



EUROPEAN COMMISSION  
RESEARCH DIRECTORATE-GENERAL

Directorate L - Science, economy and society

Brussels, 9 June 2009 (final version)

**QUESTIONNAIRE TO CREST MEMBERS AND OBSERVERS - SUMMARY OF RESPONSES  
FOLLOW-UP OF THE COUNCIL CONCLUSIONS ON SCIENTIFIC INFORMATION IN THE  
DIGITAL AGE: ACCESS, DISSEMINATION AND PRESERVATION (22-23 NOVEMBER 2007,  
14865/07)**

**TABLE OF CONTENTS**

<b>I. EXECUTIVE SUMMARY AND SUGGESTED STEPS FORWARD .....</b>	<b>2</b>
<b>II. BACKGROUND .....</b>	<b>3</b>
<b>III. QUESTIONNAIRE OBJECTIVES .....</b>	<b>4</b>
<b>IV. OVERALL RESPONSE TO THE QUESTIONNAIRE .....</b>	<b>5</b>
<b>V. NATIONAL STRATEGIES FOR ACCESS TO AND DISSEMINATION OF SCIENTIFIC INFORMATION (QUESTIONNAIRE SECTION B).....</b>	<b>5</b>
<b>VI. COORDINATION OF ACCESS AND DISSEMINATION POLICIES AND PRACTICES (QUESTIONNAIRE SECTION C).....</b>	<b>14</b>
<b>VII. LONG TERM PRESERVATION (QUESTIONNAIRE SECTION D) .....</b>	<b>17</b>
<b>VIII. ROLE OF THE EUROPEAN COMMISSION (QUESTIONNAIRE SECTION E) .....</b>	<b>19</b>
<b>IX. ANNEX: NATIONAL AND EUROPEAN INITIATIVES .....</b>	<b>21</b>

## I. EXECUTIVE SUMMARY AND SUGGESTED STEPS FORWARD

The Commission received 30 responses to the questionnaire on scientific information in the digital age, 25 from CREST members (EU Member States) and 5 from CREST observers. The responses provide informative details on ongoing initiatives in the Member States. Overall, it is encouraging to see how many valuable activities are underway in the Member States. There is now a need to capitalise on these existing activities in order to move towards convincing and robust national and European strategies on access, dissemination and preservation in the digital age.

**National strategies on access and dissemination:** Member States are increasingly attentive to the issues of access to and dissemination of digital scientific information. **The growing number of national initiatives in this field shows a clear and encouraging move towards the development of policies in these areas.** And yet, while many countries feature important activities coordinated by funding bodies, universities and/or libraries, to date **there are very few of the nationally coordinated strategies or policies called for in the 2007 Council Conclusions** on scientific information in the digital age: access, dissemination and preservation. Policies on open access to research data are less developed than policies on open access to peer-reviewed publications, and researchers are not yet sufficiently aware that open access is not necessarily in conflict with publishers' copyright provisions. Investment in the dissemination of scientific information as a percentage of investment in research is estimated between 1% and 10%. In many countries, digital subscription currently carries a considerably higher Value Added Tax (VAT) than paper subscription; some countries have addressed this issue through the financial mechanism of reimbursement of VAT to libraries. Work on setting up institutional and other types of repositories has progressed well, even if much work remains to be done. Stakeholder activities are well-developed, but mostly informal in nature.

**Coordination activities on access and dissemination:** Different types of coordination activities exist, in particular declarations and position papers, coordination initiatives supported by European funding, and coordination initiatives supported by national or other sources of funding. Important declarations include the Berlin Declaration, and position papers by the European Heads of Research Councils (EUROHORCS) and the European University Association (EUA). A noteworthy coordination initiative funded at national level is the Knowledge Exchange, including Danish, Dutch, German and UK-based organisations. **While existing declarations and initiatives form a solid basis to build on, explicit common national funding body principles, for example on open access, are still missing.** A number of international organisations such as the International Coalition of Library Consortia focus on negotiating big deals with publishers, and CERN is creating an innovative and transparent Sponsoring Consortium for Open Access Publishing in Particle Physics (SCOAP<sup>3</sup>). Despite these advances, **transparency regarding most big deals is still lacking.** Finally, **significant coordination initiatives are underway regarding the interoperability of repositories,** in particular via the European project DRIVER (Digital Repository Infrastructure Vision for European Research). Regarding preservation, the work of the Alliance for Permanent Access is crucial at European level.

**Long-term preservation:** While many of the responding countries have put in place strategies regarding digital preservation of cultural heritage in general, **specific attention to the preservation of scientific information needs to be further developed within most existing national policies and legislative frameworks.** Some countries have

developed high level strategies, but they have not yet been put into practice convincingly and researchers are not yet sufficiently aware of preservation as a key issue in this area. More awareness is needed regarding the preservation of scientific information articles and data in order to prevent a serious loss of scientific information in the long term.

**Role of the European Commission:** Respondents generally expressed support for European Commission activities regarding access to, and dissemination and preservation of digital scientific information. They welcomed future activities, for example encouraging coordination and cooperation of Member State policies, and supporting further development of a pan-European e-Infrastructure.

### **Suggested follow-up actions for Member States**

In the light of the above, three main follow-up actions are suggested (corresponding to the three areas for action referred to in the 2007 Council Conclusions):

- (1) **Formulate clear and coherent national strategies on access and dissemination:** Where not yet the case, Member States should formulate national strategies on access and dissemination by building on existing initiatives initiated by other actors. Ideally, these should address open access, copyright, investment in the dissemination of research results, VAT rates for digital subscriptions, repository and interoperability issues, and the inclusion of stakeholders. The development of clear national strategies will facilitate European policy coordination.
- (2) **Enhance Member State coordination of policies on access and dissemination:** Member States should build on existing coordination initiatives to further enhance the coordination of policies and practices on access and dissemination. Issues to address are open access, improving the transparency of big deals and negotiating contractual arrangements ensuring open access (versus only access for a limited group of users), and further work towards implementing trans-border interoperability of repositories. The European Commission can assist Member State coordination through support actions.
- (3) **Member States should ensure that the specificities of scientific information are taken into account within existing national preservation strategies.** In particular, this means addressing the needs of the scientific community and the functioning of the science and research system. Moreover, Member States should invest in raising researchers' awareness of the importance of preserving scientific information

## **II. BACKGROUND**

Efficient and reliable access to scientific information is crucial for the advancement of science and provides the means for researchers to share, build upon and re-use research results, thus avoiding duplication of effort and resources. The preservation of scientific information is equally important in order to ensure the important scientific information can be retrieved and used in the long-term. The advent of the internet and the emergence of electronic publishing have provided unprecedented possibilities for digital access to and preservation of scientific information. However, there is a perception among the scientific community at large that these opportunities are not being sufficiently exploited. On the question of access, it is felt that, despite the digital revolution, high and rising

scientific journal subscription prices are providing a barrier for effective knowledge sharing.

Consequently, over the past years, researchers have been calling for "open access" to the research results produced from public funding, i.e. free of charge access via the internet. At the same time, scientific publishers underline that publishing has a high cost, and that introducing open access without thinking through the consequences may jeopardise the functioning of the current scientific system. It is in this context that many public funding bodies, including the European Commission, have been investigating ways to improve better access to the research they funds.

