

Intercontinental Document Delivery: The AUA/FAU Experience

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SUMMARY. Describes a pilot project in overseas document delivery via Ariel, conducted by the American University of Armenia (AUA) and Florida Atlantic University (FAU). Background information on the history of Armenia and AUA is provided, followed by discussions of the origins of the project, the development of a formal agreement to provide guidelines, implementation of Ariel at AUA, and evaluation and the impact of the project on AUA library users. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2002 by The Haworth Press, Inc. All rights reserved.]

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INTRODUCTION

While interlibrary loan and document delivery service within North America have undergone near continual expansion, change, and development over the past two decades, international resource sharing cooperation between libraries has proceeded at a slower pace. Reasons for this include the significantly longer time it can take to send materials overseas, and the added postal expense for international delivery.

RLG's introduction of Ariel, a digital document delivery system, in the early 1990s, provided a rapid and cost effective alternative to earlier methods of transferring information, such as photocopying and mailing it, or sending it by fax machine. Since documents are digitized and transferred over the Internet, the lending library does not incur the expenses involved with mailing (e.g., postage) or faxing (e.g., long distance phone charges). While this does not solve potential problems involved with sending returnable loans overseas, it lends itself extremely well to transmitting copies. The following article describes a pilot project in overseas document delivery via Ariel, conducted by the American University of Armenia (AUA) and Florida Atlantic University (FAU). Background information on the history of Armenia and AUA is provided, followed by discussions of the origins of the project, the development of a formal agreement to provide guidelines, implementation of Ariel at AUA, and evaluation and the impact of the project on AUA library users.

HISTORICAL BACKGROUND

The Republic of Armenia is a mountainous country of about 11,500 square miles, located in the Transcaucasian region of northwestern Asia. Armenia borders on the Republic of Georgia to its north, Turkey to its west, and Azerbaijan and Iran to its east and south respectively.

Throughout its history, Armenia was frequently occupied by foreign powers, including invasions by the Persians, Greeks, Romans (under whom it became a large and powerful state), Byzantines, Arabs, Turks, Franks, Mongols, and Russians. Armenia has the distinction of being the world's first Christian nation, converting around 300 A.D. From the 1500s to the early 1800s, Armenia was divided between the Ottoman and Persian empires. The Russian empire began making forays into the

area in the early 1800s, and by 1828 controlled the regions formerly occupied by the Persians.

By the late 1800s, growing demands for reform by the Armenians led to increasing repression and massacres by the Ottoman Turks. This culminated in the most tragic period of Armenian history, the years during World War I and immediately afterward (1915-1923), when the Turks decided to deport the entire population of Armenians (whom they viewed as a Christian, pro-Russian security threat) to Syria and Mesopotamia (now Iraq). Hundreds of thousands of Armenians were driven from their homes, forced to march into deserts without food or water, or massacred outright. An estimated 1.5 million Armenians were killed during these years. A bright spot for Armenia during this horrific period was a brief period of independence from 1918 to 1920. However, this was crushed by invading forces from Russia and Turkey. Most of the territory went to the Russians, who controlled Armenia as a Soviet Socialist Republic for the next 71 years.

The period of Soviet control was one of relative stability and peace, during which the Armenian economic, cultural, and educational systems underwent development. During this era, Yerevan, the capital of Armenia, became a scientific and industrial research center, and enjoyed a relatively high standard of living. However, Armenian nationalism could not be expressed under the harsh Soviet internal security system. It was not until the pro-reform regime of Mikhail Gorbachev in the late 1980s that a nationalist movement began to flower. This movement initially concentrated on regaining control of the Nagorno-Karabakh region, an enclave mostly populated by Armenians, which lay within the borders of neighboring Azerbaijan. Fighting began in this region in 1988, and continued until a cease-fire agreement in 1994.

Although Armenia re-conquered the Nagorno-Karabakh region, Azerbaijan established an economic and energy blockade, starting in 1989, which was devastating to the Armenian economy. Also, a powerful earthquake hit Armenia in December 1988, killing over 25,000 people, leaving 500,000 homeless, and destroying an estimated one-third of the nation's industrial capacity. Because of these problems, an estimated twenty percent of the total population of Armenia (750,000 people) had emigrated from the country by the mid-1990s. Amidst these many problems, Armenia declared independence from the Soviet Union on September 21, 1991.¹ The financial crisis spurred by the events discussed above has continued until the present day.

