CHAPTER TWO
REVIEW OF LITERATURE

INTRODUCTION

The issue of legal deposit of electronic publications has been under investigation since 1992 by CDNL Working Group on Legal Deposit and Electronic Publishing, which presented a report to the CDNL meeting in Havana in 1994 (Conference of Directors of National Libraries, 1994). Cornish (1998), noted that there was considerable amount of interest in the deposit of electronic material as can be shown in the literature for 1996 as was in 1995 and especially in the United Kingdom where a number of studies on the topic were commissioned by the British Library Research and Development Department (now renamed the British Library Research and Innovation Centre).

As mentioned in Chapter One, many countries throughout the world has made changes to their legal deposit legislation to take into account the developments of new media particularly that of electronic publications. Hoare (1997) noted that in many countries, including the United Kingdom, proposals are being made for the extension of legal deposit to electronic and other non-print material. He pointed out that some countries like Switzerland and the Netherlands have no national legal deposit legislation, but only voluntary deposit. While some countries like Norway has the most advanced legislation which requires the deposit of all kinds of media. Hoare (1997) however, found that very few countries deal with legal deposit of online publications.
Rugaas (1988) queried the comprehensive collecting of print and discussed the problems involved in preparing legislation that covers non-print media (Rugaas, 1990). He also dealt with the legislation in Norway, covering not only conventionally published material (including sound and visual media) but also electronic publications and even radio and television broadcasts.

The Need for Legal Deposit of Electronic Publications

With the advent of new information technologies as a means of publishing and/or disseminating recorded knowledge, it is necessary for legal deposit legislation to ensure that its 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. Lariviere (2000) noted that because of their complexity, the legal, technical and organizational problems related to electronic publications represent a formidable challenge for any legal deposit scheme, where each type of material has its own specific problems.

According to Hedberg (1996), the emergence of electronic publishing has brought a need to revise established rules and standards within the information sector. This means that revision of legal deposit laws is necessary in order to safeguard new forms of published information. Hedberg also noted that there is a risk for countries where legal deposit applies only to electronic documents such as CD-ROMs, as they will lose that part of their cultural heritage that is accessible online only.
A survey carried out in 1989 indicated that only fourteen of the responding national libraries were collecting electronic media such as tapes and discs and only six of these were using legal deposit as an acquisition tool (McCormick and Williamson, 1990). However, significant developments such as the European Community Workshop on Issues in the Field of National Deposit Collections of Electronic Publications which was held in Luxembourg in December 1995 with representatives of both the libraries and publishers, concluded among others that there is a need for deposit of electronic publications. There was a consensus amongst both groups that many materials will risk becoming unavailable to future users, unless the deposit libraries undertake the responsibility of providing the means for access by users (Report, 1995).

Cornish (1992) listed the following factors that justify that the role and functions of legal deposit legislation need to be reviewed:

(a) comprehensiveness;
(b) exclusion of undesirable materials and definition of what needs to be preserved;
(c) amendment of the scope;
(d) specification of which institution is to receive the deposit copies.

The primary purpose of legal, mandatory deposit is to build and preserve a comprehensive collection of publications as a record of the nation's culture and heritage, without being dependent upon funds for the purchase of the items (Vickery, 1998). He
was also of the opinion that we are now reaching a critical point in the availability of electronic publications to deposit libraries.

In the United Kingdom, the need to extend legal deposit to non-print media, was put forward through a consultation paper by the Department of National Heritage in 1997. Other issues discussed were on existing legal deposit arrangements, the costs of such a scheme, the implications for intellectual property rights, remedies for non-compliance, the idea of reducing the requirement to fewer copies, the disposal of unwanted copies and archiving (Department of National Heritage, 1997).

The need for legal deposit of electronic publications in Australia is to serve the ongoing needs of the Australian nation and as part of its efforts to maintain the Australian documentary heritage (National Library of Australia, 2001). The National Library of Australia acquires copies of electronic publications produced in Australia as research tools. The electronic publications deposited not only benefit the producers of these new information products but also researchers in the Library. Public access to the products increases public awareness and provides an opportunity for researchers to evaluate these products.