The European Commission began to examine the scientific publishing market from a research policy perspective in 2006 with the publication of the "Study on the economic and technical evolution of the scientific markets in Europe". This study led to a debate at European level on how to improve the current European science system in terms of access to and dissemination of scientific information. The question of long term preservation of scientific information was first addressed in 2006 in Commission Recommendations and Council Conclusions on online accessibility to cultural material and digital preservation. In February 2007, the Commission adopted a Communication on scientific information in the digital age: access, dissemination and preservation (COM(2007)56). This document launched a European level policy process on access, dissemination and preservation issues, and announces a series of Commission measures, including experimentation with open access, funding of e-infrastructures, and promoting dialogue with stakeholders.

On this basis, on 23 November 2007 the 2832<sup>nd</sup> Competitiveness Council adopted Conclusions on scientific information in the digital age: access, dissemination and preservation (14865/07). These Conclusions invite Member States to reinforce and coordinate relevant national strategies, and ask the Commission to monitor good practices and support Member State policy coordination. The Conclusions introduces a timeline with specific actions to be taken between 2008 and 2010.

### **III. QUESTIONNAIRE OBJECTIVES**

Within the context described above, on 5 December 2008, the Commission presented a questionnaire to CREST members and observers following up on the implementation of the 2007 Council Conclusions. The objectives attached to this questionnaire are:

- to take stock of the current status of implementation by Member States and suggest follow-up actions at Member State level,
- to design future actions at European level supporting the coordination of Member State initiatives,
- to gain important input for the future development of a policy on access and dissemination in the 8<sup>th</sup> Framework Programme, and
- to contribute towards the policy process on the creation of the "fifth freedom" (free movement of knowledge) in the European Research Area (ERA).

Results of the questionnaire, as well as of its forthcoming discussion at the CREST meeting on 12 June 2009, will be presented and discussed among stakeholders during the European Research Area (ERA) conference "Working together to strengthen European

research" to be held on 22-23 October 2009 in Brussels. They will also feed into the work of the CREST Working Group on Knowledge Transfer.

The following summary of responses to the CREST questionnaire first gives a general overview of the responses received (III.), then discusses each of the main sections of the questionnaire (IV. national strategies for access and dissemination, V. coordination of access and dissemination policies and practices, IV. long term preservation, VII. role of the European Commission), and finally draws some conclusions and suggests possible ways forward (VIII.). The annex to this paper lists selected further information resources indicated by the respondents (IX.).

#### IV. OVERALL RESPONSE TO THE QUESTIONNAIRE

Responses were received from 30 CREST members and observers (out of 38):

- 25 responses from CREST members (EU Member States): Austria (AT), Belgium (BE), Bulgaria (BG), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE) Greece (EL), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), the Netherlands (NL), Poland (PL), Portugal (PT), Romania (RO), Slovakia (SK), Spain (ES), Sweden (SE) and the United Kingdom (UK).
- 5 responses from CREST observers (all of which are associated with FP7): Iceland (IS), Montenegro (ME), Norway (NO), Switzerland (CH), Turkey (TR).
- Member States and observers who have not yet responded to the questionnaire are welcome to do so. Any further input received will feed into next policy steps.

**Filled-in questionnaires can be submitted until Monday 13 July 2009 to:**

Mr Jean-Michel Baer, Director  
Directorate for Science, Economy and Society  
European Commission, Research Directorate-General  
[Jean-Michel.Baer@ec.europa.eu](mailto:Jean-Michel.Baer@ec.europa.eu)

#### V. NATIONAL STRATEGIES FOR ACCESS TO AND DISSEMINATION OF SCIENTIFIC INFORMATION (QUESTIONNAIRE SECTION B)

**Summary**

Section B of the questionnaire is divided into 6 sub-questions dealing with access and dissemination activities at national level. It focuses on overall national policies regarding both publications and data, the development of repositories, and stakeholder involvement.

Responses to this set of questions reveal that most **countries have not yet put in place clear national strategies regarding access and dissemination. Many countries feature well-developed activities not coordinated at national level** (ministry, administration), but instead often **at the level of funding bodies, universities and/or libraries**. This finding is coherent with the fact that the debate and actions on access and dissemination to date have their roots within the scientific and research librarian communities; indeed, funding bodies, universities, and research libraries, who are closest to researchers' needs, are first to face the need to develop appropriate policies. In terms of the **financial mechanisms** in place to fund national policies and initiatives, the vast

majority of countries reported that the funding is part of the budgets of national ministries and government departments. In some cases, regional governments provide funding.

**Policies on open access to research data are less developed than policies on open access to publications.** The 2007 OECD Recommendation and guidelines on access to research data from public funding remain a main point of reference on the question of access to research data.

On the question of **copyright**, in most countries researchers follow the conditions applied by scientific publishers. The majority of researchers are not aware that open access is not necessarily in conflict with the copyright provisions contained in publishing agreements. Several respondents underline that more and more scientific publishers are allowing researchers to self-archive their work.

**Investment in the dissemination of scientific information** as a percentage of investment in research is not systematically calculated by the responding countries. Most estimates for this figure are situated between 1% and 3%, with some estimates going as high as 10%. As part of their investment of dissemination of scientific information, individual organisation or governments have used "**big deals**" or **national licences (purchasing bundles of journals from publishers)**, but **transparent information on how much money is spent in these agreements with publishers is hard to come by.** Despite the fact that digital subscriptions can boost access and increase incentives for joint purchases and economies of scale, in Europe, this form of subscription currently carries a considerably higher **Value Added Tax (VAT)** than paper subscriptions which typically benefit from a reduced VAT rate. In most of the responding countries, awareness raising campaigns are underway, but very little success has been achieved towards putting in place financial mechanisms that could improve access to scientific information.

Replies on the question about **repositories/open archives**, on the other hand, show a great deal of successful national activities, and many of these look to standards developed at European level through the project DRIVER (Digital Repository Infrastructure Vision for European Research) as a point of reference (see V.). Regarding **stakeholder activities** across Europe, many European countries have been quite active in bringing together main stakeholders in the debate on access and dissemination (the research community, libraries, universities, funding bodies, publishers). While some are formal and structured (e.g. at government-level), most – especially activities involving publishers – are ad hoc and informal.

### **Overview of individual replies**

*Please describe the policies in place for dissemination of and access to scientific information in your Member State, including information on how these policies are financed (question No. 2)*

*Responses received from AT, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, IE, IS, IT, LV, LT, ME, MT, SE*

Specific national initiatives can be found in **Cyprus**, where the Research Promotion Foundation (RPF) framework programme has specific measures in place to promote the dissemination of scientific results. National policies are currently being prepared in **Czech Republic, Denmark and Greece**. In **Lithuania**, the 2009 Law on Research and Higher Education provides that state-funded research results shall be publicly available if

in line with legal acts on intellectual property. In **Poland**, the Minister of Science and Higher Education's Programme for the ICT Infrastructure Development 2007-2013 includes components on digitisation and the creation of virtual libraries. **Romania's** national strategy "Research, Development, Innovation" (RDI) provides policy guidance for the dissemination of scientific knowledge and its optimised application. A first draft of a **Spanish** Science and Technology law including specific articles on access and dissemination is being developed. In **Sweden** all universities are by law obliged to provide information about research to the surrounding society. This includes access to research results for commercial application as well as general information to the public and others. There is no extra financing for this apart from resources for commercialisation of research.

Several countries, in particular **Austria, Belgium, Estonia, Latvia, Luxembourg** and **Norway**, reported that responsibility for dissemination of and access to scientific information falls within the remit of libraries, including libraries in research organisations, university libraries and/or national libraries.

