

# Electronic Theses

## EThOS: the Electronic Theses Online Service

Briefing Paper

January 2007

**Global access to scholarly publications is improving as a result of the growth of institutional repositories and associated IT developments. Statistics indicate that when doctoral theses are made available in electronic format, for Open Access, usage levels of this resource increase significantly. To ensure that UK theses are visible within the increasingly competitive international research environment, and are managed cost-effectively, it is essential that the current arrangements are improved to take advantage of new technologies.**

Across the world, an increasing number of universities are encouraging students to submit theses in electronic format. Some Higher Education Institutions (HEIs) require (in addition to paper copies) electronic versions to be made available for inclusion in institutional repositories, some allow students to submit multimedia-based electronic theses in lieu of paper copies, and some HEIs are digitising older versions of theses in order to make them freely available via the internet.

### e-Theses within Institutional Repositories

Statistics from universities such as Virginia Tech reveal that many of the theses they have made available in their institutional repositories are accessed not only by a very large number of people from educational establishments but also from individuals in industry and the voluntary sector etc. Access figures also indicate that e-theses are consulted by users from a wide range of countries. This high visibility serves as a means of showcasing high quality research, and it is a useful way of attracting sponsorship and potential students.

At present, the vast majority of UK theses are still stored as paper copies and only made available for consultation within university libraries or provided on inter-library loan from the British Library in microfilm or paper format. As a result the resource is currently underused. However, as a result of the recently completed EThOS Project, some HEIs are now making use of the EThOS Toolkit to establish institutional repositories, which include e-theses, and to make the organisational changes that will populate these repositories. This approach promises cost savings to HEIs and improvements in the availability of theses (plus supporting material such as video or databases) in the long term.

In the meantime, many librarians have expressed a strong interest in participating in the Electronic Theses Online Service (EThOS), which is now being developed by the British Library as a likely replacement for the current thesis service.

### The EThOS Central Hub

#### A one-stop shop for UK Theses

EThOS will enable researchers to find, select, access and archive e-theses that have been produced in UK HEIs. An e-thesis may be a contemporary electronic version of a printed thesis, a digitised

version of a thesis that has been scanned and converted, or a 'born digital' thesis that includes multimedia and has no printed equivalent. EThOS will accommodate all of these formats. EThOS will:

- Harvest selected electronically stored material from institutional repositories, ensuring that e-theses in repositories in participating institutions are accessible to EThOS users
- Hold copies of full text e-theses from institutions that want a 'back-up' service in addition to their institutional repository
- Hold copies of full text e-theses from institutions that do not have a repository
- Offer an 'on demand' digitisation service to convert requested paper and microfilmed theses into online versions
- Provide a single web interface, which enables researchers to search for, select and access the full text of electronically stored theses from a database of UK theses
- Provide a financially viable service, on a cost-recovery basis, which is inclusive of all UK HEIs and supports the principle of Open Access to UK thesis material
- Retain all theses submitted to the service on state-of-the-art preservation systems developed for the secure storage of legal deposit material

Some institutions that maintain their own repositories may arrange to have information about their e-theses automatically collected by EThOS. Many will take advantage of EThOS to ensure that full text copies of their theses are held at the British Library: EThOS will provide HEIs with both disaster recovery support (since the British Library can provide replacement versions of e-theses) and the assurance that e-theses held by EThOS are preserved in perpetuity by the British Library.

### The Benefits of EThOS

Making UK theses easily accessible through EThOS, via a single web interface, is beneficial to both the producers and the readers of the research. The service will contribute toward the achievement of:

- A significantly higher level of national and international visibility for UK postgraduate research output
- An enhanced research profile for institutions
- International recognition of the work of individual postgraduate students
- Increased use of the research output (much of which has been publicly funded)
- Equal publicity for text-based theses and those that incorporate multimedia
- Support for the principle of Open Access
- Quicker and easier access of UK theses (regardless of levels of demand for a particular title)
- Access to UK theses at any time
- Access to UK theses from remote locations

## Electronic Theses

ETHOS: the Electronic Theses Online Service

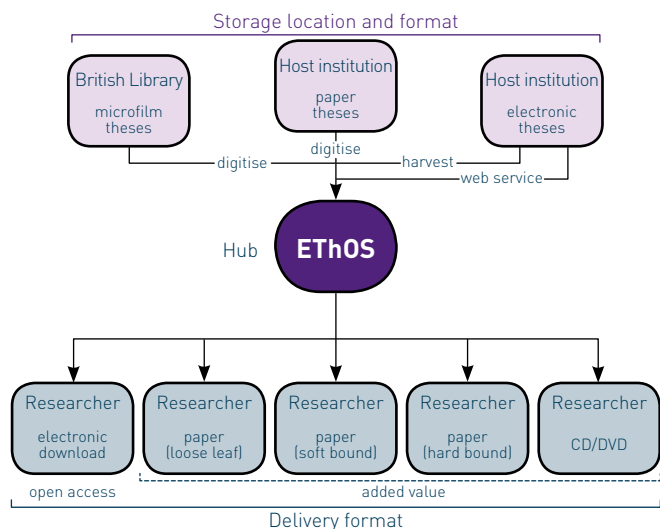


Fig 1. The ETHOS operational model

- The removal over time of manual processing in institutional libraries (the retrieval and re-shelving of theses, photocopying, issuing, inter-library loans administration etc, and associated costs)
- A reduction in calls on the thesis purchasing budget (as more become available on Open Access)
- A reduction in storage space requirements within the library
- The provision of a 'back-up' service, which can supply replacement copies of theses to institutions that encounter problems with their institutional repositories

## The ETHOS Business Model

ETHOS will make e-theses available free at point of use. The large-scale digitisation of paper theses is essential because the vast majority of theses produced over the past 10–15 years are not in electronic format, and this is where the heaviest demand will fall.

