

# Technology Watch Reports: Call for Proposals

## 1. Introduction

The DPC invites proposals to undertake a number of short desk-based research projects and on that basis draft and deliver a set of 'Technology Watch Reports' for the Coalition, for completion by December 2011.

## 2. Project Background

**The Digital Preservation Coalition (DPC)** is a not-for profit membership organisation whose primary objective is to raise awareness of the importance of the preservation of digital material and the attendant strategic, cultural and technological issues. Its vision is to **make our digital memory accessible tomorrow**.

The DPC is currently operating a three year Strategic Plan for completion in December 2011. This plan identified key tasks and initiatives for the DPC within 5 core areas of work:

- Leadership, influencing and effective collaboration
- Sharing and disseminating knowledge
- Enriching our members' experience
- Empowering and developing our members' workforces
- Assuring the sustainability and effectiveness of the Coalition

## 3. Our values: the measure of our publications

The Strategic Plan called for a continuation of the DPC's successful 'Technology Watch Report' series (<http://www.dpconline.org/advice/technology-watch-reports>) and it articulated the values which underpin all of the DPC's activities. In everything we do, the DPC will:

- Operate as a neutral body
- Embrace a consultative, innovative and open approach.
- Engage in a collaborative manner with all stakeholders to comprehend and respond to their needs.
- Maintain sound stewardship of the Coalition's resources.
- Share best practice and knowledge transfer with our members to support their local priorities.
- Maintain vendor neutrality.
- Support developments of standards and generic approaches to digital preservation.

To ensure this happens, all publications that emanate from the DPC or which carry DPC endorsement must:

- Be informed, current, concise and balanced
- Lower the barriers to participation in digital preservation
- Be derived from the needs of the membership and deliver benefit to members
- Be consistent with the mission of the Coalition
- Be of utility to non-members
- Have explicit quality criteria and impact measures

## 4. About DPC Technology Watch Reports

The Technology Watch Report series was established in 2002 and has been one of the Coalition's most enduring contributions to the wider digital preservation community. They exist to provide authoritative support and foresight to those engaged with digital preservation or having to tackle digital preservation problems for the first time. These publications support members work forces, they identify disseminate and discuss best practice and they lower the barriers to participation in digital preservation.

Each 'Technology Watch Report' analyses a particular topic pertinent to digital preservation and presents an evaluation of workable solutions, a review the potential of emerging solutions and posits solutions that might be appropriate for different contexts. The reports are written by leaders-in-the-field and are peer-reviewed

prior to publication. Each report includes a 'key message' précis of not more than 50 words and explicitly identifies its target audience.

The reports are intended to have a wide readership, including members and non-members of the coalition; staff of commercial and public agencies; repository managers, librarians and archivists charged with long term support of digital data; principal officers of public authorities that are required to retain digital data; chief information officers of IPO in the public and private sector; those who teach and train information scientists; policy advisors requiring an advanced introduction to specific DP issues and researchers developing DP solutions. The intended audience is worldwide English-speaking community. Principal audiences are in the UK, Europe, Australia New Zealand, USA, Canada.

The DPC Executive Director is responsible for directing the work and setting the topics. Authors are responsible for research prior to publication and for managing them to completion. Peer review, copy editing, design and dissemination are managed by the DPC but are outsourced.

The reports are delivered on the DPC website and extracts emailed to members who are invited to comment on a pre-release draft of the report. Finished texts are delivered as PDFs and are generally printed out for use: but the implementation of a new web site in December 2009 means new forms of delivery will be considered.

These reports will not be actively updated. While it is recognised that they will be superseded by developments, they are intended to have a currency of at least three years, and are expected to remain current for five or more years. If reports are revised they will be published as new editions.

## 5. Context of this Call for Proposals

In 2009 the DPC decided to increase the frequency of output from a target of 2 per year to a target of 3 per year. Hitherto, these have been managed as 'one off' contracts, but the long lead time and the time consuming process of agreeing content means that the Coalition would like to change how they are developed. From now on, the reports will be the outputs of brief, desk based research projects funded as a grant awarded to a principal investigator, who may in turn lead a consortium of authors. This should reduce the administrative overhead for the Coalition while preserving the quality and integrity of the reports.