In **France, Germany, Italy** and **Ireland**, a variety of policies are implemented in research organisations, funding bodies and higher education establishments. In the **Netherlands**, activities are coordinated and guided by the Royal Netherlands Academy of Arts and Sciences (KNAW), the Data Archiving and Networked Service (DANS) and SURF which unites research universities, universities of applied sciences, and research institutions.

In the **UK**, the SHERPA (Securing a Hybrid Environment for Research Preservation and Access) services, a large network of UK universities hosted by the University of Nottingham, is a useful and internationally recognised and used tool. It features up-to-date and authoritative listings of publishers' copyright and archiving policies (RoMEO), Research funders archiving mandates and guidelines (JULIET), and a worldwide Directory of Open Access Repositories (OpenDOAR). A similarly important service with international importance is based at the University of Southampton, including ROAR (tracking the growth of existing open access repositories) and ROARMAP (growth of institutional self-archiving policies).

*Please describe the policies and arrangements in place in your Member State aiming to provide open access (free internet access for readers) to peer-reviewed scientific journal articles resulting from public research funding (question No. 3)*

*Responses received from AT, BE, BG, CH, CY, DE, DK, EE, EL, ES, FI, FR, IE, IS, IT, MT, NL, PL, LV, LT, ME, NO, PT, RO, SE, SK, TR, UK*

Responses to this question indicate that many funding bodies have adopted policies on peer-reviewed publications resulting from the research they fund, often in the form of open access mandates requesting funded authors to self-archive peer-reviewed scientific articles ("green" open access) (e.g. Austrian Science Fund in **Austria**, Some research organisations in **France**, all major funding organisations in **Ireland**, the Research Council of **Norway**, and many funding bodies in the **UK**). Some funding bodies cover the cost of publishing in open access journals ("gold" open access), and some, such as the Wellcome Trust in the **UK**, liaise directly with publishers for the implementation of open access mandates.

In **Germany**, in addition to the existence of individual funding body policies, 9 key funding bodies have created the Alliance of German Science Organisations and adopted a Priority Initiatives "Digital Information" covering open access as one of its priority areas. **Iceland** is in the final stages of developing a national research policy (2009-2012) including a section on open access. All the journals published by the Academy of Sciences in **Lithuania** put their full text articles on the web. In 2008, **Portugal** created a national open access scientific repository to provide an aggregated entry with a common search engine to all scientific information. The draft Science and Technology Law in **Spain** includes a section devoted to open access to science.

The **Netherlands** have implemented many initiatives to support open access to publications, many of which are led by SURF, with the close support of the Royal Netherlands Academy of Arts and Sciences (KNAW), the Netherlands Organisation for Scientific Research (NWO), the Dutch higher education sector, and research institutions. In the Netherlands, 2009 has been declared "Open Access Year", and efforts are being made to formulate and implement an open access policy, develop and improve the knowledge infrastructure, establish a clear legal framework, and create awareness with all stakeholders. In **Sweden**, the Research Council will in the near future implement an Open Access policy as a requirement on all recipients of research grants and the Association for Higher Education (SUHF) strongly encourages all universities and colleges to introduce open access policies in accordance with the Berlin declaration.

Many universities across Europe have established institutional repositories to support self archiving, and some have adopted open access mandates requiring researchers to deposit their articles in institutional repositories after a specific embargo period. For example, in **Finland**, the University of Helsinki's mandate will enter into force in 2010 requiring that researchers working at the University deposit copies of their research articles in the University's repository. Further examples are the recent mandate of the University of Liège in **Belgium** and the University of Zurich in **Switzerland**.

*Please describe the policies and arrangements in place in your Member State aiming to provide open access to other publicly funded scientific research results (e.g. research data) (question No. 4)*

*Responses received from AT, BE, BG, CH, CY, DE, DK, EE, EL, ES, FI, FR, IE, IS, IT, LV, LT, MT, NL, NO, PL, PT, RO, UK*

In **Belgium**, the second phase of the digitisation plan of the federal scientific and cultural institutions is under preparation and will support the digitisation, online access and long-term preservation of important and broad sets of scientific collections and research data. In **Bulgaria**, the National Centre for Information and Documentation (NACID) has a mandate of national data collection, processing, maintaining and dissemination of reference and analytical information to support the national policy in education, science and innovation as well as to support Bulgarian research bodies. **Estonia** has a national programme on "Collections of Humanities and Natural Sciences" which stores, develops and make accessible scientific collections and datasets.

In **Finland**, the Ministry of Education is planning activities concerning the storage, reuse and long term preservation of the digital research data and material. **France** actively supports open access to research data and is involved in several European projects dealing with the sharing and security of research data. In **Germany**, the Alliance of German Science Organisations is working on a priority area specifically

devoted to primary research data, and the involved research organisations aim to formulate a common data policy. In the **Netherlands**, extensive work is underway towards providing open access to research data. The web portal NARCIS contains scientific publications and research output from all Dutch universities, scientific institutes, the Royal Netherlands Academy of Arts and Sciences, and the Netherlands Organisation for Scientific Research. It contains over 2,100 data sets from the Electronic Archiving System (EASY) of the DANS (Data Archiving and Networked Services) institute which are data sets in the fields of arts and humanities, and social sciences.

In **Norway**, the Ministry of education and research has started a process for policy development on access to research data. The 2005 University and Colleges Act states that research data should be made publicly accessible in accordance with norms and regulations within the relevant field of research. Public Norwegian institutions with an active policy include the Research Council of Norway (RCN), the Norwegian Social Science Data Services (NSD) and Statistics Norway. In the **UK**, the UK Research Councils are developing a key set of principles for the curation and sharing of data arising from the research they fund and research-intensive universities are increasingly developing considerable technical capacity to store, curate and where appropriate, share research data.

*Please assess the situation in your Member State regarding: (question No.5)*

*- the way in which researchers exercise their copyrights on scientific articles*

*Responses received from AT, BE, CY, DE, DK, EE, EL, ES, FR, IE, IT, LT, MT, ME, NL, NO, PL, PT, RO, SE, SK, TR, UK*

**Denmark's** Electronic Research Library (DEFF) has supported the project "Licence to publish - promoting Open Access and authors' rights in the Nordic social sciences and humanities". This Licence to Publish is a standard publishing contract that enables researchers to self-archive articles. In **France**, CNRS (Centre National de la recherche scientifique), INSERM (Institut national de la santé et de la recherche médicale) and some French universities are focusing on raising awareness amongst their researchers on copyright issues. In **Germany**, the Alliance Initiative "Digital Information" calls for a reform of the current German copyright law that would secure authors' right to provide open access to their research findings. In **Sweden**, no legislation or policy exist on how researchers should exercise their copyright, it is their own individual choice, however if a research funder has implemented an open access policy then the grant recipient is expected to fulfill the terms of that policy.

In **Norway**, the copyright situation varies from discipline to discipline. While in some disciplines, researchers sign over their copyright to the publishers as a matter of routine, in others, for example in the humanities, where book publishing with commercial potential is common, researchers are more aware of the possibility of securing their rights. Some Norwegian university libraries have set up support services to help researchers clarify their rights to self-archive articles. In **Spain**, institutions with repositories have developed agreements and deposit licences, which they use to request non-exclusive distribution rights for authors' articles. In the **UK**, the Intellectual Property Office section of the Department for Universities, Innovation and Skills provides advice and services regarding intellectual property rights. Many researchers assign their copyright to publishers, though an increasing number are now granting licences to publish.

