



**Breaking New Ground: a virtual global library service to widen access for people with print disabilities**

**Julie Rae**  
Vision Australia  
Melbourne, Australia

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**Abstract**

*Today there are 161 million blind and partially sighted people in the world and this number is growing. Extend this to print disabled and you have an even greater number of people who cannot read a conventional book, magazine or website as they are either unable to see the print, hold the item or access the website. Less than 5% of published material, i.e. books, and less than 20% of websites are accessible to these people.<sup>1</sup>*

*But how do libraries for the print disabled ensure that their clients can access the information of their choice?*

*To ensure that this can be achieved, and realising that no one organisation can achieve this on their own, the IFLA section Libraries Serving Persons with Print Disabilities and the DAISY Consortium have joined to develop the Global Library project. This project endeavours to identify how content can be shared, collected and accessed by library clients. This paper outlines the Global Library project as sponsored by these two organisations.*

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<sup>1</sup> Brazier, Helen An introduction to IFLA Libraries for the Blind Section presented to Libraries for the print disable conference Zagreb, Croatia February 2008

## Introduction

Today there are 161 million blind and partially sighted people in the world and this number is growing. Extend this to print disabled and you have an even greater number of people who cannot read a conventional book, magazine or website as they are either unable to see the print, hold the item or access the website. Less than 5% of published material, i.e. books, and less than 20% of websites are accessible to these people.<sup>2</sup>

Libraries have always been a community's 'portal' to information, knowledge and leisure. Beyond their shelves, libraries are a community's gateway to information from many sources nationally and internationally. Libraries provide professionals trained to distinguish and verify content, build collections and provide a reference and information service. Today more libraries rely on electronic sources for collecting, organizing and distributing information.

The information age has created unprecedented opportunities to acquire electronic content from many sources, including existing digital content in many different types of libraries. The concept of a world library for the print disabled rests on the ability of digital libraries to share and coordinate collection-building resources and to use digital technology to share content. It requires the design of systems and services with an ability to inter-operate using common standards.

It begins with a shared understanding that technology does not fundamentally change a library service, but rather the way in which it is organized and delivered. One such model is the development of a global library. Therefore, guidelines for the development of the digital library must begin with the assumption that the library remains a collection of organized content reflecting works of imagination and information necessary to facilitate life-long learning, career development and an informed citizenry. Its digitization is a means of ensuring that its collections are preserved and accessible to all, regardless of disability.

Major work has been done through the Digital Accessible Information System (DAISY) Consortium and with NISO (National Information Standards Organisation) to establish standards for the recording of navigable digital audio books. For many libraries for the blind, the focus of the past five years has been on the implementation of these standards and the conversion of their analogue collections to digital audio. Others are building collection resources through the Internet and accessing remote sources for the content they distribute to their users. The Internet is both a source of content and a means for distribution. It has profoundly changed information services for users and libraries. Publishers of content, trade books and magazines,

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<sup>2</sup> Brazier, Helen An introduction to IFLA Libraries for the Blind Section presented to Libraries for the print disable conference Zagreb, Croatia February 2008

electronic journals and electronic databases offer new opportunities for acquiring, managing and distributing content that is accessible<sup>3</sup>

But how do libraries for the print disabled ensure that their clients can access the information of their choice?

Everyone is keen to see publishers simultaneously publishing standard print texts with accessible formats eliminating the need for specialist libraries to format-shift information. This approach is commendable but reality assures us that this may take some years to come to fruition. In the meantime libraries for the blind are still required to convert material into accessible formats and try to increase the amount of information available to those with a print disability.

To ensure that this can be achieved, and realising that no one organisation can achieve this on their own, the IFLA Libraries for the Print Disabled and DAISY Consortium have joined to develop the Global Library project. This project endeavours to identify how content can be shared, collected and accessed by library clients. This paper outlines the Global Library project as auspiced by these two organisations.

Deliverables include: the vision and charter; the standards; storage and delivery systems; the analysis and content management processes, including Digital Rights management (DRM); setting up the Global Library model; approach to partnerships, communication and the business model. A steering committee will oversee the project through establishing four project teams which will develop approaches to: establishing a business model, collection development and exchange, end user discovery and access issues and partnerships.

### ***Background***

In the analogue world the primary way for a person with a print disability to access library material in alternative formats was to register with a specialized library service in their country that would select items of interest and deliver them to the person's home. Access to material held in other libraries in other countries was by interlibrary loan, a process that could take months.

This service model is still in place in the digital world, but there are new possibilities too. Many libraries serving people with print disabilities (in the developing world at least) have invested in digitizing their collections and building systems that allow patrons to select their own reading material and access it instantly online.

