In institutional terms, the post-World War II movement towards European integration is now 59 years old. The first of these institutions was the European Coal and Steel Community (ECSC), founded in 1951. The heir of the ECSC and subsequent institutions is the European Union (EU). During this period, a mass of materials of interest to researchers has been produced. First, the European institutions produced a body of "government documentation" describing institutional development and activities in policy areas. Second, during the last 15-20 years, researchers at private organizations, such as research institutions and think tanks, have produced an increasingly larger amount of research material on the development of European integration. Until about the mid-1990s, these EU and privately-produced documents were primarily in paper format, and were difficult for patrons to access. The introduction of the Internet in the 1990s provided all parties with a new format by which to make their documents available to the public. This article will describe the role the Archive of European Integration (AEI) has played in this process, including: the origins of the AEI, the types of research materials in the AEI, the complementary role the AEI plays with other electronic sources in making materials on the EU available; the public interface of the AEI, the behind-the-scenes or technical aspects of the AEI, future plans for the AEI.

Origins of the AEI

The AEI was founded in 2002 to complement the collections made accessible by the European Research Papers Archive (ERPA)2, launched in September 1998. ERPA was founded by individuals at several prominent research institutions so they could cooperate in making their publications electronically available. The ERPA network and Web site was designed, and has been administered, by Dr. Michael Nentwich, Manager of the Institute of Technology Assessment in Vienna. The goal of these institutions was to provide “…a common access point for the online working paper series and E-journals of the participating institutions in order to help researchers in the field of European integration studies searching the growing number of working papers now available in the internet.” The ERPA Web site does not contain copies of documents; rather its Web site provides links to the online collections of 13 participating institutions. ERPA’s policy on accepting papers is restrictive in that participating institutions must implement
refereeing or reviewing processes for papers they want ERPA to make available. Due to this policy, there were a great many online papers on the Web sites of research institutions which ERPA did not provide access to. Dr. Nentwich and Phil Wilkin, from the University Library System, University of Pittsburgh, cooperated in starting up the AEI as an online access point to materials on the Internet not available through ERPA. The AEI is different from ERPA in that it uploads onto its Web site copies of all documents which it provides access to. Currently ERPA allows access to 1,140 papers on the Web sites of participating institutions. In October 2004, University of Pittsburgh staff implemented AEIPlus, which allows simultaneous searching of descriptive metadata for the records in the AEI and the ERPA Web sites using the Open Access Initiative Protocol for Metadata Harvesting (OAI-PMH).

The University of Pittsburgh was a natural home for the AEI. First, the University has several prominent area studies programs administered by the University Center for International Studies, two of which focused on Western Europe. The Center for European Studies (CES), focusing on West Europe since 1945, had received US Department of Education grants since the early 1990s. The CES was complemented by the European Union Center of Excellence, established in 1998 by a grant from the European Commission. In addition, another of the area studies programs was the Russian and East European Studies (REES) program, which was relevant because a number of countries from this area were soon to join the EU. Second, the University Library System (ULS), University of Pittsburgh had over the last several years established itself as a leader in digital publishing. Its D-Scribe Digital Publishing program contains over 100,000 digital objects in over 100 thematic digital collections including photos, manuscripts, maps, books, journal articles, electronic theses and dissertations, government documents and other grey literature such as working papers, white papers and technical reports. The content of D-Scribe is drawn from a variety of sources including selective digitization of ULS print collections and direct author contributions from the worldwide research community. Most items in D-Scribe are available through Open Access and are freely accessible to users worldwide.

Many of the core principles espoused by the ULS in building its digital publishing program directly support the goals of AEI. Chief among these values is the principle of open access to scholarly information. In addition, the ULS is deeply invested in improving the production and sharing of scholarly research using innovative publishing services and building collaborative scholarly partnerships on a global scale.