***- the level of investments in the dissemination of scientific information as compared to total investments in research***

*Responses received from AT, BG, CH, DE, EE, EL, ES, FI, FR, IE, IT, LV, LT, MT, NO, NL, PL, PT, RO, UK*

In **Austria**, the Austrian Science Fund allows a global budget of 5 % for dissemination costs, which can include costs for open access publishing. In **Bulgaria**, the investment of the Ministry of Education and Science for national licences as a percentage of total public investments for research is about 3%. **Estonia** has calculated their investment in the dissemination of scientific information for 2007 as 1.8% of total R&D investment. In Greece, the investment by the state in the dissemination of the scientific information as compared to total investment in research activities is estimated to be roughly 10% of the Gross Domestic Expenditure on Research and Technological Development (GERD).

In **Latvia**, the current investment in the dissemination of scientific information as compared to the total investments in research do not exceed 2%. In **Lithuania**, while there are no official statistics, the estimate is 1% of GERD. **Malta** puts its estimate between 2% and 3%, and **Romania** estimates about 2%. The **Netherlands** refer to the results of the Knowledge Exchange report "Costs and Benefits of Research Communication: the Dutch Situation" which will be presented in June 2009 in Brussels in a Knowledge Exchange seminar on the economic benefits of open access. This report will be widely available following its presentation and discussion at the Dutch ministry of Education, Culture and Science in June 2009. In **Spain**, the level of investment devoted to the dissemination of research is estimated at 1.5% of the budget of the National R&D program.

Some countries mention that they have invested in dissemination via big deals and national licences, i.e. bulk journal subscriptions by institutions or governments. In this type of agreement, all affiliates (or users within a set of designated national institutions) are granted free electronic access to the bundle of journals purchased. For instance, **Portugal** has negotiated a big deal at national level meaning that all public research institutions, universities and polytechnics have free unlimited access to the national online library known as b-on: Knowledge Library Online and subscribing to more than 16,000 titles. The costs are paid by the state through the Knowledge Society Agency (UMIC). Other countries in which this type of work has been undertaken are **Germany** and the **Netherlands**. A variation on the big deal, in which publishers grant open access (versus only access to affiliates of the paying institution(s)) has recently started to take shape, e.g. the much publicised deal between the international publisher Springer and **Germany's** Max Planck Society

***- the use of financial mechanisms to improve access (e.g. refunding VAT for digital journal subscriptions to libraries)***

*Responses received from AT, BE, CH, CY, DE, DK, EE, ES, FR, IE, IS, IT, LT, ME, MT, NL, NO, PL, PT, RO, SK, UK*

In several countries, specific actors are actively trying to lobby to put in place mechanisms to lower VAT for electronic journals or to obtain a VAT refund mechanism. In **Austria**, scientific libraries have called for a reduced VAT rate of 10 % for digital scientific journals (the current VAT rate is 20 %), but have not yet been successful. In **Belgium**, the project "VAT on information sources" was launched to calculate the cost

and to develop a refunding mechanism for VAT which is 6% on printed literature, and 21% on digital literature. A proposal will be submitted to the Federal Minister of Finance.

In **Estonia**, the VAT for digital journal subscriptions to libraries is twice as high (18%) as VAT for paper journals and books (9%), and unfortunately there is no refunding of VAT for digital journal subscriptions. Research libraries and the Ministry of Education and Research have made proposals to reduce or remove the VAT for digital journal subscriptions, but these have so far been rejected by the Ministry of Finance because it is not foreseen for reduced VAT rates to apply to “electronically supplied services”. In **Germany**, the Alliance Initiative "Digital Information" also calls for an end of the "distortion of competition between print publication and digital publication [...] by equalising the applicable rates of value added tax".

In **Italy**, the Confederation of Italian University Rectors (CRUI) has approached the Italian Ministry for Economy and Finance in order to try and obtain a VAT refund, but to date no real progress has been made. In **Norway**, libraries do not pay any VAT for paper journals, but do for subscriptions to digital versions of the same journals. In connection with a white paper on the libraries in Norway, it was proposed to remove the VAT for digital journal subscriptions, but the proposal was turned down by the Ministry of Finance, in charge of the national VAT. In **Spain**, some universities and consortia have made efforts towards obtaining VAT deductions or exemptions, but have not been successful so far. In the **UK**, VAT incurred through the purchase of digital journal subscriptions may be recovered by the university through the normal VAT processes.

*Please describe the policies and activities in your Member States with regard to "repositories" ("open archives") of scientific information (including repository sustainability and interoperability) (question No. 6)*

*Responses received from BE, CY, CH, AT, DE, DK, EE, EL, ES, FI, FR, IE, IS, IT, LV, LT, MT, NL, NO, PL, PT, RO, TR, UK*

In **Denmark**, all universities have locally established institutional repositories in which it is possible to register metadata and deposit full text material. The repositories are interoperable and the content is searchable through The Danish National Research Database. In **Finland**, first repositories were set up in 2004 by individual universities and research institutions around the country, and this development has continued since. In **France**, the multi-disciplinary repository Hyper Articles en Ligne (HAL) was set up by the Centre National de la Recherche Scientifique (CNRS) in 2001, and in 2006, an agreement was signed between the conference of university presidents and several organisations to use HAL as a common tool to enhance the dissemination and visibility of French research outputs. Today, HAL also acts as a national aggregator of institutional repositories set up in individual organisations, and guarantees long term preservation of deposited content.

According to the German association DINI (Deutsche Initiative für Netzwerkinformationen), focusing on research networks and repositories, there are 138 repositories in **Germany** today. DINI is also well-known for its DINI-certificate, a certificate guaranteeing minimum repository quality standards. In **Greece**, 15 institutional repositories have been established, these are not yet interconnected. A central portal facilitating information retrieval and providing added-value services is therefore the next planned step. In **Ireland**, in 2007, governmental funding has been made available to each Irish university to build open access institutional repositories, and

to develop a harvesting and discovery service via a national portal. This is a three-year project directed by the Irish Universities Association and managed by the Irish Universities Association Librarians' Group. It is intended that this collaboration will be expanded to embrace all Irish research institutions.

**Italy** reported that it has 42 open access repositories throughout the country, many of which are accessible via the portal PLEIADI. In the **Netherlands**, the national programme DARE (Digital Academic Repository) coordinates and stimulates the development of repositories containing scientific output, and DAREnet is the name given to the network of Dutch digital academic repositories. The DARE guidelines, i.e. the rules and agreements that allow access through connected repositories, were applied in the European DRIVER project (Digital Repository Infrastructure Vision for European Research, see V.).

In **Norway**, through the work of the Norwegian Association for Higher Education Institutions, today all public universities and almost all public university colleges have established their own institutional open archives. As of 2004, university libraries developed a national search service for open institutional archives entitled NORA (Norwegian Open Research Archives) aiming to develop technical solutions, promote the value of open access and establish NORA as “the single point of harvesting” in Norway. In **Portugal**, institutional repositories are well developed, and the Knowledge Society Agency (UMIC) offers a free service to house institutional repositories of interested universities, polytechnics, national laboratories and other scientific institutions. In **Spain**, there are currently 46 institutional repositories, and a national aggregator has been created to access all the content with the individual repositories via the RECOLECTA project. In **Turkey**, most scientific studies produced in universities are deposited in institutional repositories or on the web pages of universities, and efforts are underway to create a national policy on repositories.