The current configuration and programme of the reports have been subjected to wide consultation among DPC members and with other agencies active in this field. The programme also includes an assumption that the DPC will link the publication to specialist invitational events – either to launch the report or to provide a discursive briefing which can inform the writing of the report.

## 6. Objectives and Deliverables

The Call for Proposals asks that researcher undertake desk-based research and then deliver between five and nine Technology Watch Reports themed around the topics listed below. The precise timetable will be subject to negotiation but the process should be close to completion by December 2011. Each report will be at least 12 pages and no more than 30 pages long including all appendices and bibliography and titled page A4, 10pt, equivalent comprising approximately between 6,000-10,000 words plus references, a glossary of terms and acronyms, and any appendices.

Proposals should commit to providing reports for between five and nine of the topics listed below. These topics have been subject of wide consultation and are not subject to change: but nor have they been specified in more detail.

Title	Notes
'Web Archiving'	Event held July 2009, report and detailed brief available

'Trust in Post Cancellation Access Services'	Event held April 2010, outline brief available
'Preserving Computer Aided Design'	Event held July 2010, not yet commissioned
'Preserving Email'	Event scheduled for Q2 2011
'Significant properties'	Event scheduled for Q1 2011
'Preserving and Conserving Digital Art'	Event scheduled for Q1 2011
'Preserving Moving Pictures and Sound'	Event scheduled for Q2 2011
Intellectual Property Rights for Preservation	Event scheduled for Q3 2011
Digital Forensics and Preservation	Event scheduled for Q4 2011

## 7. Approach

The DPC is a small organisation and will progress this project by offering a grant to undertake and communicate the findings of research. The researcher will be selected through dialogue based on a call for proposals. Researchers must be familiar with the DPC and with current issues in digital preservation and have a clear track record or high quality and accessible publications. We will supply a guidance document on DPC publications and agree a more detailed project initiation document for each report with section headings and issues to be addressed. An example Project Initiation Document is attached (appendix one).

## 8. Inclusions

The following are expected for each report in turn:

- a. Discuss and agree project initiation document with DPC for each report
- b. Attendance and participation at the DPC event associated with the report
- c. Appropriate desk based research, discussion with peers and literature review
- d. Drafting report to standards outlined in DPC 'Guidelines for Authors'
- e. Revisions to report based as requested by anonymous peer reviewers
- f. Spelling, citation and other simple quality checks
- g. Provision or clearance of any images or diagrams
- h. Provision of acknowledgements and confirmation of originality
- i. Provision of preview copy supplied as a Word Document with contents as agreed
- j. Provision of finished copy updated as appropriate in the light of member review comments
- k. Optional presentation of the report at an invitational launch seminar
- l. A perpetual non exclusive licence to distribute the report

In the case of a consortium, the Principal Investigator will be required to make and co-ordinate arrangements with partners.

## 9. Exclusions

- m. Deviation from the topics agreed
- n. Copyediting and proofreading
- o. Design, layout or printing
- p. Arrangement of peer review
- q. Restrictions on how and when to present the report outside of the DPC
- r. Requiring the DPC to co-ordinate partnerships

## 10. Constraints and assumptions

**Time Constraints:** The project will be effective immediately expire on 31<sup>st</sup> December 2011 though there is scope for the project to be completed after that date provided deadlines are agreed in advance. Progress will be reviewed throughout. The researcher in receipt of the grant may be invited to compete for a new grant to write technology watch reports starting on January 2012.

**Financial Constraints:** the total grant available is £30,000 inclusive of taxes and all other costs.

The grant will be released in chunks upon completion of satisfactory progress against each report. For each report, half will be paid on receipt of the first complete draft and half on release of the final copy. In unusual circumstances out of pocket expenses such as travel expenses will be provided.