In Canada, the present shift towards electronic publishing in a networked environment has raised a set of issues that expands and changes the way the National Library of Canada is fulfilling its heritage mandate (National Library of Canada, 1998). Its present collection management policy has already addressed the acquisition and
preservation of electronic publications on physical media. While a separate policy and guidelines deal with identifying, locating, acquiring, reporting, storing and preserving networked electronic publications. If these publications are not captured and preserved, major gaps in the Canadian heritage and research tools will occur.

With regards to Malaysia, Zawiyah (1998) noted that with developments in information technology, Perpustakaan Negara Malaysia is in the process of reviewing its legislation to ensure that its role continues to be relevant in the changing environment, particularly in the public sector with its emphasis on the electronic government. This is also in line with the library’s mission:

_to ensure that all Malaysians will have equal opportunities to benefit from library services and facilities as well as able to access and utilise Malaysian intellectual heritage and other knowledge resources through an integrated electronic library infrastructure throughout the country._

According to Rugaas (1995), legal deposit in a networked age is when in principle, everything has become accessible, faster and easier to use. He noted that technological developments are leaving a trail of unsolved problems connected with standardisation, copyright and other legal problems.

**Selection of Electronic Publications for Legal Deposit**

Lariviere (2000) noted that the definition of the material to be deposited has to be as inclusive as possible to ensure that electronic publications are covered regardless of
the type of carrier. If the current legislation of a country does not include electronic publications, it should be amended and clearly specified in the law. Lariviere (2000) adds that because information technology evolves at such a rapid pace, the definition of electronic publications should be worded in such a way that amendments will not be necessary each time a new mechanism or technique for providing information is made available.

Eden et al (1999) carried out a research project aiming to develop models to facilitate co-operative initiatives and partnership arrangements which will improve the identification and collection of local publications under legal deposit and the coverage of these publications in the British National Bibliography. He also highlighted the need for a review of, and changes to, legal deposit and the need for greater co-operation between the legal deposit libraries.

The British Library's legal deposit proposals for the extension to include non-print material was described by Clarke (1995). These envisage legislation covers both static forms of information, such as CD-ROMs, and dynamic forms, such as online databases. Stoker (1997) discusses the issue of whether CD-ROMs and other electronic products should be brought within the scope of existing UK laws for legal deposit. He noted that the main difficulty lies with non-tangible electronic publications, such as online services and Internet based services. These publications are constantly changing and do not remain in a stable form long enough to be catalogued and preserved for future generations. Stoker (1997) also highlights the problems caused by the advent of
distributed client/server computing, the Internet and publications available on the World Wide Web which are hypertext linked to other Internet sites.

In Japan, The National Diet Library (NDL) is currently the sole deposit library. An advisory group for the National Diet Librarian, known as the Legal Deposit System Research Council, presented a report entitled *The Interim Report: On Institution and Management of the Legal Deposit System of Electronic Publications* (National Diet Library, 1999). The group suggested that the legal deposit system is to be applied to all "packaged electronic publications" without exception by type or contents, but will not apply to "networked electronic publications".

Many of the problems associated with legal deposit of electronic documents are found in the findings of a working party set up by the National Library of Canada to look at the whole question of collecting electronic documents especially under the legal deposit regulations (Blair, 1996). The problems of selection are highlighted as the electronic environment has enabled individuals to be their own publisher. Thus libraries will face the problem of deciding what is published, what constitutes publications and how to acquire the materials concerned.

As legal deposit relies on the concept of a work being published and published in a particular country, online databases which are produced and accessed on an international basis will pose a problem (Cornish, 1998). He further reiterated that there are also problems where the producers goes out of business and is unable to provide
public access to the database, or access is no longer made available through a sole vendor or gateway.

Meanwhile, Hendley (1996) examined the problems of managing, preserving and resourcing the collection of digital material. He noted that management in this context includes identifying what is to be collected, its acquisition, storage, preservation and retrieval. Other issues reported by him are the computer needs of libraries trying to preserve the electronic material.

The selection criteria that might be applied in the digital world environment was examined by Wille (1995). The overriding criterion is seen to be the national origin of publications, followed by the publication's intended audience, significance for society and cultural heritage and for future research.