In the **UK**, there are several national, subject-based repositories for OA research papers, including UK PubMed Central, and ESRC’s Society Today. The Joint Information Systems Committee (JISC) has played an important role in the development of UK repositories. Deposit in these repositories tends to be mandatory for papers arising from research funded by the relevant funding bodies. Also, several universities have adopted policies requiring their researchers to deposit research papers into an open access repository. Important work is underway with respect to article-level usage statistics from open access repositories, for example the Publisher and Institutional Repository Usage Statistics (PIRUS) project which will ensure that usage statistics are comparable with similar statistics relating to journals held on publisher websites. The DISC-UK Datashare project has pioneered the use of institutional repositories for curating and sharing research data.

*Please describe any activities in your Member States bringing together main stakeholders in the debate on scientific information (e.g. scientists, funding bodies, libraries, scientific publishers) (question No.7)*

*Responses received from AT, BE, CH, DE, DK, EE, EL, ES, FI, FR, IE, IS, IT, LT, MT, NL, NO, PL, PT, RO, SE, TR, UK*

In **Belgium**, stakeholders within the research community are members of regional coordinating bodies and it is through these bodies that there is dialogue with scientific publishers. Cooperation with the university research councils would need improvement. **Denmark**'s Electronic Research Library (DEFF) brings together major stakeholders both

nationally and internationally. In **Estonia**, there are no regular events bringing together all stakeholders; informal communication and bilateral relationships are the main instruments used. In **France**, numerous meetings are convened at regional and national level to bring stakeholders together for discussion. In **Ireland**, funding bodies tend to coordinate stakeholder relations. In **Sweden**, the universities, colleges, main research funders and the National Library of Sweden are organized in an organization called “openaccess.se” to jointly promote in practice open access, creation and development of local repositories, to increase access, to develop data mining tools and improve long term preservation of scientific information.

**Greece** plans to organise an annual conference on open access bringing all stakeholders together. The first one was organised by the National Documentation Centre on “Open Access Infrastructures: The Future of Scientific Communication” with the participation of Greek and international stakeholders. In **Italy**, many conferences, seminars, and meetings across the country involving relevant stakeholders on many different topics (copyright, open access, VAT) have been organised by different organizations such as universities, the Conference of University Presidents, as well as cultural and professional associations and research institutions. In **Lithuania**, the most active players in the field of Open Access are research libraries, and awareness raising events are organized in close collaboration with the Lithuanian Academic Libraries Network, the Ministry of Education and Science, the academic community, and the Lithuanian Academic Publishers Association.

In the **Netherlands**, there are several organisations which initiate events, seminars, workshops and conference around the open access debate. In 2008, a working Group consisting of representatives of the government, the VSNU (Association of the 14 research universities, the Royal Academy of Sciences), the university libraries and publishers, began a discussion process on the future of open access. In **Norway**, there are quite frequently conferences and seminars bringing together important stakeholders. An example is the annual Munin-seminar held by the University of Tromsø. Various events have been held in **Spain** to discuss the issues of scientific information and communication. The subject areas most commonly dealt with are the quality of scientific journals, institutional repositories, open access to science, scientific dissemination, etc. These events have been promoted by research groups from universities, university libraries and responsible Ministries.

In the **UK**, the Research Councils UK (RCUK) Research Outputs Group is involved in research related issues around scientific information. It has several strands of work which bring together relevant stakeholders. The Joint Information Systems Committee (JISC) supports education and research by promoting innovation in new technologies. It has working groups that focus on current trends in scientific information and include representatives of publishers (JISC Board, Publishers Action Group), and researchers, funders and librarians (JISC Board, various sub-committees, Scholarly Communications Group). A Universities UK working group has been set up to investigate the availability to authors of funds to pay open access publication charges. This working group has representation from scientific publishers, universities, libraries, JISC and research funders.

## VI. COORDINATION OF ACCESS AND DISSEMINATION POLICIES AND PRACTICES (QUESTIONNAIRE SECTION C)

### Summary

The second section of the questionnaire is made up of one question sub-divided into 3 sub-areas on coordination in different areas relating to access to and dissemination of scientific information (common funding body principles, big deals, repository interoperability). In filling in these categories, respondents mainly reported coordination taking the form of **declarations and position papers**, coordination **initiatives supported by European funding**, and coordination **initiatives supported by national or other sources of funding**.

With regard to **common national funding body principles**, respondents' replies were not limited to funding bodies, but rather referred to initiatives by a range of different actors. The **Recommendations on Open Access of the European Heads of Research Councils (EUROHORCS)**'s are the main document cited that represents the views of funding bodies. This document recommends to its members to sign the Berlin Declaration and follow EURAB's opinion on open access where possible, but does not suggest establishing a common policy on open access. An important coordination initiative funded by national organisations is the **Knowledge Exchange** including Danish, Dutch German and UK-based organisations.

A number of international organisations focus on negotiating **big deals** with publishers as consortia, or even as consortia of consortia (most importantly, the **International Coalition of Library Consortia**). Big deals enable access to users affiliated with the members of the negotiating consortium, but not open access. As is the case for national big deals, transparency regarding how public money is being spent via this type of agreement is lacking.

The European Organisation for Nuclear Research (CERN) is going beyond the big deal model via its innovative initiative **SCOAP<sup>3</sup> (Sponsoring Consortium for Open Access Publishing in Particle Physics)** which aims to create a funding consortium for open access publishing in the field of high energy physics.

Important coordination initiatives are underway regarding **interoperability of repositories and standards**. One important effort in this area is the European project **DRIVER (Digital Repository Infrastructure Vision for European Research)** which pursues the objective to create a pan-European infrastructure for digital repositories. Many institutional and national repository systems are compatible with the guidelines developed by DRIVER. Regarding preservation, the work of the **Alliance for Permanent Access** is crucial at European level.

### Overview of individual replies

*How has your Member State been involved in exploring possibilities for Member State coordination regarding access and dissemination questions? (question No. 8)*

*- defining common national funding bodies principles on open access*

*Responses received from AT, BE, BG, CH, CY, DE, DK, EE, EL, ES, FI, FR, IE, IS, IT, LT, LV, MT, NL, NO, PL, PT, RO, SK, UK*

A large number of respondents to this question mentioned that access issues are covered by the **Berlin Declaration** on Open Access to Knowledge in the Sciences and

Humanities, signed by over 250 universities, learned societies, foundations and libraries, calling for open access to human knowledge and cultural heritage.

Several references were made to the **Recommendations on Open Access (OA) of the European Heads of Research Councils (EUROHORCS)**'s which have 24 European member organisations (of which 21 are in EU Member States). These include a recommendation to sign the Berlin Declaration and to adopt the 2006 European Research Advisory Board recommendations (which call for green open access with a 6-month embargo period).

A further important initiative comes from the **European University Association** whose Working Group on Open Access adopted a **Statement from the EUA Working Group on Open Access** in 2007 suggesting a series of areas for actions at university level, including the preparation of statements and position papers, building interoperable open access repositories, strengthening the legal rights of authors, advancing open access publishing business models, and encouraging peer review and quality control mechanisms by academic researchers for open access journals.

The issue of access to specifically data is tackled by the Organisation for Economic Co-operation and Development (OECD)'s **Principles and Guidelines for Access to Research Data from Public Funding** which set up guidelines to facilitate cost-effective access to digital research data resulting from public funding.

