# CISTI Source and journal use at Memorial University of Newfoundland

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### Keywords

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### Abstract

This paper looks at the first full year of the implementation of CISTI Source at the Queen Elizabeth II Library, Memorial University of Newfoundland. The paper comments generally on journal use by title and takes a close look at the level of ordering associated with a group of Elsevier journal titles cancelled in 2002. It looks at the difficulty of putting in place a mechanism to prevent the ordering of articles for which there are local holdings in both paper and/or electronic formats. It discusses the consequences of not having an adequate blocking mechanism in the context of the overall cost of CISTI Source versus savings garnered from journal cancellations. The paper looks at user uptake and reaction to the new document delivery service. The paper reports briefly on the trial delivery of colour articles by Ariel between CISTI and the Queen Elizabeth II Library.

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## Introduction

In January 2003, faculty, students and staff from four faculties at the Memorial University of Newfoundland were given access to unmediated document delivery through CISTI Source. The new service was implemented to provide broader access to scientific and technical information and to compensate for the cancellation of a suite of 154 Elsevier titles in December 2002. The project was a collaborative effort between the electronic resources and serials, information services, and document delivery units of the Queen Elizabeth II Library. This paper looks at the new service in its first full year of implementation.

## CISTI Source at Memorial

There are currently two categories of CISTI Source users at Memorial: those with document delivery privileges and those who have access to the CISTI Source index and alerting services only. Those with document delivery privileges can request documents from CISTI collections through the direct service and from CISTI partner libraries through the link service (the decision was taken to offer access to the link service because not all cancelled Elsevier journal titles were available through the direct service). It was decided not to offer the global service which provides document delivery from anywhere in the world. Users with document requests that cannot be filled through direct or link supply were directed to the Queen Elizabeth II document delivery unit. In addition to direct and link supply, users also choose from standard or custom supply options. Standard supply offers a scanned black and white image sent by Ariel transmission. Custom supply meets the needs of researchers who require high-quality colour images or grey-scale images of high resolution. Custom supply documents are high-quality photocopies. Once photocopied, the document is sent by courier to the Queen Elizabeth II library. Whether sent by courier or Ariel transmission, all CISTI Source articles received at the library are hand-delivered to the campus address specified on the request. Documents can also be picked up at the library. No limit has been set on the number of article requests a user can make through CISTI Source.

## Use by journal title

It was clear from a preliminary study done in the summer of 2003 that the new service was popular with our users. Over the course of the year, the following statistics were logged:

(1) 7,274 article requests filled from 1,759 separate journal titles.
(2) The fill rate was 97.5 per cent.
(3) 168 journal titles had ten or more article requests.
(4) 695 journal titles had between two and nine article requests.
(5) 896 journal titles had one article request.
(6) Of the 7,274 articles ordered:
   • 86.3 per cent were filled using direct supply;
   • 9.5 per cent were filled using Link supply; and
   • 4.2 per cent of requests chose the custom service option.
(7) 59.3 per cent of articles requested were published in 2000 or later.

## Blocking access to local holdings

Between January and May 2003, users of CISTI Source were not prevented from ordering from journals held in electronic and or paper formats at Memorial Libraries. On May 8, 2003, a local holdings file was uploaded by CISTI that effectively blocked ordering at the ISSN level from journal titles to which Memorial libraries held an electronic subscription. As of May 8, 2003, a user who tried to order from an electronic journal title with local holdings was directed to those holdings via an URL in the CISTI Source catalogue.