THE AMERICAN UNIVERSITY OF ARMENIA (AUA)

In the aftermath of the devastating earthquake in 1988, many Western delegations traveled to Armenia to provide humanitarian and technical assistance, and met with their Armenian counterparts. It was during one such meeting in 1989 that the idea of establishing an American-style technical university in Armenia was first proposed. A few years later, in 1991, this dream evolved into the specific goal of founding a graduate university based on the American model, and offering instruction entirely in the English language. Thanks to the planning, financial and logistical support of the Armenian government and two major institutions in the United States, the Armenian General Benevolent Union (AGBU) and the University of California system, the American University of Armenia (AUA) became a reality. On the same day Armenia declared its independence, September 21, 1991, AUA began teaching classes, with 101 students enrolled. The building that AUA offers classes in was formerly the Communist Party Headquarters in Armenia! Today, AUA continues to operate as an independent, non-profit institution of higher education in Armenia. It is one of the first universities in Armenia where students pay private tuition, and are not funded by the government.

Presently, AUA's academic programs provide graduate education in Business and Management, Industrial Engineering, Computer and Information Science, Political Science, Health Sciences, Law, Comparative Legal Studies, and Teaching English as a Foreign Language. In addition to its academic programs, AUA has developed several research centers.

The AUA Papazian Library was founded shortly after the University's establishment. It is named after the family of Simon and Pinna Arman Papazian, major benefactors of AUA. What began as a single unit now has evolved into a library system that includes the Legal Resource Center and the Public Health Reference Room. In a very short period of time, the library has developed into one of the most popular learning centers in the region, serving not only the students, faculty, and staff of the University, but also students and scholars from other institutions, and the community at large. The library holds over 25,000 monographs and subscribes to 80 periodicals. As the language of instruction at AUA is English, the majority of the library's collection consists of English language materials. A significant portion of these materials were acquired from private donors.²

ORIGINS OF THE PROJECT

In 2000, Tom Sloan, the Executive Director of the Southeast Florida Library Information Network (SEFLIN), was invited by the Information Resource Center at the U.S. Embassy in Armenia to deliver a series of lectures at AUA and other Armenian libraries. During this trip, Mr. Sloan became familiar with the difficulties facing the library world in Armenia.

Dr. William Miller, Director of Libraries at Florida Atlantic University (FAU), visited Armenia to participate in the same lecture series the following year. He found most of the nation's libraries to be "labyrinthine, inaccessible, with outdated materials that do not circulate out of the library." In addition to the closed stacks, unreliable electrical power often left libraries in the dark, forcing staff members to use flashlights to page materials for patrons. Armenian libraries were described as "virtually devoid of current technology. The Internet access is spotty and extremely expensive, because the national phone company is a monopoly." The majority of Armenian library staff members are also extremely poorly compensated.³ The financial difficulties that plague Armenia as a whole extend to their libraries, which essentially have no money with which to purchase current materials.

The development of AUA under the American model extended to its provision of library services. Therefore, AUA's Papazian Library became the first library in Armenian history with American-style open stack services. Library users were now able to access library materials and browse the shelves without library staff intervention.

For most of the twentieth century, Armenian libraries were under the control of the Soviet Union. Therefore, as to be expected, the vast majority of the materials in their collections are in the Russian and Armenian languages. Additionally, there was no tradition of cooperative resource sharing among Armenian libraries. As an English-language university in a non-English speaking part of the world, AUA had virtually no local sources for supplying interlibrary loans of English language materials. AUA faced the problems of obtaining recently-published materials in English that supported its graduate and professional programs, very limited resources for purchasing such materials, and dealing with often unreliable and expensive postal and transportation services for delivery of library materials. Furthermore, subscriptions to western journals are difficult to manage from the region of the former Soviet republics.