An important cooperation effort by Member States on access, dissemination preservation issues is the **Knowledge Exchange** which supports the use and development of Information and Communications Technologies infrastructure for higher education and research. The partners of the Knowledge Exchange are based in 4 EU Member States: Denmark's Electronic Research Library (DEFF), the German Research Foundation (DFG), the Joint Information Systems Committee (JISC) (UK), and SURF (NL). The Knowledge Exchange is active in the areas of open access, e-infrastructure (repositories), and copyright. In 2007, the Knowledge Exchange and other organisations launched a "Petition for guaranteed public access to publicly-funded research results" which to date has over 27.000 signatures.

An investigation of the impact of "green" open access (through self-archiving of peer-reviewed author manuscripts) on reader access, author visibility, and journal viability is underway in the EU co-funded project **PEER** (Publishing and the Ecology of European Research) which brings together publishers, repositories and researchers. A further relevant European project is the recently launched project **SOAP** (Study of Open Access Publishing) focusing specifically open access publishing ("gold" open access). Some respondents also referred to the EU co-funded project **Europeana (European Digital Library)**, which focuses on facilitating access to cultural material easier in a multilingual online environment building on Europe's rich heritage.

***- improving transparency of the contractual terms of 'big deals' financed with public money and assessing the possibilities to achieve economies of scale by demand aggregation***

*Responses received from AT, BE, BG, CH, CY, DE, DK, EE, EL, ES, FI, FR, IE, IS, IT, LT, LV, MT, NL, NO, PL, PT, RO, SK, UK*

Important work in the area of big deals has been done by the International Coalition of Library Consortia (ICOLC) comprising some 150 library consortia from around the world, which in turn negotiate big deals with publishers on a national, regional or subject basis.

A key initiative in this area is the Sponsoring Consortium for Open Access Publishing in Particle Physics (SCOAP<sup>3</sup>) led by the European Organisation for Nuclear Research (CERN). SCOAP<sup>3</sup> is a steadily growing consortium of funding agencies, laboratories, and national and international libraries and library consortia in the area of high-energy physics. In the SCOAP<sup>3</sup> model, high energy physics funding agencies and libraries, which today purchase journal subscriptions individually, will negotiate with and centrally pay publishers for their services. Articles published via this model will be open access. SCOAP<sup>3</sup> currently counts over 100 members from 21 countries including 14 EU Member States.

*- working towards the interoperability of repositories of scientific information in Member States*

*Responses received from AT, BE, BG, CH, CY, DE, DK, EE, EL, ES, FI, FR, IE, IS, IT, LT, LV, MT, NL, NO, PL, PT, RO, SK, UK*

One of the most noteworthy efforts in this area is the EU co-funded project **DRIVER (Digital Repository Infrastructure Vision for European Research)** pursuing the objective to create a cohesive, robust and flexible, pan-European infrastructure for digital repositories. The current DRIVER consortium is composed of 13 universities, libraries and research centres in 11 Member States. A further European level initiative is the **e-Infrastructure Reflection Group (e-IRG)**, a high level European group founded to define and recommend best practices for the pan-European electronic infrastructure efforts with a focus on grid computing, storage, and networking. It consists of official government delegates from all the EU countries.

A further important area of e-infrastructure is the **search for common formats**. Especially noteworthy in this context are the **Common European Research Information Format (CERIF)**, and **euroCRIS (European Current Research Information Systems)**. CERIF is a set of guidelines meant for all actors dealing with research information systems. They were first developed in 1991 (updated in 2000) by a group of EU Member State and Associated country experts under the co-ordination of the European Commission. The goal of CERIF, which is now promoted by the euroCRIS group, is to facilitate access to and exploitation of research information.

A recent co-ordination initiative aims to establish a **not-for-profit agency enabling organisations to register research datasets and assign persistent identifiers to them**, so that research datasets can be handled as independent, citable, unique scientific objects. This agency will start by promoting the use of Digital Object Identifiers (DOI) for datasets. A Digital Object Identifier (DOI) is used to cite and link to electronic resources and differs from other reference systems commonly used on the Internet, such as the URL, since it is permanently linked to the object itself, not just to the place in which the object is located. This initiative, launched by a Memorandum of Understanding signed in March 2009, brings together major research and technical information providers in Germany (National Library of Science and Technology, TIB), the UK (British Library), Switzerland (Library of the Swiss Federal Institute of Technology, ETHZ), France (French Institute for Scientific and Technical Information, INIST), Denmark (Technical Information Center of Denmark) and the Netherlands (Technical University Delft Library).

An important coordination effort in the area of preservation is the **Alliance for Permanent Access** created in 2004 and aiming to develop a shared vision and framework for a sustainable organisational infrastructure for permanent access to

scientific information. This alliance counts 15 members including European and international funding bodies, libraries and associations. Some of the members of the Alliance for Permanent Access are part of the EU-funded project **PARSE.Insight (Permanent Access to the Records of Science in Europe)** aiming to develop recommendations for developing the e-infrastructure to maintain the long-term accessibility and usability of scientific digital information in Europe.

## VII. LONG TERM PRESERVATION (QUESTIONNAIRE SECTION D)

### Summary

This section of the questionnaire deals with digital preservation policies regarding scientific information. It raises two specific questions regarding Member States' implementation, taking into account scientific information specifically, of the Commission Recommendation of 24 August 2006 and the Council Conclusions of 13 November 2006 on online accessibility to cultural material and digital preservation.

While many of the responding countries have put in place strategies regarding digital preservation of cultural heritage in general, specific attention to the preservation of scientific information needs to be further developed within most existing national policies and legislative frameworks. Some countries have developed high level strategies, but they have not yet been put into practice convincingly and researchers are not yet sufficiently aware of preservation as a key issue in this area. More awareness is needed regarding the preservation of scientific information articles and data in order to prevent a serious loss of scientific information in the long term.

### Overview of individual replies

*Please describe whether and how your Member State has defined a structured approach to the long term preservation of scientific information and incorporated this approach in national plans for digital preservation (in line with Commission Recommendation of 24 August 2006 and Council Conclusions of 13 November 2006 on online accessibility to cultural material and digital preservation) (question No. 9)*

*Responses received from AT, BE, CZ, MT, CH, BG, CY, DE, DK, EE, EL, ES, FI, FR, PL, IE, IS, IT, LT, LU, NL, PT, RO, SK, UK*

In **Belgium**, the 2nd phase of the Digitisation Plan of the federal scientific and cultural institutions will devote more attention to the long-term preservation of scientific data and collections. The federal institutions will also try to participate in European projects in collaboration with other similar institutions in order to create joint central repositories. The **Czech Republic** is preparing a broad concept covering digitisation, long-term preservation of and access to the entire national cultural heritage in digital form. One national portal will provide users with access to Czech national cultural heritage covering library documents, archival documents, museum collections, architectonic monuments, performing arts and media.

In **Denmark**, there is a well-established deposit law. All research publications including electronic publications have to be deposited at the National Libraries. Also, the Royal Library and The State and University Library are involved in the EU co-funded project PLANETS (Preservation and Long-term Access through Networked Services), which addresses core digital preservation challenges. Its primary goal is to build practical services and tools to help ensure long-term access to digital cultural and scientific assets. In **Estonia**, there are several regulations and initiatives concerning data preservation and

plans for digitisation of cultural heritage; however, there are no clearly defined and structured links between the long term preservation of scientific information and national plans for digital preservation.

In **Finland**, work on long term preservation of materials of national memory organizations (libraries, museums and archives), including digital material, is on-going under the auspices of the Ministry of Education's National Digital Library project. In **France**, in 2007, the Ministry of Research and Higher Education placed the responsibility for the long term preservation of scientific information under the supervision of the National computing centre for higher education (CINES). This centre provides for the scientific community of higher education and public research, computing solutions for high performance computing and long term data preservation.

