

17. Do you have any other contribution to ensure better legal deposit in the country?

Thank you very much
APPENDIX B: Observation Guide for the three Deposit Centres

Introduction:

This Observation Guide was used for observing the activities and facilities of the three legal deposit institutions under study. It is one of the instruments that the researcher used for collecting data for the study on the state of legal deposit in Uganda: Challenges for Electronic Publications, with a case study of Africana Special collection section Makerere University Main Library, National Library of Uganda and National Documentation Centre at Uganda Management Institute.

- Observe the physical environment and facilities.
- Observe the current status of available resources
- Observe the acquisition process of electronic publications
- Observe the current process of accessing, retrieving and storing of electronic publications.
- Observe the system components that are currently used in managing of electronic publications.
- Observe the storage capacity, which houses the collection.
- Observe the current technology and network that is used in legal deposit of electronic publications.
- Examine the challenges encountered in electronic legal depositing in Uganda.
Appendix C: Interview Guide for Publishers and UPBA

Dear respondents,
I am Elizabeth Nantongo, a bonafide graduate student of EASLIS, COCIS, Makerere University. I am required to undertake a study entitled “the state of legal deposit in Uganda: Challenges for Electronic Publications”, with a case study of Africana Special collection section Makerere University Main Library, National Library of Uganda and National Documentation Centre at Uganda Management Institute”, as part of the requirements for the award of Master of Science in Information Science. The purpose of this instrument is to collect data for this study. The data you are about to give will be confidential and used for this study only. Your identity is not required.

1. Bio data (optional):
   - Gender.
   - Job title/specification
   - Job activities
2. How long have you been in the publishing industry?
3. Do you know about the legal deposit laws? Which one in particular?
4. Have you made efforts to deposit materials in the legal deposit centres?
5. How many materials have you deposited?
6. Do you publish any electronic materials?
7. Are these deposited in any centre? Give reasons for your answer.
8. What are the challenges faced in electronic deposit of electronic materials?
9. What suggestions do you give for electronic deposit of electronic materials?
   - What do you think is the way forward for electronic legal deposit in Uganda?

Thank you very much.
APPENDIX D: CONTENT ANALYSIS GUIDE

To review the different sources of information, the researcher searches for the following:

• Concept and function of legal deposit

• Need for electronic publications legal deposit

• A review of legal deposit laws in Uganda and the extent to which they cater for electronic materials

• Challenges of legal deposit of electronic publications

• Strategies for effective legal deposit of electronic publications