Navelsaker (1995) also examined the criteria for selecting electronic material and is of the opinion that making all generally available electronic documents accessible to the public is impractical, expensive and on the whole probably impossible. Thus, the criteria for legal deposit of electronic documents in national libraries should therefore be as follows:

(a) The electronic document has been made available to the general public and its original form is electronic

(b) The document can be considered of lasting value for the understanding of today's society
Thus, based on the above criteria, legal deposit of electronic publications will include (McGowan, 1997):

(a) Electronic publications "imitating" traditional publications (books, journals, newspapers, newsletters)

(b) Interactive literature

(c) Multimedia publications

(d) Educational computer programs

(e) National newsgroup on networks

(f) Open discussion groups on list serves

(g) Selected databases

Koelman et al. (1998) in his report of a study to examine the copyright aspects of the preservation of electronic publications, noted that the selection criteria for electronic publications formulated by the National Library of the Netherlands explains what is meant by electronic publications and the types of electronic publications for deposit. Thus, an electronic publication is understood as a publication of which the contents can be consulted through the use of electronic devices. The library further subdivides electronic information into three main categories namely:

(a) Texts and treatises

(b) Numerical and factual databases, and

(c) Reference materials.
Access to the Deposited Electronic Publications

Another critical issue for legal deposit of electronic publications is the access to the deposited material (Lariviere, 2000). Electronic publications need to be accessed before the user is able to get to the information available. There are technical and legal considerations to be taken care of which include ensuring that the information is accessible both currently and retrospectively, and ensuring the deposit of associated software, manuals and accompanying material.

Hakkarainen (1995) noted that the legal deposit of electronic material is weak if it is not accompanied by a degree of certainty concerning preservation and access. He felt that it would be difficult and probably even impossible to propose a legislation that would widen the scope of legal deposit to new media if at the same time the problem of handling the long term preservation and access to the material is not dealt with first.

The issue of access of electronic publications as observed by Bourne (1995) is that there is nothing special about the bibliographic control of electronic material compared with conventional print material. However, he noted that certain characteristics like the actual format, its availability and accessibility, will need to be included. Similarly, the International Conference on National Bibliographic Services (1998), recommends that bibliographic control of electronic publications should assure no less accessibility than that of other media.
Byrum and Myers-Hayer (2000) reported the results of a survey conducted in 1998 to ascertain the extent to which National Bibliographic Agencies (NBAs) were providing coverage of publications in electronic formats, both handheld and remote access. A large number of institutions, totaling 61 and representing agencies in 59 countries, replied to the questionnaire. NBAs representing 34 countries indicated current coverage of at least one type of electronic resources. Of NBA’s already providing coverage of electronic materials in their national bibliographies, 28 reported they will expand coverage of electronic materials in the future, and of those which do not provide coverage for any electronic materials, 22 are planning to initiate some kind of activity in this area in the near future. It was found that those that acquire electronic resources generally depend on legal deposit legislation.

The problem of handling electronic dynamic documents in the context of legal deposit was addressed by Fagerli (1995). He reported that the model of a national library providing traditional online access has moved away to a variety of databases from an "electronic reading room". He concluded that:

(a) legal deposit of dynamic documents must be accomplished by the National Library through access to the documents; and

(b) the instrument of access should be an international, standardised homepage - the National Homepage that should function as the national bibliographic file of these documents.
Preservation of Deposited Electronic Publications

The issue of long-term preservation of electronic publications continue to command the attention of national libraries (McGowan, 1997). Since almost all existing legal deposit legislation is limited to print on paper, a historic record based only on these sources will not give a full picture of today's world to future researchers. Haynes and Streatfield (1997) were of the opinion that although organizations have their own policies for the preservation of digital material, there is no national policy. The issues involved in creating such a policy are complex but a national agency could coordinate the development of the guidelines and standards necessary for the maintenance of a distributed archive.

Cornish (1994) noted that legal deposit is an essential element in preservation programmes but is quite separate from copyright legislation in most countries. He added that the ability to copy something for preservation is determined by such factors as the age of the material, its format and the reasons for making the copies. The process of photocopying, microfilming and electronic conversion all pose specific legal questions and as the use of electronic media grows, the legal issues regarding preservation need to be studied carefully.