The effect of this change on ordering was immediately noticeable (see Figure 1). If one omits the summer term and compares the winter with the fall term, there were 3,494 articles ordered between January and April, while only 1,792 were ordered between September and December. While initial enthusiasm for the service and the busy winter semester may account for some of the difference between the winter and fall figures, it is clear that the block did have an effect.
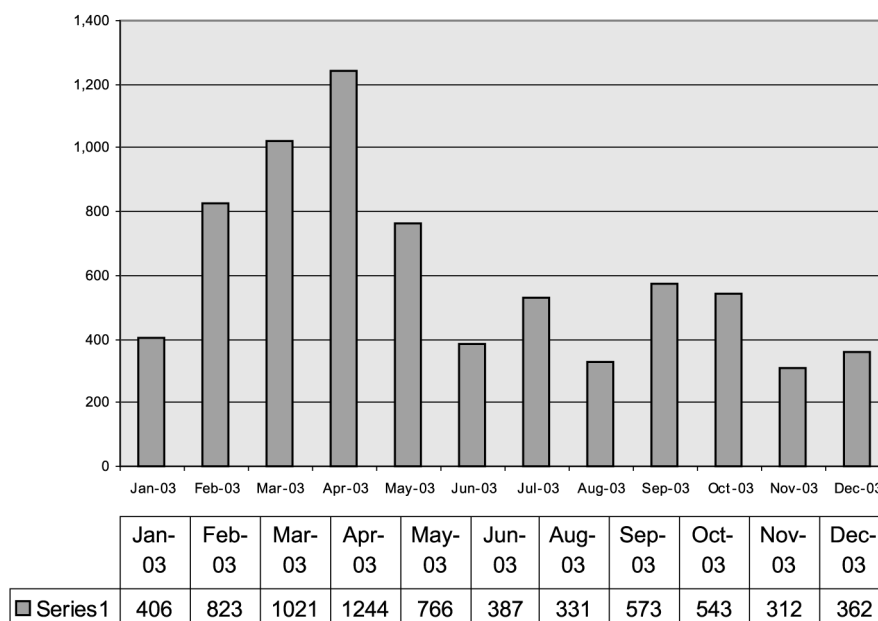
It should be noted that instituting a blocking mechanism at the volume and issue level presents a serious challenge to both CISTI and Memorial libraries. At the present time, a block is still not in place on ordering journal titles held locally in paper format. The scale of "double-dipping" or ordering from journals for which local holdings are available was extensive over the course of the year.

## Journal titles with more than ten article requests

As mentioned earlier, 168 titles had ten or more article requests. Article requests from these titles accounted for 4,001 documents or 55 per cent of the total volume. An analysis of article requests from this group of titles by publication year shows the scale of "double-dipping": 2,984 of 4,001 requests could have been filled from local holdings, i.e. from titles with current holdings or from cancelled titles with extensive back holdings. The figure of 2,984 articles represents 75.5 per cent of requests filled from the "more-than-ten" group and 41 per cent of the total number of filled request from all journal titles.

While these figures demonstrate the necessity for an adequate blocking mechanism, blocking article requests at the volume and issue level is still some way away. It is reasonable to assume that the process will continue to be inefficient (albeit less so, now that a block on some of our holdings is in place) for the immediate future. It is instructive, however, to look at this "double-dipping" in the

**Figure 1** Number of articles ordered per month – January to December 2003



| | Jan-03 | Feb-03 | Mar-03 | Apr-03 | May-03 | Jun-03 | Aug-03 | Sep-03 | Oct-03 | Nov-03 | Dec-03 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ Series1 | 406 | 823 | 1021 | 1244 | 766 | 387 | 331 | 573 | 543 | 312 | 362 |

wider context of journal subscription costs. One of the reasons CISTI Source was implemented at Memorial was to compensate for the cancellation of a group of Elsevier journal titles in 2002. Significantly, the annual subscription costs for this group of journals alone was six times higher than the total cost of implementing CISTI Source at Memorial in 2003.

## Elsevier titles

One of the interesting aspects of implementing CISTI Source at Memorial University libraries was the opportunity to collect use-statistics on journal titles, particularly those journal titles with high-subscription costs. An assumption has been made that in most cases a document delivery request from a journal title represents a viable use of that title. Of the group of 154 Elsevier titles cancelled in December of 2002, the following document delivery statistics were collected:
- 875 articles were ordered;
- article requests were made from 76 separate titles; and
- 34 titles had ten or more article requests.

When compared to subscription costs, the cost associated with document delivery requests from this group of journals indicates significant financial savings. In no case did the number of article requests warrant the reinstatement of a subscription to a particular journal title. Also, had users been prevented from making document delivery requests for back issues of cancelled Elsevier titles with local holding in paper format, the number of document delivery requests would have dropped substantially, e.g. only seven titles would have had ten or more article requests.

## User training

In order to implement the new document delivery service as smoothly as possible for users, training sessions were held in December of 2002 and May and December of 2003. Queen Elizabeth II librarians and staff provided information on how to search the CISTI Source Web site and how to order documents. Information services staff registered all new users prior to the session. In all, 39 faculty, graduate students, postdoctoral and research assistants attended these sessions. As well as training sessions, library staff created web pages that offered general information about CISTI Source and information about how to order documents. In April 2003, a listserv for CISTI Source users with document delivery privileges was set up. The listserv was used for general announcements about enhancements to, or

problems with, CISTI Source. It was also used very effectively in February 2004 to distribute a user-satisfaction survey.

