

## **Does national access to e-publications make a difference: the Icelandic experience?**

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At the initiative of librarians and the Icelandic government the entire population of Iceland has access to a wide range of databases and e-journals in order to improve the nation's access to information. In this article the emphasis will be on the e-journals.

The ideology behind the national access to e-publications in Iceland is to make research articles in all academic disciplines freely available to all Icelanders on the Internet. Since the project started in 2001 contracts have been signed with the providers of electronic journals but there are still many important providers that have not yet been included due to lack of funding. The aim of the Icelandic national access project is to promote and improve research developments and support education such as distant education. This article discusses the different issues involved in the national access, such as the usage, funding of the project and the limitations of the business model in use

### **Two lines of thought - one project**

In 1998 libraries wanted to share resources to make accessible larger numbers of e-journals and databases to their users, mainly the research community.

At the same time the government had issued a policy on equal access for all Icelanders to the information society.

These two lines of thought became one project as the libraries adopted the government's policy. The aim of the project was to make various electronic databases and e-journals accessible to the whole population of Iceland at an agreeable cost.

The result from this project was that contracts have been signed with the providers of electronic databases and journals. An access is IP based and opens to all IP addresses from domestic Internet Service Providers. The project was initiated in 1998 by the Ministry of Education which set up a committee to look into the possibility of working out national agreements with vendors. In 1999 that committee proposed the establishment of a three year experimental project. First contract was signed 1999 for *Encyclopaedia Britannica Online*. In 2000 a working group was set up to carry out the 3 year experimental project. A number of contracts were signed before the 3 year project finished at the end of the year 2002.

In 2002 the task was assigned to National and University Library of Iceland.

### **Present situation**

The National and University Library of Iceland acts on behalf of the Ministry in all dealings with information providers, regarding financial, technical and public relations matters.

An advisory committee works with the library and acts as the representative of end-users and libraries. The task is to select e-content, divide cost, and keep up-to-date on new developments, select which contracts are signed on the national level, decide which contracts are better kept in the hands of smaller consortia and which are better kept as individual subscriptions by an institution.(1)

The National consortium contracts 2001 – 2006 to e-journals are:

- Blackwell,
- Karger,
- Kluwer,
- Springer,
- Elsevier

Smaller consortia also sign agreements with vendors that allow national access such as the Health Consortium agreement in 2003 to Elsevier Health Sciences Collection.

The National access to e- journals from 2003 – 2005 covers 81% of the total cost of national access to e- journals but the Elsevier Health Sciences Collection covers 19% of the total cost.

### *Vendors*

The opportunity of working out national agreements with vendors' databases and e-journal vendors turned out to be possible because Iceland has a small population (about 300.000) and a high educational level. It ranks high in general IT use, the level of Internet access is high and computer ownership is also high.

### *Demanding users*

The international comparison shows that Iceland is among the top 10 nations in quantity of medical research when calculated per one hundred thousand inhabitants. (2)

During the period 1994-98 papers from clinical medicine in Iceland were ranked 1st in the world with 6,7 mean citations when the world mean was 4,1. Molecular biology and genetics were ranked 10th.(2)

With the high output of scientific research the researchers depend on good access to research information and expect the libraries to provide easy and unrestricted access to e-journals

### *High standard of health care*

Iceland enjoys high standard in health care. Infant mortality rate is the lowest in the world. Life expectancy for males is the highest in the world. High standards depend on good access to quality information. Health care providers depend on good access to quality information.

These characteristics made Iceland the ideal place to develop such a project as the national access and publishers were ready at that time to take part in the project.

### **The cost model**

The libraries pay for the largest part of the national access. The journal subscriptions each library had in the year 2000 were used as the basis for the payments for the national licences. In addition a national access was negotiated for to the whole subscription packages that the vendors were selling. This national access is 30% of the total cost and the subscription cost from the year 2000 covers 70%.

The subscription cost from the year 2000 is still used as a base for calculating what each library in Iceland pays, both for their former subscriptions and the national access. This is the cost model set up by the Icelanders not the publishers.

The payments and division of cost for e-journals are as follows:

The libraries pay 94% for e-journals and the state 6%. The cost is covered by 37 research libraries out of their budget, of which two libraries pay 71% and the rest 23%.

The cost model is not working since only a few libraries pay for the e-journals out of their budgets. Many institutions are using this access and are not paying for their use.

