Publisher Perspective on Continuity of Access

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e-Journals are forever?
British Library 26th April 2010
Overview

- Archiving – fundamental of the journal publishing system
- Publisher’s approach to Digital Archiving
- Post Termination policies
- Maintaining the archive
- Open Access
Archiving – a fundamental of the journal

- [We must be] very careful of registering as well the person and time of any new matter... as the matter itselfe; whereby the honor of ye invention will be inviolably preserved to all posterity.
  [Oldenburg, 24 November 1664]

- all Ingenious men will be thereby incouraged to impart their knowledge and discoveryes
  [Oldenburg, 3 December 1664]

- [I should not] neglect the opportunity of having some of my Memoirs preserv’d, by being incorporated into a Collection, that is like to be as lasting as usefull
  [Boyle, 1665]

- [Phil. Trans. should be] licensed under the charter by the Council of the Society, being first reviewed by some of the members of the same.”
  [R.Soc. Order in Council 1/3/1665]
Overarching definitions

1. **Digital archiving** addresses assurances for customers that they will be able to access digital content in the future and for all time. "Digital archiving" is a continuing process; it stands outside of any specific online platform and is not dependent upon any publisher.

2. The **post-termination access policy** for journals on ScienceDirect also provides for access to content both now and in the future but only on the ScienceDirect platform. The ScienceDirect post-termination access policy enables access to content via an online platform provided by Elsevier and is, therefore, publisher-dependent.
Approach to Digital Archiving

- In common with our librarian and research colleagues, publishers take digital archiving seriously.

- Publishers have a responsibility to authors and readers to maintain “the minutes of science.”

- Publishers recognize their importance to the library community and, of course, we have an interest in maintaining a valuable business asset.

- Elsevier has participated in a broad range of actions related to digital archiving — we’ve been involved in discussions, projects and committees since 1995.

- We were among the first (after AIP) to make a public archiving commitment and perhaps the first to incorporate it in our licenses.
Elsevier Four levels of Digital Archive

1. **Internal production archive** - The files stored in our Electronic Warehouse (EW) in Amsterdam, which are routinely backed-up. The EW contains all of the “raw” material to recreate our journals.

2. **Official archive** - A formal, contractual relationship between Elsevier and a trusted archival institution to provide permanent retention and access to the digital files for future generations.

3. **De facto archive** - We have about ten regular ScienceDirect OnSite (SDOS) customers worldwide who have a local archive, but make no archiving commitment beyond their constituency.

4. **Self-designated national archive** - Libraries or other institutions choosing to maintain an archival copy locally, primarily as a national or regional security measure.
Elsevier Public Policy on Archiving

- To maintain the digital archive of the journals it owns and makes available over the ScienceDirect service.

- To maintain, in its internal production archive, the digital files of Elsevier journals in perpetuity, converting them as appropriate if technology used for storage or access changes.

- Permanent availability of these archival files is of critical concern to customers.
  - Therefore Elsevier has deposited this archive with multiple repositories mutually acceptable to Elsevier and an independent board of library advisors.

- Elsevier publishes many journals owned by other publishers (such as scientific societies). To the extent it has the right to do so, Elsevier will include these journals in its ScienceDirect service and will maintain them in its digital archives in the same manner in which it maintains the Elsevier journals.

- In the event of selling or otherwise transferring ownership of an Elsevier journal to another publisher, use reasonable efforts to retain a non-exclusive copy of the digital archive for that title and make it available through the ScienceDirect service to existing subscribers.

- If Elsevier ceases publication of an Elsevier journal, the digital archive for that title will be maintained at Elsevier and made available through the ScienceDirect service.
20 Mainframe computers

Rows of servers

Storage in Petabytes

Water cooling system

Generators

Wet cell batteries (just in case...)
Post-termination Access Policy

- When a customer licenses access to a journal on ScienceDirect, the customer is, in effect, buying the right to access, in perpetuity, the content of that journal for every year for which the customer paid a full electronic subscription.

- In the case of termination there are two access options:
  
  **Option 1. Customers can receive the raw data**, formatted in SGML/XML/PDF allowing them to mount this data locally. The files are provided at the cost of replication.

  **Option 2. Customers can retain access via ScienceDirect.** Chargeable option of a fixed portion and a variable amount calculated on the number of full-text article downloads in the preceding year.

- If a customer cancels individual journal titles but remains a licensed customer of ScienceDirect, then the customer will be able to continue to access the content of the cancelled journal(s) via ScienceDirect for those years for which a full electronic subscription was paid.
Maintaining the Archive

- Publishers have developed archives with third parties around the world to ensure the availability of content for perpetuity.

- Archives become activated in extreme circumstances.

- Elsevier first developed a “dark archive” with Koninklijke Bibliotheek (KB), the National Library of the Netherlands in August 2002. Contains all Elsevier journals.

- In 2005, Elsevier developed a second archive with Portico to supply both journal and e-book content. Portico now works with over 650 libraries and 94 publishers.

- Elsevier has developed a third archiving mechanism with CLOCKSS, who work with over 40 libraries and over 20 publishers.

- Elsevier believes that it is important to maintain these multiple archiving agreements as:
  - The base technology involved in each archive is different.
  - They have a community approach – publishers and libraries working together.
  - Each archive is complementary to one another.

- Fundamentally maintaining these archives is the right thing to do for science.
Open Access

- Elsevier is not opposed to any method to support the goal of achieving universal sustainable access to published research.

- We are open to any mechanism that has the potential to close remaining access gaps while at least maintaining existing levels of:
  - Quality control, Researcher productivity, System-wide costs (i.e. not duplicating), Preservation

- The fundamental element of any mechanism that provides access to scholarly literature is sustainability.

- There have been claims that providing “Open Access” to articles is an answer to maintaining the archive as if all content is available to all, there is no need to have specially created archives.

- The underlying principle is that irrespective of the method by which an article is published there needs to be a mechanism to sustain its archivability and simple online availability does not guarantee this.

- Several publishers who publish under an author pays mechanism are partnering with third party archivers (such as Portico and CLOCKSS) to ensure sustainability.
Closing Remarks

- Maintaining the archive has always been and remains a fundamental of the scholarly communication system

- Publishers have worked to develop policies to ensure the archive of scholarly content covering both digital availability and post-termination access

- A collaborative approach between key stakeholders has led to the development of trusted international archives of scholarly content and these are maintained by several key entities

- Needs to be a continuation of collaborative work between publishers, libraries and government

- Consultation on industry projects – e.g. JISC Project PeCAN

- Emphasis on sustainability irrespective of publishing mechanism – open access is not a substitute for developing and maintaining the archive of scholarly communication.