The legislative obligation to achieve a comprehensive legal deposit of electronic publications is a challenge facing the National Library of South Africa and other international libraries. Presently, the Legal Deposit Act (No. 54 of 1997) makes provision for legal deposit of published material in any other medium. The “Act” defines medium as recording or transmitting information intended for subsequent reading, listening or viewing. A point of departure in this paper is that collection, accessioning, preservation and access to electronic legal deposits is a “gray” legislative and regulatory area. The paper will also discuss how the Act has been implemented in South Africa and outlines areas which need further improvements.

The National Library of South Africa therefore developed a draft policy on legal deposit of electronic publications as an indicator to possible inputs to legislative and/or regulatory amendments. A pilot study conducted by the National Library of South Africa integrates the publisher’s deposit of electronic publications with the workflow of users of deposited material. The paper will therefore share a pragmatic approach of the pilot study and how Information and Communications Technology (ICT) plays an important role in legal deposit of electronic publications. The ICT should aim to promote interoperability between application systems and repositories of electronic content, in order to avoid the need to duplicate metadata, and to ensure that users can discover digitised versions of material they identify via catalogues of electronic material. Promotion of access to electronic publications as well as intellectual property rights would also be given a full attention in the presentation of the paper.
INTRODUCTION

The legislative obligation to achieve a comprehensive legal deposit collection of electronic publications is a challenge facing the National Library of South Africa and other related institutions globally. Presently, the South African Legal Deposit Act, 1997 (No. 54 of 1997) makes provision for legal deposit of published material in any other medium. This Act defines medium as recording or transmitting information intended for subsequent reading, listening or viewing. A point of departure in this paper is that collection, accessioning, preservation and access to electronic legal deposits is a “gray” legislative and regulatory area. The paper will also discuss how the Act has been implemented in South Africa and outlines areas which need further improvements.

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LEGISLATIVE BACKGROUND

The National Library of South Africa, herein referred to as NLSA, provides information services within the remit of legislative frameworks that provide for collection, accession, preservation and access to the national documentary heritage. The largest proportion of these works is received in terms of legal deposit legislation. There are five legal deposit libraries in the country and these libraries formed a Legal Deposit Library Consortium. Legal deposit makes provision for a copy of every document published in South Africa to be deposited at the National Library of South Africa and other national legal deposit libraries. The national legislative frameworks enacted to give effect to the provision of effective information service delivery include the following:

- Copyright Act No. 98 of 1978
- Electronic Communications and Transactions Act No. 25 of 2002
- Legal Deposit Act No. 54 of 1997
- National Library of South Africa Act No. 92 of 1990
- Promotion of Access to Information Act No. 2 of 2000
- Public Finance Management Act No. 1 of 1999
This legislative framework constitute a cohesive, informed and enabling environment for policy development relevant to the National Library of South Africa.

Section 195 of the South Africa's Constitution, 1996; provides for, amongst others, the following:

- effective, economical and efficient use of resources;
- provision of timely, accessible and accurate information; and requires that;
- the public administration be accountable

This legislative provision from the Constitution of South Africa Act is further entrenched in the objects of the National Library of South Africa Act (No. 92 of 1998) as follows:

“to contribute to socio-economic, cultural, educational, scientific and innovative development by collecting, recording, preserving and making available the national documentary heritage and promoting an awareness and appreciation thereof, by fostering information literacy, and by facilitating access to the world's information resources”.

**Electronic Collection Development**

Electronic collection development, like other trends and developments in the library and information services sector, impacts on preservation methods and procedures applicable to legal deposit libraries and archives as public domains and custodians of national documentary heritage. Based on international practices and trends to preserve national documentary heritage, the National Library of South Africa subscribes to international methods and practices to build a complete digital collection accessible to the public.

A diversified approach not only to legislative frameworks but also technical and procedural processes due to digital and on-line publications is a challenge to legal deposit libraries nationally and internationally. Metadata standards and digital object identifiers are technical aspects to be considered to make digital collection not only accessible but also integrated within the workflow of the organisation.

The Migration Strategy of electronic documents developed by National Archives and Records Services of South Africa is a fundamental blue-print considered by the National Library of South in its collection development strategy. UNESCO Guidelines on digitization and practices from European Union countries provide international approach on digital collection principles subject to be adapted by the National Library of South Africa for preservation of digital collection.

**Preservation Services**

National libraries are responsible for safeguarding those records that society has considered necessary to create and keep. The task of the Preservation Services Programme is to ensure that the National Library maintains and develops world class in-house preservation policy and practices, and a national preservation function capable of providing preservation and conservation services on a national basis.
The preservation services of the National Library of South Africa seek to preserve its collections for posterity using conservation techniques that include the reformatting of materials. Documents too fragile to be photocopied are reformatted by the National Library's reprographic services onto photographic film, microfilm, and microfiche or in digital format. The National Library of South Africa maintains a comprehensive database of its microfilm and microfiche master copies. Services to other libraries and cultural institutions comprise of national advisory and coordinating services, including participation in national preservation projects.