In **Lithuania**, a discussion on digital preservation is underway; a feasibility study "Long term preservation of electronic documents" was prepared by Vilnius University. In **Germany**, the Ministry for Education and Research funded the project NESTOR (Network of Expertise in long-term Storage and availability of digital Resources in Germany), in which libraries, museums and archives joined forces to define common approaches to numerous aspects of long-term preservation. In addition, the Alliance of German Science Organisations sets digital preservation as one of its priorities. In **Luxembourg**, several institutions are currently setting up multi-site, replicated storage systems in order to capture and archive digital-born content.

In **Portugal**, the Open Access Scientific Repository assures the long term preservation of its contents. In **Spain**, the Ministry of Culture, via the National Library and the Directorate General of Books, Archives and Libraries, has started work to raise awareness on digital preservation. A plan for the preservation of Spanish digital heritage is forthcoming. The **UK** Government works with partners including JISC, the British Library, the National Archives, and the Research Councils to ensure a coherent UK approach to preservation and curation. The Office of Science & Innovation (OSI) report on e-infrastructure was published in February 2007 and Research Councils UK is co-ordinating the responses to the report's recommendations. An important initiative in this area is the Digital Curation Centre which is currently focusing on scientific data.

*Please describe whether and how the specific characteristics of scientific information have been taken into account when setting up the legislative framework (including legal deposit) or practical set-up for digital preservation (question No. 10)*

*Responses received from AT, BE, DE, EE, EL, ES, FI, IT, IS, NL, PL, PT, RO, UK*

In **Austria**, the media law was amended in 2009 to enable the Austrian National Library to collect media like websites. In **Belgium**, there is no legislation for digital preservation apart from the Copyright Act; however, a solution is being sought to allow for preservation, especially in the case of orphan works. Consultations on the issues of copyright have been taking place with the Belgian intellectual property office since 2007.

In **Finland**, the Law on Collecting and Preserving Cultural Materials took effect in January 2008. It repeals the earlier Legal Deposit Act, as well as the Act on the Archiving of Films. The new act covers Finnish on-line publications as well as film, radio and television materials, in addition to printed publications and recordings. The National Library receives free copies of all Finnish printed publications, sound, image and CD-ROM recordings and on line-publications. **Germany** features a legal deposit law for all digital publications originating in Germany since 2006, and the German National Library is responsible for long-term archiving. In **Greece**, discussions are underway on

adapting the existing legal framework for intellectual property rights to the open access and information society era.

In **Italy**, as far as legal deposit is concerned, some jurisdiction has been transferred to the regions which legislate autonomously. The Open Access CRUI Working Group is working with the National libraries of Rome and Florence to implement a framework for legal deposit of PhD Theses in Institutional repositories. Universities are also working with archivists to define a metadata set and a suitable workflow for long term preservation. In the **Netherlands**, by law, the Royal Library has an e-depot for all national and international scientific and cultural publications, as the Royal Library is one of the two designated safe places for scientific publications in the world.

In **Romania**, the current legal deposit law includes doctoral theses but not online publications. This law is currently being reviewed by the Ministry of Communications and Information Technology. A new legal deposit law will make reference to digital preservation and will take an e-repository type approach. In the **UK**, The Legal Deposit Library Advisory panel, established to recommend regulations for the implementation of the Legal Deposit Libraries Act, is considering as a priority the legal deposit of e-journals. A voluntary pilot scheme is in progress involving publishers and the deposit libraries, which will inform the panel on the factors that will need to be addressed within a regulation.

## VIII. ROLE OF THE EUROPEAN COMMISSION (QUESTIONNAIRE SECTION E)

### Summary

Respondents to this question were **generally favourable** regarding current European Commission activities regarding access to, and dissemination and preservation of digital scientific information. They also **welcome future activity**, and in particular recommend (continued) support and action in the following areas:

- Encouraging coordination and cooperation of Member State policies
- Supporting the further development of a pan-European e-Infrastructure
- Developing principles on access and dissemination for future EU-funded research, including funding projects experimenting with open access and new publishing business models
- Developing EU copyright rules for research
- Supporting provision of access to scientific knowledge produced in developing countries

### Overview of individual replies

*Please describe the role that you see for the European Commission / European Union in terms of policies on access to, and dissemination and preservation of scientific information in the digital age.*

*Responses: AT, BE, CY, DE, DK, EE, EL, ES, FR, FI, PL, IS, IT; LT, LV, MT, NL, PT, RO, SK, TR, UK*

Respondents outlined the following future roles for the Commission/European Union:

- Encouraging and stimulating the **coordination and cooperation of Member State policies** on access, dissemination and preservation:

- Monitor and evaluate relevant policies and activities in the Member States
  - Stimulate exchange of best practices
  - Support the creation of a Member State network on access, dissemination and preservation issues
  - Provide specific recommendations and a timeframe
- Supporting the further **development of a pan-European e-Infrastructure**
    - Promote the use of common standards and formats for repositories (interoperability)
    - Evaluate quality of repository content and establish quality control mechanisms
  - Funding of projects **experimenting with open access** / new publishing business models
  - Developing EU **copyright rules** for research
  - Developing **principles on access and dissemination for future EU-funded research** (including joint programming, research infrastructures, mobility)
  - Supporting **provision of access to scientific knowledge produced in developing countries**

## **IX. ANNEX: NATIONAL AND EUROPEAN INITIATIVES**

(Information on national and coordinated activities is based on the additional information provided by respondents)

### **National information & initiatives**

#### **Austria:**

Open Access Policy of Austrian Science Fund:

[http://www.fwf.ac.at/en/public\\_relations/oai/index.html](http://www.fwf.ac.at/en/public_relations/oai/index.html)

#### **Belgium:**

Flemish Research Libraries Council: <http://www.vowb.be>

Electronic Scientific Libraries (ELEKTRON): [http://www.vowb.be/elektron\\_en.html](http://www.vowb.be/elektron_en.html)

Interuniversity Library of the French Community of Belgium (BICfB):

<http://www.bicfb.be/>

BICfB repository: <http://edoc.bib.ucl.ac.be/>

#### **Bulgaria:**

Ministry of Education and Science: <http://www.nsfb.net/>

Bulgarian Current Research Information System (BulCRIS):

<http://www.cris.government.bg/public/Locale.do?language=en&page=/public/Main.do>

#### **Cyprus:**

Research Promotion Foundation: [www.research.org.cy](http://www.research.org.cy)

#### **Czech Republic:**

Research and Development: <http://www.vyzkum.cz/Default.aspx?lang=en>

National Digital Library: <http://www.vyzkum.cz/Default.aspx?lang=en>

#### **Denmark:**

Denmark's Electronic Research Library: <http://www.deff.dk/default.aspx?lang=english>

#### **Estonia:**

Research and Development and Innovation Strategy 2007-2013 "Knowledge-Based

Estonia: <http://www.hm.ee/index.php?0&popup=download&id=6175>

Collections of Humanities and Natural Sciences:

<http://www.teaduskogud.org/?&lang=en>

#### **Finland:**

Report of the Open Access Scientific Publishing Committee

<http://www.minedu.fi/OPM/Julkaisut/julkaisuhaku?lang=en>

Ministry of Education in Finland (Research affairs):

<http://www.minedu.fi/OPM/Tiede/?lang=en>

The Finnish Social Science Data Archive (FSD):