After observing the challenges faced by the AUA Library System, Tom Sloan proposed a demonstration program which would expand access to English language materials for AUA faculty, staff, and students,

by partnering with a larger American university library. This partnership would include the establishment of an interlibrary loan agreement, and implementation of the Ariel document delivery system at AUA. The Ariel system, developed by RLG, uses a computer workstation, scanner, and printer to digitize articles and other documents, and transmit them to other Ariel stations anywhere in the world, without incurring long distance telephone or postage fees. An Ariel network had been established among libraries in South Florida several years before, thanks to grant funding obtained by SEFLIN, and the system had proven its value in document delivery and interlibrary loan.

Mr. Sloan developed a needs assessment to justify support for the project, delineating three major goals of the project: (1) assisting the AUA Library System in establishing its place in the global village, supporting faculty and student needs for English language materials, and sharing resources with other libraries and library systems throughout the world; (2) demonstrating for the libraries of Armenia the Ariel document delivery system; and (3) allowing AUA to assist partner libraries with access to unique and scholarly materials (e.g., see the AUA Digitization Project of Ancient Manuscripts at <http://www.digilib.am/>). Upon returning to the United States, Mr. Sloan presented the need for an American partner academic library to work with AUA to the SEFLIN Board of Directors. Dr. William Miller of the Florida Atlantic University Libraries stepped forward to volunteer the services of his institution. Mr. Sloan developed a planning document for the project, with goals, outcomes and a time line, in November 2000.⁴

Florida Atlantic University (FAU) is a rapidly growing, comprehensive public university of about 25,000 undergraduate and graduate students, spread over five full-service campuses, over a geographic area covering six counties along the southeast coast of Florida. Academically, the university is organized into eight colleges, which offer 76 undergraduate, 68 master's, and 16 doctoral degree programs. The administrative headquarters of the university is located at the Boca Raton campus, the oldest and largest of the FAU campuses. Founded in 1961, FAU's libraries today hold over 900,000 volumes, and subscribe to over 3,900 print and 4,300 electronic periodicals.

DRAFTING A FORMAL AGREEMENT

In developing an international bilateral agreement for interlibrary loan services, it was vital to consider the needs and capabilities of both partners. First it was decided that because of the unreliable and expen-

sive postal services in Armenia, the agreement should cover photocopies only, and no loans of monographs and/or other returnables, which would be at risk of loss or damage in transit, were to be included. It was also decided that only materials held by FAU were to be provided. FAU would not obtain materials from third parties and transmit them to AUA. All copies were to be transmitted by Ariel.

Since the FAU ILL Department had worked on nearly 55,000 total borrowing and lending ILL transactions during the 2000-2001 fiscal year, it was a concern among the ILL staff that the agreement could add a considerable number of requests to their workload. Therefore, numerical limits were established to create a reasonable ceiling on the number of requests that would have to be dealt with. In this case it was decided that a fair maximum would be 6 requests per day, or up to 30 requests per week. Articles over 50 pages would count as 2 requests, and articles more than 100 pages in length, and entire issues of a periodical, would not be copied.

The types of materials which could be requested under the agreement included photocopies of periodical articles, conference papers, book chapters, sections of reference works, and government documents. The AUA library staff was asked to mediate all requests to ensure that the items being requested were held by the FAU Libraries. The FAU Libraries developed a web page to be used by AUA library staff to submit requests to FAU: <http://www.library.fau.edu/depts/ill/fau_aua.htm>. This included an electronic form for the submission of photocopy requests (which came to FAU in the form of e-mail), a link to the FAU WebLUIIS catalog, to verify ownership, and a link to FAU's list of electronic journals, from some of which articles could be printed and transmitted by Ariel, depending on their licensing agreement. Finally, an item on copyright, explaining fair use and the CONTU guidelines, and the requirement for AUA to abide by these, was added to the agreement.

On March 9, 2001, Mrs. Satenik Avakian, Director of Libraries at AUA, visited the FAU Library. During this visit, Ariel was demonstrated, and final details for the project and the agreement were worked out. After approval by the university administrations, the agreement was signed by both directors on May 17, 2001. A copy of the agreement is posted as a PDF document via the web site listed above.

IMPLEMENTING ARIEL AT AUA

Once a formal agreement had been developed and signed, the next step was for AUA to obtain the necessary equipment and software. RLG, creators of the Ariel system, generously agreed to donate a copy

of the Ariel software to AUA. The hardware, which includes a computer, monitor, scanner, and laser-jet printer, was purchased by AUA.