The plan was to use the cost model in the beginning and later change it by looking at different factors such as usage. It has not been possible so far to change the model since it is difficult to divide the usage between participating libraries due to the fact that the users are accessing from different locations in Iceland. Other institutions also claim they do not have the additional funds to pay for this access from their library budget.

There is a problem with calculating cost because of uneven spread of subscriptions between libraries in the year 2000. The reason is that most subscriptions were covered by the same libraries that carry the cost today.

A new model is needed because many changes have taken place since the national access first started. New universities have been established that do not participate in the old model since they did not have any journal subscriptions at the year 2000. Companies have also merged which does influence the cost model.

A group is now working towards establishing a new cost model based on the number of university students and employees FTE count.

### **Hvar.is**

To ensure awareness of the offered information a web-site was established for the national access. The web-site was given the name Hvar.is which translates into English as Where.is. It has practical information about availability and how to use and access the information.

The number of visits to Hvar.is each year corresponds to that 1/3 of the Icelandic population visited the website each year. In the year 2004 the visitors were 117.000. The number of visits increased by 20% between the years 2003 and 2004.(3)

## **Training**

Training is also offered to the users to ensure public awareness of the offered information and to increase the information skills for the end-users.

## **Usage**

### ***How much?***

From the statistics we know the total number of full text access for all users in the country.

We can only break down the usage figures from a few main libraries that have separate IP numbers which the publishers count separately but it is not possible to measure the total usage by every institution. This is a limitation set by the publishers.

During the year 2003 the download of full text articles from the e – journals offered through the national access were 360.142 articles and during the year 2004 the total was 481.944 articles. There has been an increase in the usage of full text articles from the national access, about 35% between 2003- 2004. If we look at the year 2004 the access figures correspond to that of each Icelander in the age group 14 to 65 is accessing 2.5 full text articles per year from the national access.

### ***Who are the users?***

With nationwide access braking down the actual usage is not possible since about 50% of the usage is from home.

No one knows exactly who is using the e-journals within Iceland.

What we do know according to statistics based on visits to the website, librarian's experience and use reports received from the e-journals, that this access is frequently used by the following user groups:

- universities and colleges
- research institutes
- distance students who rely on this access
- patrons of public libraries who seek quality information via the Internet
- Secondary school students.

### ***When is it used?***

A librarian at Landspítalinn Anna Sigríður Guðnadóttir did a small survey in 2004. The group included in the survey were endocrinologists in Iceland. A part of the survey was looking into usage of both e-journals as part of the national access and e-journals as subscribed to by the library. The outcome was that 33% of respondents used them during work hours, 22% after work hours and 45% during and after work hours.(4)

**Does the National Access fulfil the user’s need?**

**2004 – National access/vs. library subscription to e-journals at Landspítali**

National access	Outside national access
53% of total access	47% of total access
36% of total subscription cost	64% of total subscription cost

If we look at the subscriptions for one library the Landspítali University Hospital Library almost half of the articles used through the IP access of the library is outside the national access. The cost for that additional access is almost twice the cost paid by that library for the national access. Total access for this library was 111.953 full text articles in 2004. If this usage is broken down between the national access and the journals subscribed to by the library, the FT access from the national access was 59.235 articles (including the health sciences collection from Elsevier). Access to FT from the library’s e-subscriptions was 52.708 articles.

The national access to e-journals does not fulfil the e-journal need for this group. However the national access is more economical for the library.

In this context it is worth mentioning that the most expensive e- journals are not included in the national access and never will be on account of a limited and highly specialised user group.

**Does this national access make a difference?**

*Research*

According to users this access is important for education, technology and research. How much it has influenced research we do not know. However, research has increased during this period about 85% for all of Iceland and even more for the health sector or about 300% according to a search done in the ISI database for published articles indexed in the ISI database from Iceland 1999-2003.

In June 2005 a resolution was issued by the Council of Science and Technology in Iceland appointed by the Prime Minister's Office. The Council of Research and Technology emphasizes that it is very important to ensure that this special access will remain open as stated in the declaration:

“It is clear that there has been a great increase in the usage of electronic journals provided by the national access. It is used by the general public, specialists and researchers. It is used by many institutions that do not pay for this access. The electronic journals are available to everybody, but only few libraries pay for them out of their budgets. The usages of this electronic information is increasing, benefiting

the total population. It is important for education, technology and research that this access will remain open". (5)

### *Library services-*

#### *Interlibrary loans*

Interlibrary loan (ILL) decreased by 45% from the year 2000 to 2003 in Iceland. If we look at how users are accessing articles in Iceland we do notice a change regarding ILL but the national access is not the only explanation. During this period four health science libraries merged and also the main health library discontinued supporting Norfree, which is a free delivery of articles between member libraries in the Nordic countries.