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<sup>3</sup> Designing and Building Integrated Digital Library Systems –Guidelines. International Federation of Library Associations and Institutions IFLA Professional Reports, No. 90 2005 page 6

Despite this great leap forward, the range of library material in alternative formats that is available to people with print disabilities is still limited for the most part to the holdings of the specialized library service in their country. The need to overcome this limitation, however, is growing.

For example, in multicultural regions, libraries are under pressure to respond to the increasing demand for material in many languages. One cost-effective solution would be to provide access to the collections of libraries in countries where those languages are prevalent. Opening up access to other collections would also help to reduce the duplication of effort that takes place when libraries around the world produce the same work. For people with print disabilities, less duplication will lead to a greater range of material being available.

To overcome this limitation we need to understand the reasons behind it. There are three major reasons:

- there is no easy way for people to find out what library material is available in alternative formats in other countries;
- there are legal restrictions related to copyright; and
- there is the digital divide that separates the "haves" from the "have not's" in terms of social and technological infrastructure and skills development.

A Global Library is a concept that all support however in reality the definition of what a Global Library can and should do may be quite varied. It was important that a key definition and stated expectations of the Global Library were made clear from the beginning of the project.

The Steering Committee has defined the Global Library for people with print disabilities as being:

- A network of online collections of digital objects,
- Collaboratively created/collected according to internationally accepted principles for collection development,
- Made available digitally in a coherent, accessible and sustainable manner,
- Supported by services to allow authorised users worldwide to retrieve and exploit global resources, and
- All subject to copyright.

The Global Library is *not*:

- Distribution of physical objects. It will be up to the recipient (whether that is the "home" library of the client or the client) to convert digital objects to the physical alternate format of choice.
- A centralised repository of anything.
- Centralized governance and funding.
- Driven by the concept of a bookshop model. However, the bookshop concept should not be dismissed. Members can of course continue to offer their commercial models.

The project is guided by four principal strategies or initiatives that define:

### **1. Business model team**

This team will evaluate a number of business model options for the Global Library and provide a rationale for the recommended approach. This group will consider a consortium model, a transactional model et al in how we can ensure that we are able to share resources equitably.

### **2. Discovery and access: end user issues team**

This team identifies current end user discovery and access challenges; desired capabilities; options to get from where we are to where we want to be; and recommendations including costs. This will involve how an end user can find, locate and retrieve their information of choice.

### **3. Shared collection development team**

This team will identify collection development and exchange challenges; develop desired models for Content Purchasing and Exchange as well as Content Creation.

### **4. Partnership development team**

This team considers current partnerships that could be leveraged; considers the 'players' and prioritizes those who could further the aims of the Global Library; develops a case statement for each potential strategic partner. Case statements will be used by the key members of the Project Executive in seeking support from desired potential partners.

## **Challenges**

While investigating the options on how we can develop the Global Library a number of challenges will need to be addressed.

### **Challenge 1: No easy way to find library material in alternative formats**

Currently, people with print disabilities are largely unaware of the range of library material that is available in alternative formats around the world. If the specialized library service in their country does not have the work and cannot arrange for an interlibrary loan, most people look no further.

People with access to technology and skills who choose to explore other options must identify and search multiple library catalogues, peer-to-peer sharing sites such as Bookshare, repositories of public domain material such as Gutenberg, and retail sites such as Audible or Amazon. It is a daunting task for any individual; if you rely on a screen reader and can't skim a site quickly for content of interest, it is nearly impossible.

### **Challenge 2: Legal restrictions related to copyright**

Being able to find a work in alternative format does not necessarily lead to access. People with print disabilities – and the libraries serving them – must understand and apply a complex set of legal terms and conditions before access can happen.

#### **2.1: Copyright exceptions and import/export of works in alternative formats**

Over 50 countries have an exception in their copyright legislation that permits the production of alternative formats.<sup>4</sup> It is not clear that the alternative format of a work produced under a legislative exception in one country may be used in another without applying for permission to the rights holder(s). In addition, the language of exceptions varies from country to country regarding which formats can be produced and who is eligible to use the material (e.g., people with vision loss only; people with vision loss or physical disabilities; people with all types of print disabilities).

Some libraries in countries with similar exceptions have decided to assume the risk of exchanging material and place the onus on the importing library to ensure that it is used in accordance with the laws of its country. A few libraries offer direct service to patrons internationally, but only for physical items.