The National Library of Norway has carried out a number of projects to explore the implications of acquiring, making available, archiving, and preserving electronic information (Solbakk, 1995). These include the following:
(a) The capture of messages to Norwegian newsgroups in the NetNews system and incorporating them into a full-text database to be preserved on CD-ROM;

(b) The storage of Norwegian electronic journalism a similar full-text database;

(c) The deposit of electronic copies of compendia produced for university students, accessible as Adobe Acrobat files by universities in place of paper copies;

(d) Software is acquired selectively and only made available for research

Another study that was commissioned by the Koninklijke Bibliotheek (KB), the National Library of the Netherlands, specially examined the copyright related problems which could impede efforts to preserve and maintain the accessibility of electronic data (Koelman et al. 1998). The study concluded that electronic publications need to be reproduced in order to be preserved. Unless it can apply for a statutory exemption, the KB may infringe third party rights in one way or another by copying the publications that it wants to preserve. Basically, the KB needs the requisite consent before it can preserve a publication legitimately by copying it. Even if the KB obtains the consent of the publisher to migrate a publication, it still cannot be sure that it does not infringe any rights, especially if the publisher on his part had to obtain a license to include certain parts to the electronic publication.

In Australia, a National Consultative Meeting on the management of Australian physical-format digital publications brought together representatives from publishers, creators and the National and State Libraries (National Library of Australia, 1998a). Issues such as legal and voluntary deposit, copyright, access, licensing, collection
development, cataloguing, and preservation paths were discussed and an action plan was formalised to progress the development of strategies for the long-term preservation and access to significant Australian publications.

*Maintenance Cost of Equipment of the Deposited Electronic Publications*

The extra expenses which include the cost of maintaining and updating equipment incurred by a library which received legal deposit of electronic material is another issue to be considered. Whether the library itself will provide for the extra cost or from other resources funded by the government department concerned, is another question that need to be addressed. In fact, these problems are currently being faced by the Deutsche Bibliothek (Stephan, 1996).

The financial constraints in which most national libraries operate, the criteria for selecting material for legal deposit, is definitely of great importance (Christophers, 1995). Based on the great variety of types and formats of electronic material, Christophers concluded that it will be necessary for experts in their own field to be delegated in the legal deposit of these materials. He pointed out that items, which are received by the British Library, but are outside the scope of its collection policies, are transferred to other more suitable repositories. Thus, the British Library's National Sound Archive receives two copies of sound recordings, while the British Film Institute's National Film Archive is responsible for the acquisition of films.
Meanwhile, Smethurst (1990) has been exploring the sharing of responsibility for preservation of the British Library's collection with its fellow legal deposit libraries. Similarly, a number of European national libraries are part of a joint legal deposit scheme where copies are also received by other libraries. In Norway, a national library branch which is 1000km away from the capital city of Oslo carries out legal deposit and other functions (Scott, 1991).

*Fear of Publishers and the Licensing Issue*

Rugaas (1995) found out that one of the most significant obstacles to achieving legal deposit of electronic publications is the fear of publishers and copyright holders that deposit will lead to unfair exploitation of their intellectual property. He is of the opinion that it is the main task of the national library, or the national institution or an organization looking after these interests, to point out to the owners that this will not happen.

Williamson (1995) gave a publisher's view of electronic information products where the data owner, the access software supplier and the user of electronic information are bound together by legal agreements. He found that it is not workable to expect each publisher to negotiate a new agreement with the legal deposit holder for each product, and the deposit holder to negotiate different access agreements with users for each deposited product.

Lariviere (2000) noted that while there seems to exist a consensus among the deposit libraries that access to deposit electronic material should be controlled, the
information producers still fear that a statutory obligation to provide access to their electronic material could jeopardise their revenues and compromise their ability to compete in the international information market. Lariviere also suggested that a site license be granted with the deposited electronic material in order to allow researchers to search the electronic sources for private and non-commercial use.

In Australia, the National Library of Australia has developed a set of guidelines for the use of CD-ROMs and other electronic materials voluntarily deposited with the Library (National Library of Australia, 1998b). It recognises that users of the Library may access the electronic publications in accordance with the fair dealing provisions of the Copyright Act, 1968 and that the Library has an obligation to control and preserve the information contained within the CD-ROMs and other products in accordance with its statutory role. The policy strictly limits the use that the Library may make of these titles to protect the interests of the publisher.

SUMMARY

The review of literature in this chapter discussed several issues relating to legal deposit of electronic publications, which include:

(a) the need for legal deposit of electronic publications,
(b) the selection of electronic publications for legal deposit,
(c) access of electronic publications deposited,
(d) preservation of deposited electronic publications,
(e) the cost of maintenance of equipment of the deposited electronic publications,

and

(f) fear of publishers and the licensing issue.