Contents of the AEI

The AEI contains over 12,300 items, including both documentation produced by the EU ("government documents") and papers produced by private institutions. There are two requirements which must be met before an item can be uploaded onto the AEI. First, it must address and discuss some aspect of the broad topic of European integration since 1945. By its nature, all EU documentation would qualify for uploading onto the AEI. Privately-produced materials are selected for uploading on the basis of their direct relevance to the topic of European integration. For example, a paper on governance which might have implications for, but does not specifically address, the EU would not be accepted. If titles only briefly mention Europe or European integration, the AEI editor will accept or reject items on a case-by-case basis. Second, the paper must be in finished form, that is, it must have all the elements of a paper capable of submission for publication which, with revision, could be made publicly available on a Web site.

Materials published by EU

EU documentation is chosen for uploading according to several criteria. First, the AEI digitizes (into PDF format) and uploads EU documentation which is not, and is not likely to be, available in electronic format elsewhere. Second, the AEI often seeks to upload documentation which complements materials already available on EU Web sites. For example, the EU has published many series and annual reports beginning as far back as the 1950s, but in most cases only the most recent volumes are on the Internet. In several cases the AEI has uploaded all the earlier volumes of a partial series or annual report on an EU Web site. Third, the focus is on uploading key historical documentation which provides basic information on the development and implementation of Community institutions and policy areas, and which describe developments and trends over a period of time, such as series and annual reports.

Within these general guidelines, AEI staff must choose between two major categories of EU materials, informally referred to as "publications" and "documents". The category "publications" are produced by the Publications Office of the European Union (abbreviated as EUR-OP, OPOCE, or OOPEC). In general, they have several characteristics which distinguish them from the category "documents": they are often bound and have the appearance of monographs and brochures; they
frequently have copyright symbols and ISBN numbers; they are much more likely to be cataloged and shelved, and hence available in institutional libraries.

The category "documents" refers primarily to "internal" materials produced by individual institutions. The Commission and its Directorates-General produce a large percentage of these, but other institutions like the European Parliament also produce them. Two of the most common types are working documents of the Commission (COM docs) and staff working documents (SEC documents). Uploading "documents" has been a major focus because they are less accessible than "publications".

The AEI has also uploaded EU "documents" which are not part of the legislative process, and which are very difficult to locate. For example, it will soon complete the uploading of about 2,400 speeches given 1946-1984, mostly by Commissioners.

Currently, the AEI contains 7,994 items of EU documentation, most in one of the following categories: over 840 in annual reports; about 3,580 COM documents; about 780 SEC documents; about 1,450 speeches.

Materials produced by private organizations

Unlike the ERPA, the AEI does not restrict its collection only to refereed and/or reviewed materials, but freely accepts other types of materials. The AEI does not scan these materials; it seeks permission from research institutes from around the world to upload copies of their publications from their Web sites, including working and policy papers, small monographs, journal articles, and independently-produced research materials (working papers, policy papers, discussion papers, conference papers, small monographs, journal or serial articles, etc.). Initially, collection here will focus on freely-available materials already on the Web. In the future, AEI staff hope to collect materials in other formats, i.e., paper, word-processing files. The AEI’s goal is to collect all appropriate materials in these categories not already accessible through ERPA. One particularly large collection on the AEI includes all available papers (1,514) presented at the bi-annual European Union Studies Association (EUSA) conferences since 1991. Another collection is the newsletter of the European Union Studies Association ECS/ECSA/EUSA Newsletter/Review (1988-2007). Currently, the AEI contains 4,403 papers from 28 private organizations.

Relationship of the AEI to other sources of EU documentation

The primary online sources for EU documentation are the EU’s own databases, such as EuropeX, EUR-Lex and EU Bookshop. Beginning in 1995, the EU began to place an increasingly larger percent of its documentation online, and since 2000 most EU documentation is found there. There are a number of private Web sites which provide access to a great deal of material on the EU. The Web site ArchiDok at the University of Mannheim downloads documents (currently contains over 7,500 items, most published since 2000) full text from EU databases and provides indexing data and a search engine. European Navigator (ENA) is a multimedia digital library in Luxembourg on the history of European integration which contains over 16,000 documents from a variety of EU and other sources on the historical process of European integration. The AEI described above, contains over 12,300 items on the EU, about 65% of which are EU documentation.