**Facilities:** the researcher is expected to provide whatever facilities and equipment that may be required.

**Other Constraints:** The DPC may after appointing peer reviewers, invitational events or releasing to members as a preview, make specific requests for changes to the content or structure of the report. The researcher shall be free to publish papers or give presentations based on their desk based research and to use contents from their report in any other publication or venue provided the DPC is appropriately credited. Researchers are encouraged but not required to provide the DPC with any ancillary data sets or notes that are relevant and which could be published alongside the finished report. The DPC will encourage members to provide comments and feedback about the report and may publish these alongside the report.

**Quality measures:** approval of peer reviewers, extensibility of topic, reference to previous work, clarity of expression, conformance with house style, conformance with design principles, citation in other works, volume and substance of comments received in preview and post release, number of reports completed.

**Value:** The DPC seeks to ensure the quality of each finished report while maximising the breadth of topics covered and delivering value for money. Proposals will need to show how they have balanced these three requirements.

## 11. How to respond to this invitation to tender

Questions should be addressed to William Kilbride, DPC by email: [william@dpconline.org](mailto:william@dpconline.org).

Applications are sought from experienced and capable researchers. Submissions (not more than 10 pages A4 in 10pt, preferably as PDF) should be lodged with William Kilbride of the DPC by email to [info@dpconline.org](mailto:info@dpconline.org) by **1700 on Fri 7<sup>th</sup> January 2011**. Late submissions will only be accepted by prior agreement. The application should include the following headings

- Introduction and Executive Summary
- CV of lead researcher (indicating similar projects and relevance of experience)\*
- Brief biographies of any other researchers involved
- Preliminary Project Plan including provisional assignments of topics to authors
- Assumptions from the researcher
- Preliminary Risk Assessment
- Project Budget Breakdown
- Names and addresses of at least two independent referees\*

*\*Not required for existing members of the coalition*

## 12. About this document

Version 1	Document updated based on previous release	23/11/2010	WK
Version 2	Proof check	25/11/2010	CJ
Version 3	Draft discussed and approved by DPC Board	01/12/2010	DPC Board
Version 4	Updated after Board discussion and released	09/12/2010	WK

# Technology Watch Report: Example Author Brief (Web Archiving)

## 1. Introduction

This document outlines the contents and context of a report which will form part of the DPC's Technology Watch Report series and which will discuss the thematic topic of the preservation of web-based resources. The DPC seeks to commission this report from [firstname lastname] of [name of institution and address]. The purpose of this document is to frame the contents of the report and in this way act as a project initiation document. The resulting report should conform the relevant sections of the DPC publication plan and the DPC Notes for Authors Reviewers and Editors which will be supplied, and be subject to a contract or exchange of letters (yet to be agreed).

As a general guide, the purpose of the Technology Watch Report series is to provide thematic authoritative support and foresight to those engaged with digital preservation or having to tackle digital preservation problems for the first time. To ensure this the report should:

- Be informed, current, concise and balanced.
- Lower the barriers to participation in digital preservation.
- Be derived from the needs of the membership and deliver benefit to members.
- Be consistent with the mission of the Coalition.
- Be of utility to non-members.
- Have explicit quality criteria and impact measures.

## 2. Scope of this report

This report will provide a guide to current developments, practical and emerging issues which organisations are facing in preserving web based resources. Chapters and contents will be as follow:

**Executive Summary:** A one page précis of the report is required, including concise recommendations

**Audience and key message:** The report should open with a description of the intended audience and key message of the report. The key message should be not more than fifty words.

**Background:** The report will provide basic background information to the subject outlining the issues relevant to a wide range of organisations e.g. HE sector, national libraries vis-à-vis legal deposit, e-Science community etc. A brief historical introduction to the field should be included to introduce the 'problem', the key players who have contributed to emerging solutions. Efforts should be made in this section to introduce key terminology, to define terms that might be ambiguous and to introduce acronyms which will be used later in the report.

**Issues:** The report should concentrate on technology issues described below, but reference should be made to current areas and gaps in policy development

- Collecting policies
- Legal deposit and copyright restrictions
- Take down policies
- Use cases and user requirements
- International and local collaboration

**Standards:** The report should include description of specific standards (such as metadata standards, file formats and such) that are relevant to preserving web resources. This could be offered as a separate section of the report or be included in the main text.