After initial set up and testing, AUA encountered a series of telecommunications issues and firewall problems that prevented Ariel from working properly. After some time, these challenges were worked out with the help of AUA systems staff and RLG. On September 20, 2001, the first test request was successfully transmitted from FAU to AUA. At this time, Dr. William Miller of FAU was visiting Armenia as an invited speaker, and AUA was able to achieve the goal of demonstrating the Ariel system to the Armenian library community.

EVALUATION AND IMPACT OF THE PROJECT

Satenik Avakian reports that the AUA community is very satisfied with the interlibrary loan project, which enables retrieval of research information that would otherwise not be accessible. She notes that the program has played a pioneer role in the history of AUA, and that they are very interested in finding other ways to expand this truly valuable service. For example, AUA has developed online forms to allow users to submit requests, allowing users to enhance their research and be served faster. She also reports that requests are being filled by FAU in an accurate and timely manner, and that they have received many positive comments from users of the service. For example, Michael Thomson, Associate Director of the Master of Public Health Program at AUA stated "In the beginning of the Master of Public Health Program each student was limited to five references. At that point, the library holdings were limited and full-text was in its infancy. Students had access to Medline SilverPlatter on CD, but that contained only abstracts. The MPH Program aggressively pursued options for full-text options or document delivery services. The resources from the FAU affiliation have greatly enhanced the academic program and reduced stress on our students, while improving the thoroughness and depth of their literature reviews."

Materials ordered have covered issues such as breast cancer education for older and urban women; market reform and mortality in transition economies; the theory of political transitions; and comparative analysis of the public and private sector. The establishment of the interlibrary loan project has given AUA an opportunity to keep updated and have access to recently-published research materials in English, something that was a dream in the past.

In the first twelve months of the project, AUA requested only 30 items, which FAU was able to transmit. FAU's worries about being inundated with requests from AUA proved to be unwarranted. Mrs. Avakian believes that the reason the service has not been used to its full capacity (up to 6 requests per day) is that it is still new to the AUA community, and notes that its usage has been increasing with time. She is positive that within a year or two, use of the service will expand, meeting the numbers that were originally proposed.

CONCLUSIONS

The document delivery project between AUA and FAU demonstrated the efficacy of the Ariel system in transmitting digitized documents internationally, and fulfilled its goal of providing English language materials for the patrons of the AUA library. The project also achieved its goal of demonstrating the Ariel technology for Armenian libraries. On April 25, 2002, Dr. Miller and Mrs. Avakian agreed to extend the agreement for another twelve months.

Following the successful implementation of Ariel at AUA, another project based on the AUA/FAU model was initiated. Cornell University's Weill Medical Library will supply materials by Ariel to Armenia's Republican Scientific-Medical Library. FAU has lent support to this project by purchasing the Ariel workstations and software for the Republican Scientific-Medical Library. In addition, FAU has purchased the Ariel hardware and software for Armenia's largest university, Yerevan State University, and has initiated a document delivery service with that institution also. SEFLIN has played a key role in these projects by acting as a purchasing agent and shipping the equipment to these institutions. FAU has also sent many English-language books to Armenia, via the U.S. Embassy, which have been distributed to libraries. After the initial success of the AUA/FAU project, FAU has become a leader in mediating library support for Armenia.

The model of resource sharing demonstrated in this project, in which a library in an information resource-rich nation can assist a library in a nation suffering from economic hardship, war, natural disasters, or other problems, through electronic document delivery, could be applied to libraries in many locations throughout the world. National library associations could help coordinate similar projects, which could assist in economic and educational development globally.

REFERENCES

1. *Armenia—A Country Study*. <<http://lcweb.loc.gov/frd/cs/amtoc.html>> [Accessed August 1, 2002].
2. "History of the University." American University of Armenia. <<http://web.aua.am/aua/about/history.htm>> [Accessed July 30, 2002].
3. Miller, William. "Re: Armenia." E-mail to Ken Frankel. May 7, 2002.
4. Sloan, Tom. *Interlibrary Loan Cooperation Needs of the American University of Armenia Library System*. Unpublished, 2000.