As a result other libraries use ILL from libraries that provide NORFree outside Iceland.

#### *Aleph/Gegnir*

At the same time as the national access was started a central web-based library system, Aleph, was acquired by the Icelandic Library Consortium. It is a centrally run library system used by the majority of Icelandic libraries and accessible to all Icelanders. The system covers most of Iceland's library and information resources. (6)

Linking enables users to link from their search for e- journals to bibliographic records in Aleph. This linking access is useful to further enhance search results and tie together the National access to e-publications and the National library system.

### **Advantages**

The advantages of the national access as seen by the libraries are that it creates better access to information and knowledge, it supports distance education and the libraries join resources to subscribe to databases and e-journals. The libraries also have better opportunities in linking resources by using both the national access and the national library system and in that way make the best use of all of our collections and services.

The libraries also have built expertise regarding contracts and negotiations and there is one body dealing with the publishers and aggregators saving both time and money.

### **Disadvantages**

The main disadvantages are that only a few libraries pay for the electronic journals that are available to everybody. To solve this problem the libraries have to agree on a different cost model. The new model should take into account different criteria such as FTE for employees and the number of students.

The national access to e-journals is, according to the licence agreements with the publishers, divided into two parts: the subscription cost based on the subscriptions the

libraries had in the year 2000 and the cost of the national access. This division is as follows: for the national access is about 30% of the cost and for the subscription cost about 70%. Since it is the policy of the Government of Iceland to make the e-journals accessible to all it is only fair that the government covers 30% of the cost. Now it covers only 6% of the cost. A good argument to procure additional funds for the national access to e-journals is the Policy of the Government of Iceland on the Information Society for the years 2004 – 2007 “Access for everyone” This policy emphasizes the part Icelandic libraries play regarding access for everyone. This is promising for libraries and to be able to carry out this policy the libraries need to procure additional funds

## Access for everyone

Convenient access to sources of information and knowledge needs to be ensured. This is to be accomplished, for example, by the ready availability of computers and the Internet in schools and Iceland's libraries and by further strengthening services for individuals at these establishments. All the country's main libraries are to receive support in installing wireless networks for access by their customers.

**Responsibility:** Ministry of Education, Science and Culture.

Efforts will be made to co-ordinate databases within varying disciplines of science and academic study. These are to be made accessible on the Internet to both the public and academics, thus contributing to the improved utilisation of scientific data as well as to innovation, e.g. by private enterprise.

**Responsibility for the above tasks:** Ministry of Education, Science and Culture; Ministry of Agriculture where appropriate; the respective educational and scientific institutes.

(7)

### **Open access /vs. national access**

The Open Access model for e-journals might be a better solution for Iceland in the near future since the cost factor is too great for the national access to provide access to all e-journals available. OA might succeed in providing access to all publications needed.

At ministerial level in Iceland a group is working towards a policy on access to research data from public funding. This policy is built on work done by OECD and ESB. 35 OECD countries, including Iceland supported OA and OAI by issuing a declaration in January 2004; Declaration on access to research data from public

funding. (8, 9) The outcome from this work might influence further development of the national access to e-journals.

## **Conclusion**

The six years of the national access have left a mark. This access is very much used as pointed out earlier. It does make a difference.

One good example is the resolution that was issued in June this year by the Council of Science and Technology in Iceland that emphasized the need for this very important special access to remain open.(5)

The national access period has been very enjoyable for Icelandic libraries. It has been a privilege to experience this breakthrough regarding access to information for all Icelanders.

The national access has been a quest to find a way to make information accessible to all Icelanders. We have been able to provide a unique access. However this access is not equal to OA. No one nation can be an island regarding access to information. Information is not just about access it is also about sharing information with others. The national access does not allow our researchers to share their work freely outside Iceland. It also limits the boundaries of distance education to location within Iceland. I do believe that the national access in Iceland is a proof that such an access is very valuable to the general public, specialists and researchers alike but to complete the quest Iceland needs to work with other nations towards commonly agreed principles and guidelines on access and sharing of research data.

OA should be the access we should look forward to in the near future.

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