**Technology:** The main thrust of the report is an analytical description of current tools and techniques, with a focus on preservation within the workflow of web archiving. Specific issues to be covered might include, though not an exhaustive list, some of the following:

- Analytical description and comparison of different tools for harvesting such as PANDAS, Web Curator and Heritrix
- Comparison of file formats generated by different tools (eg ARC versus WARC)
- Description of gaps where automation might help but tools are either not available yet or where existing tools need to be integrated more effectively
- A description of digital preservation challenges resulting from a web harvest and how these are currently being addressed by practitioners
- A gap analysis of preservation activities and commentary on how these gaps might be filled
- Discussion of emerging technologies such as Memento and their impact on web archiving

**Current Activities and Case Studies:** The report should be illustrated with examples and case studies. The author is encouraged to seek examples of good practice internationally, commensurate with the readership of the report. Outcomes of previous research projects as well as emerging or planned services may be presented.

**Recommendations:** The report should conclude with recommendations for the digital preservation community, and a clear indication of the agencies or individuals that are required to take up these recommendations. They should be recommendations for specific actions not generalised aspirations. The recommendations should be re-iterated in the Executive Summary.

**Glossary:** A list of non-standard acronyms, abbreviations, and vocabulary should be included. Care should be taken in the text to clarify technical terms which may be ambiguous. Jargon should be avoided as is the use of common vocabulary in non-standard ways.

**Further reading:** The report should include an annotated bibliography of useful resources and publications for readers who require more detail or who require advice on topics tangential to the main thrust of the report.

**References:** Bibliographic references should be presented in Harvard format. See the Notes for Authors for more guidance.

**Appendices:** appendices may be included if required, such as lists of service providers or sources of additional advice.

### 3. Deliverables from this project

The report will be at least 12 pages and no more than 30 pages long including all appendices and bibliography and titled page A4, 10pt, equivalent comprising approximately between 6,000-10,000 words plus references, a glossary of terms and acronyms, and any appendices

The Report will be subject to editorial and anonymous peer review by the DPC. The Report should be of publishable quality with all tables, diagrams and text delivered in digital format suitable for transfer to a web site. Drafts should be available in word format to enable peer review comments. Detailed advice on style and presentation are provided in the accompanying 'Notes for Authors Reviewers and Editors'.

The report should contain material of substance, which is not merely a compilation of available materials. The contents should be of relevance to the activities of the DPC, of scientific and or technical merit, and timely. It should not contain unwarranted assertions. Any assertions about technology developments or impacts should be based on evidence, independent analyses or sound reasoning.

### 4. General Template

As far as appropriate the report should conform to the structure of existing DPC Technology Watch Reports. These are online at: <http://www.dpconline.org/graphics/reports/index.html#techwatch>. Although each report is different, there is a clear benefit to readers in having a familiar layout and style of presentation. As a general rule, DPC Technology Watch Reports are structured around the following template:

- Title and author details
- Executive Summary - a succinct presentation of the main findings of the report of no more than one page
- Key words - up to six key words
- The technology, standards and tools - a description in general terms describing
  - what they do
  - how they are used
  - the scope of the report
  - links to other technologies, standards and tools where appropriate
- The Technology Watch Issue - a succinct statement of why the topic should be considered at this time
- Products - a technical overview of the current technology, standards and tools
- Developments - an analysis of current and likely developments in the technology, standards and tools, and in products which will be available
- Assessment - a reasoned assessment as applicable of the current or potential:
  - applications
  - benefits
  - limitations
  - risks (e.g. to development and application)
  - resource implications (e.g. scalability or staff skills)
  - timescales (e.g. for development)
- Glossary - including all acronyms used and technical terms
- References - to include published literature web sites including product and demonstration sites projects using or developing technologies

## 5. Timetable

A draft timetable for the Author and DPC is as follows:

- Finalise topic and themes
- Begin desk based research
- Submission of draft report to William Kilbride (WK) by 14 days later
- Completion of editorial and peer review by DPC and returned to Author (14 days later)
- Submission of final report incorporating agreed changes to WK (14 days later)
- Preview release to DPC members ( 1 day later)
- Publication after final design and copy editing and optional launch event (28 days after preview released)