Using the AEI

Users may search the content of the AEI for words appearing anywhere in the full text of most documents, as well as searching by specific fields for author, title, abstract, keywords, and many other fields. In addition, the AEI editorial staff have developed a number of custom browse views to allow users to explore the documents in the repository by subject and by other special categories such as series, conference, or institutional author. The user can specify to limit the search results to official EU documents, or to include works not authored by the EU. An EU Document Number browse view allows the user to view the contents of the AEI arranged in document number order as though they are on a library shelf.

To supplement the searching and browsing tools, the AEI editors have prepared a series of annotated guides for select groups of related documents within the AEI. These "Bibliographic Surveys" are designed to facilitate access to such groups of documents, both describing the nature of the relationship between the documents included and providing direct links to each document described, in categories such as White Papers, Press Releases, Summit Meetings, Green Papers and Structural Fund Reports.

Registered users may establish one or more subscriptions to receive an e-mail when new materials that meet their search criteria are added to
the AEI. Registered users may also submit their own work to the AEI, provided the content falls within the scope of the AEI. A step-by-step, easy-to-use process guides the user through submitting descriptive information about the work and uploading the document to be reviewed by the AEI editors before being added to the AEI. Individuals wishing to contribute new materials to the AEI are encouraged to self-register using the "Register" link on the AEI Web site and begin submitting materials immediately. Alternatively, individuals or institutions who need assistance or have questions about contributing content to the AEI are encouraged to contact the AEI staff by e-mail to <aei@mail.pitt.edu>.

**AEI technology**

The AEI is based on EPrints open access author self-archiving software. EPrints is free open source software developed by the Department of Electronics and Computer Science at the University of Southampton, England. Although EPrints installations are relatively few in number in North America, the software is widely used in Europe and is the leading repository platform in the United Kingdom. EPrints is generally considered to be the first open source author self-archiving institutional repository software. At the time of its selection for AEI in 2002, EPrints was one of only a small number of repository platforms available. It was selected because of its rich and highly configurable author submission interface and for its easily customizable search interface. The AEI EPrints software is hosted on a server running Sun/Oracle Solaris 10 operated by the University Library System’s Information Systems Department and located in the University’s state of the art Network Operations Center, which provides extensive environmental and security controls, multiply redundant network storage and backups, and 24/7 monitoring and support.

**Future plans for AEI**

While the AEI editorial staff continually strive to add relevant content to the AEI, priority will be given to materials that are not now, or are not soon likely to be available in electronic form on the Internet. The AEI staff are currently in somewhat of a holding pattern because they are not sure of the future digitization plans of the EU itself. The EU has plans to begin digitizing materials from its institutional libraries during the coming year, but there is no information available yet on the extent of this new digitization phase. In light of this, during the last 18-24 months AEI staff have focused on digitizing materials which the EU is least likely to digitize.

In 2011, the AEI will be upgraded to EPrints 3 software, adding many new features, including a simplified author submission interface, RSS feeds, sharing of documents in the Archive on social networking sites such as Twitter and Facebook, enhanced tools for citation exports, and the automatic display of document preview thumbnails from the abstract page.

**Conclusion**

Since its inception eight years ago, the AEI has quickly grown, through partnerships with organizations on several continents and careful collaborative collection-building, to become the largest online repository (except for the EU’s own Web sites) of full text documents on the subject of the EU. The AEI will continue to upload documents which the EU itself probably will not identify and which are especially difficult to access elsewhere. The University Library System, University of Pittsburgh will continue to enhance the AEI and propel its growth in service of its mission to support open access to the wealth of scholarly research information in the AEI for the global research community.

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Notes

1 The other institutions have been: the European Atomic Energy Community (Euratom), founded in 1957; the European Economic Community (EEC), founded in 1957, whose name was changed to the European Community (EC) in 1968 and to the European Union (EU) in 1993. For the sake of clarity, the term EU will be used throughout this essay.

2 European Research Papers Archive [online]. <http://eiop.or.at/erpa/> (consulted on November 1, 2010).


10 EU Bookshop [online]. <http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site> (consulted on November 1, 2010).


14 Information on the distribution of scholarly open access repositories by software platform can be found at the Directory of Open Access Repositories – OpenDOAR [online]. <http://www.opendoar.org/> (consulted on November 1, 2010).