

# EC Science Policy Consultation September 2011: A response from the DPC

## 1. About us

The Digital Preservation Coalition (DPC) is an advocate and catalyst for digital preservation, ensuring our members can deliver resilient long term access to digital content and services. We are a not-for-profit membership organisation and our primary objective is to raise awareness of the importance of the preservation of digital material and the attendant strategic, cultural and technological issues. We support our members through knowledge exchange, capacity building, assurance, advocacy and partnership. We draw our members from the UK and Ireland and have series of alliances with organisations across the world. Our vision is to make our digital memory accessible tomorrow.

## 2. The Role of the EU in access and preservation of scientific information

You asked, '...in what specific areas can and should the European Union best contribute to improving the circulation of knowledge and specifically access to and preservation of scientific information (including both publication and data)?'

- Policy formulation at European Level on access and preservation
- Co-ordinating existing initiatives at member state level
- Supporting the development of a European network of repositories
- Encourage universities, libraries, funding bodies etc to implement specific actions

The DPC believes that preservation has a particular importance for scientific information because meaningful innovation is necessarily responsive previous generations of research. In that sense, preservation of appropriate research outputs is essential to all sciences, especially for unrepeatable experiments or unique moments of discovery. Aspirations about access to information are meaningless without commensurate actions that to ensure preservation.

We have no specific view on the role that the EU should play vis-à-vis national or local agencies though we welcome all actions that will encourage a dialogue between and within member states to ensure the preservation of scientific information and we call on the EU to engage in that dialogue as a matter of urgency, using existing examples of best practice to help build capacity. We have encouraged our members to respond directly to present their own view on the role that the EU should play in achieving this.

## 3. Access and Preservation of Scientific Publications

3.1 You asked, 'Do you agree with the statement "there is no problem with access to scientific publications in Europe"?'

No. The DPC believes that there is no meaningful access without preservation. Research has shown that scientific publishers, scientists and memory institutions lack confidence and capacity to preserve publications (see Sharpe and Waller 2006, 31, Boyle et al 2008, 5, Angevaere 2009, 17, van der Hoeven 2009, 16). This creates a significant problem for access.

3.2 and 3.3 You asked, 'How would you rate the importance of the following potential barriers to access to scientific publications?'

- Insufficient national/regional strategies/policies on access to scientific publications
- High prices of articles/journal subscriptions
- Limited or reduced library budgets
- Different VAT rates for online media and printed material
- Lack of awareness and interest within the research community on access and open access
- No incentive system in place encouraging and rewarding practices that enhance access

We note that the list of barriers does not include long term risks such as obsolescence, lack of documentation, and lack of preservation infrastructure. Continuity of access is also a financial question and that access is therefore dependent on a sustainable business model for preservation. Consequently we call for rapid innovation of technical and policy infrastructure to address these challenges.

3.4 You asked, 'Do you think that publications resulting from publicly funded research should as a matter of principle be available free of charge to readers on the Internet (ie open access)?'

The DPC has no specific view on this question which is outside of our terms of reference. However we have encouraged members to respond directly with views of their own.

3.5 You asked, 'Do you think that open access can increase access to and dissemination of scientific publications?'

We note that meaningful access and dissemination is only possible where the relevant preservation infrastructure and policy exist. Consequently any efforts to increase access or dissemination will require careful and rapid deployment of preservation policies and services.

3.6 You asked, 'Do you think that open access to scientific publications can co-exist with the traditional scientific publication system?'

The DPC has no specific view on this question which is outside of our terms of reference. However we have encouraged members to respond directly with views of their own.

3.7 and 3.8 You asked, 'Which of the following different modes should public research policy facilitate in order to increase the number and share of scientific publications available in open access?'

- Open access publishing (author pays model - gold open access)
- Self-archiving (green open access)
- a combination of self-archiving and open access publishing
- funded conversion of traditional subscription based journals and open access journals

We have no specific view but would base our judgement on an assessment as to which is most likely to be sustainable in the medium or long term. Public research policy should have a presumption in favour of enduring access – however that is delivered – and should discourage developments which have not made appropriate provision for the long term.

3.9 and 3.10 You asked, 'In the case of self-archiving what embargo period ... is desirable?'

We recognise that embargos are sometimes useful to incentivise research and to ensure that data and analyses are robust. However the sloppy imposition of an embargo can create unnecessary preservation risks. Embargos should not prevent reasonable interventions for preservation.

