# DART-Europe: pan-European networking and services

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http://www.ucl.ac.uk/Library http://www.dart-europe.eu

# Introduction

DART-Europe (Digital Access to Research Theses – Europe) is a partnership of European research organisations with a shared interest in the collection, management and dissemination of open access electronic research theses. The partnership was founded in 2005, with the over-arching purpose of

supporting the management, discoverability, re-usability and preservation of Europe's electronic research theses.

DART-Europe's membership primarily consists of consortia and national libraries, although individual Universities are increasingly becoming involved. DART-Europe is both a networking organisation and a service provider: in the latter regard, the partnership maintains the DART-Europe E-theses Portal, which is a discovery and access service for Open Access theses which have been approved for higher degrees in European Universities. The DART partnership has no external funders, and any work carried out in the name of the consortium rests entirely on the willingness of its members to contribute time and other resources: the Portal, for instance, is managed by UCL (University College London) on behalf of the partners. DART-Europe works very closely with LIBER (Ligue des Bibliothèques Européennes de Recherche)<sup>1</sup>, and the Portal carries LIBER's official endorsement. DART-Europe is also the European Working Group of the NDLTD (Networked Digital Library of Dissertations)<sup>2</sup>.

### Managing European collaboration

At the time of writing, DART-Europe has participants in 15 European countries. The cohesion of the DART-Europe consortium is achieved through the principle of partnership. In support of this, a Partnership Agreement<sup>3</sup> has been devised. The Agreement, which every partner is asked to sign, is designed to be 'light-touch'. Signatories agree to support 7 general principles and to help to achieve the aims of DART-Europe: in summary, they are invited to contribute metadata to the DART-Europe Portal, they are invited to contribute resources to support DART-Europe's work, they agree to help DART-Europe to be an effective network for e-thesis information, expertise and resources, and they agree to nominate a representative to serve on the DART-Europe Board. Partnership costs nothing. The intentions behind the Partnership Agreement are to define a shared vision, and to help to create a sense of community, rather than to place any significant resource commitments on the partners.

Every partner is represented on the DART-Europe Board<sup>4</sup>, which governs the work of the consortium, and which meets once or twice a year. The Board is augmented by invited members (representing, for instance, LIBER).

Between meetings, an Executive Group comprising the Board's Co-chairs and the Portal service manager meet more frequently to expedite actions agreed by the Board, to discuss progress, to review new collaboration opportunities, and generally to ensure that the strategic questions which are put before the Board at its meetings are the right ones.

In addition to its partners, DART-Europe has another category of member: contributors. Contributors are organisations which supply metadata to the DART-Europe Portal, but which do not sign the Partnership Agreement. Although not full, decision-making partners, DART-Europe's contributors obviously have a very important role to play in the development of the consortium and its services.

For an unfunded organisation such as DART-Europe, this inclusive structure is a neatly pragmatic solution to the challenges of international cohesion and governance.

### **Open Access electronic theses**

Before looking at DART-Europe's E-theses Portal in more detail, it is probably worth touching quickly on the subject of Open Access e-theses in general. There are several good reasons why authors should be encouraged to make their theses available on an Open Access basis. Theses can contain cuttingedge research, and yet in the print world they are often partially-hidden and difficult to access. OA theses make new research available to researchers in a timely way. Moreover, they help to highlight the work of early-career researchers, as well as acting as a showcase for the quality and currency of the research activities of research groups and universities. In this way they can help to raise the impact of academic institutions, and to stimulate new research income from academic and industrial collaborations. Meanwhile, public visibility helps with the detection of plagiarism, and of course that ease of detection also acts as a deterrent. The electronic model also facilitates the open dissemination of supplementary data, animations, 3D-models and other multimedia to support and enrich the core thesis.

Many examples from UCL's institutional repository help to support the argument that open access theses can raise research impact. Two are mentioned here. The first example, Thomson, Catherine Claire (2003) *Danmarkshistorier: National imagination and novel in late twentieth-century Denmark<sup>5</sup>* has been in the UCL repository for some three years. Since the collection of download statistics began in January 2008, it has been downloaded over 1400 times. A second example is a recent thesis: Wang, H. (2009) *New strategies for low noise, agile PLL frequency synthesis*<sup>6</sup>. It was deposited in June 2009, and has already received over 300 downloads. It is clearly not the case that every repository download translates into a citation in the research literature. However, how many times is the average thesis consulted in hard copy at the University library over a lifetime? Open access

e-theses are much more visible and more frequently accessed than print theses. They can help to showcase the work of researchers and their institutions. Including details of such theses in the DART-Europe Portal helps to increase this exposure.