- Theses only need to be digitised once – they are then permanently available for free and immediate download
- Large-scale digitisation is only required until the bulk of the theses wanted by researchers are digitised. It is estimated that after 10–15 years the operation will be scaled down
- Digitised theses will be returned to the originating institution for inclusion in their institutional repository
- ETHOS is based on cost recovery – all funds raised will be spent on the service and digitisation of UK theses
- HEIs offering content via ETHOS have a choice of relationship type

Large institutions will be asked to help guarantee the financial viability of the service by making an annual advance payment, for which institutions will receive digitisation of a guaranteed number of its theses including those ordered on demand by researchers. The number of theses digitised will be to the full value of the advance payment figure and the minimum initial commitment will be three years. The fee depends on the JISC band rating of the institution:

- £8,000 per annum for a large institution (bands A, B or C)
- £4,000 per annum for a mid-sized institution (bands D, E or F)
- £2,000 for smaller institutions

(HEIs that wish to pay for the digitisation of individual theses may join ETHOS as associate members.)

## Open Access and IPR

Just as paper theses may have restrictions on their availability, it may not be possible to make all e-theses openly available.

For example, a PhD sponsored by a commercial company may be subject to contractual restrictions. In cases such as this, the institution can use its repository to enforce an appropriate policy, so that ETHOS does not make the e-thesis openly available.

An expert review has been completed of IPR issues as they would affect the ETHOS service. ETHOS will digitise paper theses without asking permission from the primary rights holder (usually the author), unless that rights holder has stated otherwise. This is a pragmatic approach, since retrospectively locating thesis authors is impractical. However, because the benefits of ETHOS accrue mainly to the UK higher education sector, with no profit or other benefit being derived by the service itself, this approach was considered to be most sensible.

## Improvements to Current Arrangements

The current provision of theses in paper and microfilm format is costly to both institutions and the British Library. HEIs spend a considerable amount of money in terms of both storage space and staff time retrieving, issuing and re-shelving hard-copy theses. The British Library operation involves time-consuming work converting paper theses into microfilm. Inter-library loan costs, time delays in providing material to researchers, and the inconvenience of having to use cumbersome microfilm readers discourage users from making full use of UK theses. The inefficiency of the current arrangements has led to a situation that is unsustainable; it is hard to see how the current British Library service can continue in the face of technological developments in other services around the world. The supply of theses in electronic format through institutional repositories and ETHOS will provide a timely and state-of-the-art alternative, which will be of benefit to authors and readers of theses, and to the institutions that host them.

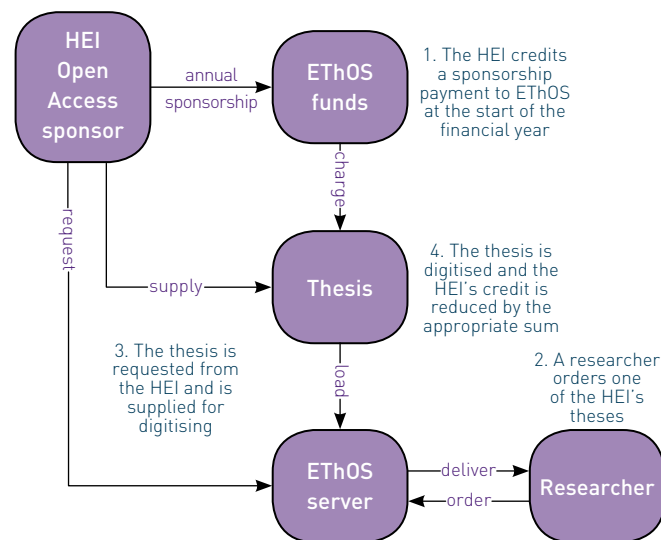


Fig 2. The ETHOS sponsorship model

## Further information and resources

ETHOS Project: [www.ethos.ac.uk](http://www.ethos.ac.uk)

ETHOS Toolkit: <http://ethostoolkit.rgu.ac.uk>

JISC Banding: [www.jisc-collections.ac.uk/help\\_and\\_contact/coll\\_allbanding](http://www.jisc-collections.ac.uk/help_and_contact/coll_allbanding)

Some Facts about Virginia Tech Electronic Theses and Dissertations: <http://scholar.lib.vt.edu/theses/data/somefacts.html>

To find out more about ETHOS, please contact: [info@ethos.ac.uk](mailto:info@ethos.ac.uk)