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<sup>4</sup> Judith Sullivan, February 2007, "Study on Copyright Limitations and Exceptions for the Visually Impaired," Study prepared for the Standing Committee on Copyright and Related Rights, SCCR/15/7, World Intellectual Property Organization, viewed 8 February 2009, <[http://www.wipo.int/edocs/mdocs/copyright/en/sccr\\_15/sccr\\_15\\_7.html](http://www.wipo.int/edocs/mdocs/copyright/en/sccr_15/sccr_15_7.html)>

## **2.2: Licensing agreements**

Library materials in alternative formats can also be subject to licensing agreements between the library and the rights holder. In some countries, libraries must apply to publishers for licences on a title by title basis. In countries with exceptions, libraries might also have agreements with copyright licensing agencies and individual publishers. These agreements can restrict eligible use, formats allowed, number of copies and further distribution. The library may also need to implement technical protection measures, report back to the rights holder on usage, and pay compensation.

Bookshare in the United States has been particularly successful in securing licences from publishers that allow global online access to copyrighted material in alternative formats.

## **2.3: Digital Rights Management**

Digital Rights Management (DRM) refers broadly to any strategy or tool that is used to control who can access digital content and how they can use it. DRM might be as simple as putting a copyright notice on a document, or it might go much further and encrypt a document so that you must input a special code (or key) to read it, and only on a designated machine. Encryption is an example of a Technological Protection Measure (TPM), which is a kind of DRM, but the terms are often used interchangeably.

The level of DRM applied depends on many factors, including copyright, distribution rights, business models and the inherent value or sensitivity of the information.

According to a recent DAISY Consortium Board survey, member libraries offering online services apply three or four levels of protection:<sup>5</sup>

1. Qualification of users, which requires proof of disability
2. Contractual agreement with the end-user
3. Notice of copyright on the material
4. Secure access by user name and password.

Some libraries have implemented or are considering implementing watermarks. Bookshare has implemented encryption, fingerprinting, and account monitoring. At the far end of the scale, the National Library Service for the Blind and Physically Handicapped (NLS) in the United States and the LG DTB Library in Korea have tied usage to dedicated devices.

## **Challenge 3: The digital divide**

Legal entitlement to use a work in alternative format is also not enough to guarantee access. Technological barriers can pose a further challenge.

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<sup>5</sup> DAISY Consortium, January 2009, "Board members' survey of copyright laws in organizations' countries," unpublished document.

### **3.1: Connectivity and bandwidth**

Connectivity and bandwidth are the first barriers. The very premise of the Global Library as it is currently scoped is that the end-user resides in a region with some level of connectivity to the Internet, wired or wireless. However, by the end of 2007, according to the International Telecommunications Union, less than one out of five people living in the developing world were online, compared to over 60 percent of people in the developed world.<sup>6</sup>

Fixed broadband is still an issue in the developed world, at 10-15 percent in Europe and the Americas; it is less than half a percent in Africa. The ability of end-users to stream or download files effectively requires broadband.<sup>7</sup>

Over the past ten years, growth in mobile access has outstripped other types of access in both developed and developing countries with the effect that 97 percent of people in the developed world and 45 percent of people in the developing world have a mobile phone. Still, the rollout of mobile broadband is concentrated in the developed world, and about 20 percent of the world's population is not covered by a mobile cellular network.

The Global Library is about the sharing and downloading of digital works, on average an audio file is 250mb in size, Braille files and e-text are all files that take considerable bandwidth to download. Both developing and developed countries will have difficulty with this issue as end users may not have access to or can afford broadband costs. Other intermediaries, such as public libraries, may be required to work with print disability agencies to assist people in obtaining information.

### **Conclusion**

Lack of access to information is the biggest barrier to full participation in work, recreation and life for people with a print disability.

The Global Library Project is in its infancy as the working groups have only been operating for six months. At the writing of this paper only two working groups have been established. With the challenges identified there are opportunities for our libraries to rethink our procedures and operations, develop partnerships with other agencies such as Microsoft, OCLC, Google, Bookshare and beyond, plus ensure that by working together people with print disabilities will be able to locate and retrieve accessible information when they want and how they want.

A Global Library will help to ensure that people with a print disability will have access to and fully participate in every part of life they choose. I look forward to participating in making this vision a reality.

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<sup>6</sup> All figures in this section are from the ITU World Telecommunication/ICT Indicators Database, available online, <<http://www.itu.int/ITU-D/ict/>>

<sup>7</sup> In Canada, for example, the CNIB Digital Library offers audio books in 45-minute chunks, which allows end-users with lower band-width connections to access content without interruptions such as timeouts.



This paper has been written with contributions from the Global Library Steering Group and its subcommittees

Global Library Steering Committee

Margaret McGrory - CNIB

Bente Dahl Rathje – Danish Library for the Blind

Helen Brazier – RNIB

Koen Krikhaar – Dedicon

Neil Jarvis – RNZFB

Francois Hendrikz - South African Library for the Blind.

Keun-Hae Youk - Korean Library for the Blind.

Working group chairs.

Margaret Williams - CNIB

Deborah Mould - Vision Australia.

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