### The DART-Europe E-theses Portal<sup>7</sup>

The DART Portal provides discovery services for open access research etheses. The Portal collects data from repositories from all over Europe. The content changes daily, but currently stands at over 120,000 theses approved by some 200 different Universities, sourced from repositories in 15 European countries. New records are added daily. The Portal holds metadata about theses, but the full text is always served to the researcher from the originating repository: the Portal's role is to enhance the discoverability of those full texts. Metadata is collected using OAI-PMH, and various standardisation and indexing routines are applied to support services. Simple Dublin Core is used as the data collection format, in order to make participation in the Portal as easy as possible for content-holding Universities and consortia.

The Portal has a simple interface with a single search box. A more advanced, form-filling search is also available. Boolean searching is supported. Results lists present brief details about each thesis - title, author and date of award – and also credit both the University that awarded the thesis, and the contributing organisation. This helps consortial contributors to keep their own identity in the Portal alongside those of their members. Browsing is also offered, by author, awarding University, contributor, country and year of award.

Clicking any title will bring up full details of a thesis. The full records are displayed exactly as they are received by the DART-Europe harvester. Abstracts, keywords and other information are often included; each record always includes at least one http identifier, which provides access to the full text at the source repository.

The Portal has 'marked list' and search history facilities. New records are displayed on the home page in daily and weekly lists, and are available as a RSS feed. The home page has a feedback form, which is surprisingly well used. The content of the Portal is also crawled and indexed by search engines. This adds yet another level of discoverability to the theses whose details are held in the Portal.

It would be difficult to achieve richer services than those which are already in place without either imposing a DART-specific metadata standard on contributors, with which many would not have the time, resources or technical expertise to comply, or greatly escalating the levels of post-aggregation intervention, which the consortium is not in a position to resource. The DART Portal is currently designed to strike a balance between ease of contribution, complexity of maintenance, and helpfulness to users. The aim might be characterised as to do the simple things well.

Usage reports attached to the Portal appear to show healthy patterns of use. It is pleasing to see that usage is steadily increasing, particularly as DART-

Europe does not have a dedicated marketing budget. Many of the users are based in Europe, but the 'top ten countries' for recent months shows a mixture of European and non-European countries (including the US, Mexico and Brazil). A sample of recent feedback shows comments – complimentary! – originating in Thailand, France, Brazil, Germany and Slovakia. Usage and feedback data tend to confirm that the European research covered by the Portal is of worldwide interest, and that DART-Europe's role in disseminating this research is an effective one.

The DART-Europe E-theses Portal benefits the entire research community in a number of ways. It helps to raise the visibility of participating consortia and Universities, and because it is designed with simplicity in mind, it does so at a low cost to those participants. It helps to expose the work of early-career researchers, and to introduce them at the beginning of their academic lives to important issues of open access and copyright. It also helps researchers in general: by aggregating content, DART-Europe provides a single entry point to a large quantity of consistently high-level research in an orderly and easilysearchable format and, because of open access, that research is immediately available in full anywhere in the world.

#### Conclusion

The DART-Europe E-theses Portal is a simple discovery tool, but a useful one. It holds a growing body of content, and is becoming increasingly well-used. The Portal is good for researchers and good for research. However, there is more to DART-Europe than the Portal service. The consortium has an expanding partnership which includes representatives of a growing number of European countries, and it has strong links with LIBER and the NDLTD. DART-Europe is becoming an effective e-theses networking organisation: for instance, the partners will be holding an e-theses Master Class as part of the 2010 LIBER Annual General Conference<sup>8</sup>. Within the consortium there is a wealth of experience and expertise in the field of electronic theses and DART-Europe, supported by a practical and inclusive organisational structure, is well placed to harness some of these interests for the benefit of all European Universities.

#### References

- <sup>1</sup> LIBER: http://www.libereurope.eu/
- <sup>2</sup> NDLTD: http://www.ndltd.org/
- <sup>3</sup> DART-Europe Partnership Agreement:
- http://www.dart-europe.eu/About/documents/docs.php
- <sup>4</sup> DART-Europe Board: http://www.dart-europe.eu/About/contacts/board.php
- <sup>5</sup> http://eprints.ucl.ac.uk/1940
- <sup>6</sup> http://eprints.ucl.ac.uk/15830
- <sup>7</sup> DART-Europe E-theses Portal: http://www.dart-europe.eu
- <sup>8</sup> LIBER 2010 Annual General Conference: http://www.libereurope.eu/node/434