Digitization

The digitization service is a new initiative in line with international best practice, creating digital records of materials for both preservation and access. Despite new technological developments, microfilm is still central to the preservation strategy, and is used extensively to copy South African newspapers and manuscript material. Digitisation is a fairly new field of expertise at the National Library, in keeping with present international trends. The Library has many valuable items in its holdings which can be made accessible to the public via the Internet. Digitisation services can also be provided for external clients.

The National Library is a partner with the National Digital Imaging Project of South Africa (DISA) on a project entitled South Africa's Struggle for Democracy: Anti-Apartheid Periodicals, 1960-1990 in which digital copies are being made of scarce periodicals published during the three key decades in the growth of opposition to apartheid rule, a period when the African National Congress (ANC), black consciousness, and other resistance movements were very active. Approximately forty periodical titles have been selected from a comprehensive list, representing not only a wide spectrum of political views published during these years, but also a diversity of subjects such as trade unions, religion, health, culture, and gender.

Digitisation forms one aspect of the library’s overall strategy for managing digital resources. MacDonald (2006:7) outlined the following points that create a complete digital resource:

- Maximise use of the collections by facilitating a greater volume of networked access, both in the reading room and remotely, and providing the enhance functionality intrinsic to the digitised items.
- Reflect national and international priorities of wider access to, and enhanced use of, integrated collections of digitised educational, cultural or scientific materials which have a combined value greater than their component parts.
- Contribute to the conservation of original physical materials for future users by substituting digital surrogates.
- Preserve the collection of analogue and sound recordings.

Standards and Guidelines

The National Library of South subscribes to national and international set of rules and standards to make its digital collection accessible to the users. The use of standards in electronic records systems follows those taken by the National Archives

**Accessibility**

A draft discussion paper on European Commission on Preservation prepared for UNESCO (March 2002) outlines three ways in which digital material can become inaccessible: (i) degradation of media on which they are stored, (ii) obsolescence of software making it impossible to read digital files, and (iii) introduction of new computer systems and peripherals that cannot handle older materials.

**Consultative Policy Development: A Generic Model**

According to Cloete (2006) “one of the most critical issues in the policy process is the consultation or the involvement of key policy stakeholders. If the stakeholders are not involved from the beginning of the policy development process, the implementation of the policy might not be supported. However, too much stakeholder participation may also become frustrating, time wasting and destructive”.

The National Library of South Africa together with the Department of Arts and Culture held a consultative workshop and invited stakeholders in the government and private sector to give inputs in drafting a standard electronic collection development policy framework. Amongst service providers who participated in consultation workshop were Sabinet (South African Bibliographic and Information Network) Online; Juta Stats; Information Management COR Concepts and Lexis Nexis. These service providers were invited as part of consultative policy process to leverage standards and practices in electronic and digital publications.

The following e-preservation strategy was presented by one of the service providers and it is considered to be relevant to the National Library of South Africa to implement its electronic collection development framework:
The following public entities play a crucial role in ensuring policy implementation in government.

**Government Information Technology Officers (Gito) Council**

The Gito Council was created to serve as an information technology (IT) co-ordination and consolidation vehicle to assist in information government when and how to intervene in the interest on enhanced service delivery through the use of information and communications technology (ICT).

It has a critical role to play in enhancing the delivery of state services and has been involved in investigating, formulating and developing an IT security-policy framework and e-government policy and strategy, and IT procurement guidelines. It also monitors government IT projects to eliminate duplication.

The Gito Council has formed a working group to investigate and make recommendations on the use of open-source software in government. Another working group investigate knowledge management in government. All ICT projects will be brought in line with the objectives of the Gateway project. The National Library of South Africa aligns itself to e-government policy and strategy to enhance
service delivery through the use of ICT and has successfully migrated to open source software.

National Archives and Records Service of South Africa (NARS)

The representative from NARS advised the panel during the policy development debate that section 13 of the National Archives and Records Service of South Africa Act (No. 43 of 1996) requires NARS to perform a “government-wide transversal regulatory function concerning the management of current records of government bodies”. According to the Act, the National Archivist is charged with an overarching responsibility for the proper management and care of governmental bodies. Amongst functions of the National Archivist is to determine the conditions subject to which electronic records system of governmental bodies should be managed.

Department of Public Service and Administration (DPSA)

The DPSA is in the process of amending the Regulations that will require government departments to submit IT plan, reports etc to promote sharing of information amongst the departments and to eliminate duplication. The DPSA acknowledges that libraries are about access to information and empowering people to improve the literacy rate, participate in decision making, and improve the livelihood, and are therefore key ICT policy making.