## User uptake

Document delivery request figures alone indicate that the implementation of CISTI Source has been a popular addition to services offered by Memorial University libraries. Over the course of the year, 427 users registered for CISTI Source accounts with document delivery privileges. Of these, 195 or 45.6 per cent were active users (ordered at least one document in 2003). The average number of requests per active account per month was 3.1. CISTI staff indicate that this is lower than average. In-house CISTI studies of user behaviour at other universities find the average number of orders per month to be 4.0 per user per month. It should be noted that this number was 6.1 at Memorial for the first five months of the study. The drop in this figure may be attributed to three factors:
(1) A drop in initial enthusiasm for the new service.
(2) January to April being among the busiest months of the year.
(3) The aforementioned block on ordering materials owned by Memorial in electronic format as implemented on May 8, 2003.

## User satisfaction

In February 2004, a brief user-satisfaction survey was distributed to CISTI Source users through the listserv. The survey asked nine questions of users regarding training; how easy they found it to use the service; what kinds of problems they experienced, if any; how use of the service affected their use of interlibrary loans; their overall satisfaction with the service, and specifically how satisfied they were with the speed of delivery, the supply options, and the quality of documents delivered. Users were asked how the service could be improved.

A total of 66 (34 per cent) of 195 active users responded. The results of the user-satisfaction survey provided a wealth of valuable information on the new service, and while it is not within the scope of this paper to report on all findings, the following general points can be made:
- On a scale of one to five, 86.2 per cent of respondents rated their degree of satisfaction with the service as "good service" (4) or "completely satisfied" (5). The average score was 4.2.
- Users expressed a high degree of satisfaction with the range of supply options available, the quality of documents delivered, as well as the speed of delivery. Note: speed of

delivery was measured once in the spring semester and again in the fall term. The spring study indicated that 82 per cent of requests were filled by the next day, and the fall study showed 90 per cent filled by the next day.

- When asked how access to CISTI Source document delivery had affected their use of traditional interlibrary loan, respondents replied as follows: increased = 4; decreased = 34; not sure = 16; do not use ILL = 9; no response = 3. Note: though slightly more that 50 per cent say that their use of ILL decreased, the decrease is not reflected in the overall ILL figures for the same period, which show an increase of 10 per cent over the year from the previous year.

- Problems with the blocking mechanism constitute Memorial users' number one complaint about CISTI Source. Specifically, electronic journals are blocked at the ISSN or title level, while electronic subscriptions often only provide access to a limited number of years. Consequently, Memorial users of CISTI Source find that they are frequently blocked from ordering articles from issues of journals that our electronic subscriptions do not cover.

- Approximately 15 per cent of respondents stated that they would like to see more titles available through CISTI Source and/or an increase in title holdings to include pre-1993 issues.

- Users would also like to see more electronic subscriptions at Memorial libraries.

## Colour delivery by Ariel

In the summer of 2003, staff at CISTI and at the Queen Elizabeth II Library Document Delivery unit tested the Ariel transmission of colour documents. All documents were sent to an Ariel 3.0 station and printed on a HP LaserJet 4600N.

Prior to the testing, staff at Memorial, with the help of a faculty member from the department of Earth Sciences, compared colour photographs and grey scale images from a print journal with the same material ordered through the CISTI Source custom service. The original and the colour photocopies were considered to be almost identical in terms of quality. It was hoped that the same quality could be preserved when scanned documents were sent by Ariel transmission.

About 12 documents were transmitted as part of the test. A number of these were sent twice so that the originals could be sent back to CISTI by courier, ensuring that both CISTI and QEII staff were analysing identical documents. Transmitted copies were compared to the original and to colour photocopies of the original sent through the CISTI Source custom service.

It was readily apparent that those colour documents sent by Ariel were inferior in terms of quality, so much so that they could not be considered a viable alternative to the custom service currently offered by CISTI. The problem seems attributable to the limitations of Ariel software that can only transmit documents at a maximum resolution of 300dpi.

A solution to the problem may be forthcoming with future releases of Ariel software. It is more likely, however, that a post-to-web option may offer a better alternative to the transmission of high-resolution and colour documents.

## Conclusion

Colour transmission by Ariel, and problems associated with blocking access to local holdings aside, both quantitative and qualitative data from this study shows the implementation of CISTI Source at Memorial to have been a success.

Use patterns indicate that users at Memorial want quick access to a broad range of journal titles. The volume of article requests associated with the vast majority, if not all, of these titles shows that the most cost efficient way to provide access to this information is through document delivery rather than through subscription.

Generally, the use of CISTI Source document delivery offers further evidence that document delivery needs among our user population continue to increase.