#### 4. Access and preservation of research data

4.1 You asked, 'Do you agree with the following statement: "Generally speaking there is no access problem to research data in Europe"? '

No. The DPC believes that there is no meaningful access without preservation. Research has shown that scientific publishers, scientists and memory institutions lack confidence and capacity to preserve scientific data sets (see Sharpe and Waller 2006, 31, Boyle et al 2008, 5, Angevaere 2009, 17, van der Hoeven 2009, 16). This creates a significant problem for access.

4.2 and 4.3 You asked, 'how would you rate the importance of the following potential barriers to enhancing access to research data?'

- Insufficient national/regional strategies/policies on access to research data
- lack of funding to develop and maintain the necessary data infrastructure
- Insufficient credit given to researcher making research data available / lack of incentives
- Lack of mandates to deposit research data
- Lack of data management requirements in research projects
- confidentiality and privacy issues

We note that the list of barriers does not include long term risks such as obsolescence, lack of documentation, and lack of preservation infrastructure. Continuity of access is also a financial question and that access is therefore dependent on a sustainable business model for preservation. Consequently we call for rapid innovation of technical and policy infrastructure to address these challenges.

4.4 and 4.5 You asked, 'Do you think that research data that is publicly available and that results from PUBLIC funds should as a matter of principle be available for re-use and free of charge on the Internet?'

The DPC has no specific view on this question which is outside of our terms of reference. However we have encouraged members to respond directly with views of their own.

4.6 and 4.7 You asked, 'Do you think that research data that is publicly available and that results from partly public and partly private funding should, as a matter of principle, be available for re-use and free of charge on the Internet?'

The DPC has no specific view on this question which is outside of our terms of reference. However we have encouraged members to respond directly with views of their own.

## 5. Preservation of Scientific Information

5.1 You asked, 'Do you agree with the following statement, "Generally speaking, the issue of preservation of scientific information is at present sufficiently addressed"?''

No we do not agree. In our view there are three areas pertaining to preservation which need urgent access if we are to obtain enduring impact from scientific data sets: technology, organisation and capacity. The technology challenge is best understood as the need to develop tools for preservation – a challenge that continues to change and grow in scale and complexity as the scale, complexity and importance of scientific information expands. The organisational challenge is best understood as a need to develop coherent and easily implemented organisational and operational structures to enable and broaden the deployment of preservation tools to ensure the continuing value and impact of data. The capacity challenge is best understood as the need to extend resources – human, infrastructural and financial – to ensure that preservation policies and technologies are deployed effectively. The scope and nature of these three challenges have been delineated by a number of research projects in the last decade. Although progress can be demonstrated, the challenges remain.

5.2 and 5.3 You asked, 'Do you agree with the following statements regarding potential barriers to enhancing preservation of scientific information in the digital age?'

- It is not always clear which scientific information should be preserved
- It is not always clear who is responsible for preserving scientific information (research organisations, libraries, governments?)
- There is no harmonised approach to legal deposit
- Funding for preservation is inadequate
- The quality of interoperability of repositories needs to be further developed

We believe that each of these statements is true and that action is required on each of them to lower the barriers for preservation and long term access to scientific data. Although each is important, the European Union's ability to influence them is not uniform. The Union is particularly well placed to address challenges that are cross disciplinary and cross border in nature, especially making clear where responsibility lies for preservation, approaches to legal deposit, and funding for preservation. In addition, we believe there are other barriers which the European Union is particularly well placed to address such as the inadequate distribution of capacity – an issue which might be addressed by enhancing the mobility of expertise.

## 6. Preservation, Research and Impact

6.1 You asked for any further feedback

We would like to finish our contribution by re-iterating the wider social and economic potential of a preservation infrastructure for scientific information. Scientific data is valuable because of the cultural, social and economic outcomes that research and innovation can deliver. Those outcomes are tangible. Directly and indirectly they are vital to the realisation of healthier, wealthier, safer, greener and smarter communities and citizens. But access to scientific data is not guaranteed without appropriate preservation infrastructure: scientific research is hampered and the benefits of research are delayed or deferred. Robust preservation infrastructures which ensure dependable access will therefore enable more efficient and better-supported research, and facilitate more rapid and more economical return on scientific investment.

## 7. References

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