State Information Technology Agency (SITA)

In terms of SITA Act 88 of 1998, “the objective of the State Information Agency is to provide information technology, information systems and related services in a maintained information systems security environment to, or on behalf of, participating departments and organs of state and in regard to these services, act as an agent for South African Government.” (Section 6 of the Act).

The National Library of South Africa subscribes to the definition of “digital divide” outlined in the South African Department of Communication ICT Charter. According to the charter, digital divide refers to the “disparity between those who use and have access to the ICT’s and those who do not, and is characterized by a lack of meaningful access to ICT’s primarily because of historical and demographic factors between racial groups, lack of basic literacy, and encompasses the lack of access to ICT infrastructure and services, and includes physical, digital, human and social resources and relationships”.

South Africa is swiftly working towards e-governance and all state organs, including the National Library of South Africa, should align their electronic government services to the national framework of e-governance. Abrahams (2009) argues that ‘e-government constitutes the way public sector institutions use technology to apply public administration principles and conduct the business of government’ while ‘e-governance is the movement of governments online to electronically deliver their services and programs, provide government information, and interact with the citizen’. The National Library of South Africa espouses the e-governance in its policy for access to electronic publications and it is on this principle that the e-deposit strategy is aligned to the broader application of e-governance policy by the state.
From Local to Global: National and International Policies on Digital Collection Development

According to Agnew (2007:4) "a digital collection consists of digital objects that are selected and organized to facilitate their discovery, access and use. Objects, metadata, and the user interface together create the user experience of a collection. Digital collection development brings new processes, systems and procedures to preserve the documentary heritage, and it should be integrated within the strategic change management process.

The National Library of South Africa's point of view is that digital collection development is a change management process aimed at restructuring the operational set-up from conventional method of building collection to a technologically based method. Maganya (2001:160) defines change management as follows:

“change management is a process whereby the structures, systems and processes through which policy is implemented are organised in a manner that enables the realisation of the strategic visions, goals and objectives. It is essentially concerned with the interface between management and the delivery of services, that is the processes through which policy directives are turned into programmes and implemented, work processes, lines of accountability, operational procedures and so on”.

The National Library of South Africa has integrated these ideas in the initiative which is now in process.

ELECTRONIC LEGAL DEPOSIT PROTOCOL

The National Library of South Africa collects electronic legal deposit materials on behalf of the consortium as arranged by consortium members. Consortium members are the NLSA, Library of Parliament, Mangaung Public Library, Msunduzi Public Library and National Films, Video and Sound archives (NFVSA). Digital or electronic collections are resource-intensive and require that proper infrastructure be in place. As a result, the NLSA acquired high capacity servers to house the collection in an anticipation of the high digital volumes expected. It should be noted that with the increase in collections, the servers will at some point run out of space and it is therefore critical that this process be regularly managed.

High capacity servers are not the only determining factor for managing digital collections. The ultimate goal of collecting and managing digital collections is to provide access to the users of these resources. The nature of digital collections is such that they are also bandwidth hungry. Downloading a digital resource over a low capacity line can be very frustrating to the user. The NLSA has in this regard planned for a bandwidth upgrade on the existing line.

A web-based protocol for handling e-deposit materials has been designed as a platform to manage digital resources received from the publishers. This protocol involves publishers logging into the system that authenticates them. Upon access
permission, a template screen will appear and prompt the publisher to populate it with required information. A document with descriptive template will be uploaded and sent through. The sent document will be received by a librarian after being electronically notified for further processing.

The Legal Deposit Act requires that electronic materials be kept in their original format. Due to this legal requirement, an original document will be kept and a compressed version be made available for access. Only materials that are cleared of copyright laws can be publicly made available. The compressed version helps downloading to be lighter on the network.

The following diagram illustrates the operational procedures and processes for depositing electronic publications:
CONCLUSION

The e-legal deposit strategy of the NLSA is informed by the Legal Deposit Act 54 of 1997; the National Library of South Africa Act No. 92 of 1990 and other applicable legislative frameworks within which the National Library of South Africa operates. The National Library of South Africa aligns itself to e-government policy and strategy to enhance service delivery through the use of ICT and has successfully migrated to open source software. The challenges of e-deposit are not only technologically based but also relate to managing intellectual property rights in an electronic environment. Intellectual property rights are legal means to protect and balance the interests of the “author” against those of the public. The National Library of South Africa concedes that there is an urgent need to amend a system of laws that define and protect intellectual property response to technological changes, particularly emerging circumvention technologies that constantly influence the change management processes.

Endnotes


Copyright Act No. 98 of 1978

Electronic Communications and Transactions Act No. 25 of 2002

Legal Deposit Act No. 54 of 1997

National Heritage Resources Act No. 25 of 1999.

National Library of South Africa Act No. 92 of 1990

Promotion of Access to Information Act No. 2 of 2000

Public Finance Management Act No. 1 of 1999

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