<http://www.fsd.uta.fi/english/index.html>

Roadmap, for creating new infrastructures:

<http://www.minedu.fi/OPM/Tiedotteet/2009/02/Tutkimusinfrastrat.html?lang=en>

### **France:**

French National Research Agency: <http://www.agence-nationale-recherche.fr/FaitsMarquants?lngInfoId=159>

Open archives initiative: <http://www.couperin.org/archivesouvertes/>

Open access information: <http://openaccess.inist.fr/>

CCSD: <http://www.ccsd.cnrs.fr/spip.php?rubrique15>

Hyper Article en Ligne (HAL): <http://www.ccsd.cnrs.fr/spip.php?rubrique12>

### **Germany:**

Alliance of German Science Organisations - Priority Initiative "Digital Information":

[http://www.dfg.de/forschungsfoerderung/wissenschaftliche\\_infrastruktur/lis/download/allianz\\_initiative\\_digital\\_information\\_en.pdf](http://www.dfg.de/forschungsfoerderung/wissenschaftliche_infrastruktur/lis/download/allianz_initiative_digital_information_en.pdf)

Deutsche Initiative für Netzwerkinformationen: <http://www.dini.de/>

Network of expertise in Digital long-term preservation (NESTOR):

<http://www.langzeitarchivierung.de/index.php?newlang=eng>

Springer-Max Planck Society deal:

[http://www.mpg.de/scip/lic/oag/Springer\\_oc\\_en.htm](http://www.mpg.de/scip/lic/oag/Springer_oc_en.htm)

### **Greece:**

Athena- Research and Innovation Center in Information, Communication and Knowledge Technologies: <http://www.athena-innovation.gr>

GRNET Networking Research and Education: <http://www.grnet.gr>

National documentation centre website on open access: <http://www.openaccess.gr>

Open archives: <http://www.openarchives.gr>

### **Iceland:**

Science and Technology Policy Council: <http://www.vt.is>

Centre for research: <http://www.rannis.is>

The Icelandic Current Research Information System <http://www.ris.is>

### **Ireland:**

Open access policy of Science, Foundation Ireland (SFI):

[http://www.sfi.ie/uploads/documents/upload/SFI\\_OA\\_policy\\_2009\\_v3.pdf](http://www.sfi.ie/uploads/documents/upload/SFI_OA_policy_2009_v3.pdf)

**Italy:**

IT: Web Site Open Access Working Group (CRUI):

<http://www.cruir.it/HomePage.aspx?ref=894>

Open Access in Italia Wiki: [http://wiki.openarchives.it/index.php/Pagina\\_principale](http://wiki.openarchives.it/index.php/Pagina_principale)

Creative Commons Italia: <http://www.creativecommons.it/>

Università Aperta: <http://www.universita-aperta.it/>

PLEIADI: <http://www.openarchives.it/pleiadi/>

CRUI-CARE: <http://www.cruir-care.it/>

ICCU: <http://www.iccu.sbn.it/genera.jsp?id=256>

**Latvia:**

Latvian National Library: [www.lnb.lv](http://www.lnb.lv)

Latvian Academic Library: [www.acadlib.lv](http://www.acadlib.lv)

**Lithuania:**

Lithuanian Research Library Consortium: <http://www.lmba.lt/OA/liet/oa.htm>

Ministry order regarding the establishment of Lithuanian science and study electronic documents (eLABa): [http://edok.sf.library.lt/failai/Kiti\\_dokumentai/eLABa\\_eng.pdf](http://edok.sf.library.lt/failai/Kiti_dokumentai/eLABa_eng.pdf)

**Luxembourg:**

Consortium Luxembourg pour l'acquisition et la gestion des publication numériques: <http://www.portail.bnl.lu>

**Netherlands:**

Data Archiving and Networked Services (DANS): <http://www.dans.knaw.nl/en/>

NARCIS-gateway to Dutch scientific information: <http://www.narcis.info/index>

Knowledge bank for universities of applied science: [http://www.hbo-kennisbank.nl/en/page/page.view/hbo\\_about.page](http://www.hbo-kennisbank.nl/en/page/page.view/hbo_about.page)

Royal Netherlands Academy of Arts and Sciences (KNAW): <http://www.knaw.nl/english/index.html>

SURF: <http://www.surf.nl/en/Pages/home.aspx>

**Norway:**

The Research Council Norway Open Access:

<http://www.forskningsradet.no/no/Artikkel/Forskningsradets+prinsipper+for+apen+tilgang+til+vitenkapelig+publisering/1238627853241>

White Paper No. 30 (2008-2009) Climate for Research <http://www.regjeringen.no/kd>

**Poland:**

Ministry of Interior: [www.mswia.gov.pl](http://www.mswia.gov.pl)

Ministry of Science and Higher Education: [www.mnisw.gov.pl](http://www.mnisw.gov.pl)

"Open a book" initiative: <http://otworzksiazke.pl/>

**Portugal:**

About Open Access Repositories (RCAAP): [http://www.rcaap.pt/about\\_en.jsp](http://www.rcaap.pt/about_en.jsp)

Knowledge Society Agency: <http://www.infosociety.gov.pt/>

**Romania:**

The National Authority for Scientific Research: <http://www.mct.ro>

The National Institute for Information and Documentation, Bucharest: <http://www.inid.ro>

The National Library of Romania <http://www.bibnat.ro>

**Spain:**

Draft Science and Technology Law: [https://lcyt.fecyt.es/wp-content/uploads/2009/02/borrador-cero-alcyt-11\\_02\\_09.pdf](https://lcyt.fecyt.es/wp-content/uploads/2009/02/borrador-cero-alcyt-11_02_09.pdf)

Resolution on the creation of the institutional repository of the Principality of Asturias: <http://www.asturias.es/portal/site/Asturias/menuitem.1003733838db7342ebc4e191100000f7/?vgnextoid=d7d79d16b61ee010VgnVCM1000000100007fRCRD&fecha=03/02/2009&refArticulo=2009-03201>

Principality of Asturias. Governing Council Agreement “Open access” mandate: <http://bibliotecas.csic.es/servicios/docs/principado.pdf>

Carlos III University of Madrid. Resolution of the Rector of the Carlos III University of Madrid of February 25, 2009, on the call for proposals to increase the presence of the UC3M’s research institutes and groups on the Internet: [http://www.uc3m.es/portal/page/portal/investigacion/programas\\_convocatorias/programa\\_vicerrectorado\\_09/ayudas\\_web/Web.pdf](http://www.uc3m.es/portal/page/portal/investigacion/programas_convocatorias/programa_vicerrectorado_09/ayudas_web/Web.pdf)

General report on Spanish repositories: [http://www.accesoabierto.net/sites/default/files/Informe2009-Repositorios\\_0.pdf](http://www.accesoabierto.net/sites/default/files/Informe2009-Repositorios_0.pdf)

**Sweden:**

OpenAccess.se - Scholarly Publishing: <http://www.kb.se/OpenAccess/Hjalptexter/English/>

**Switzerland:**

Swiss National Science Foundation: [http://www.snf.ch/E/NewsPool/Pages/news\\_070809\\_OpenAccess.aspx](http://www.snf.ch/E/NewsPool/Pages/news_070809_OpenAccess.aspx)

Swiss Federal Institute of Technology Zurich (ETHZ): [http://www.open-access.ethz.ch/oazurich/index\\_EN](http://www.open-access.ethz.ch/oazurich/index_EN)

University of Zurich: [http://www.oai.uzh.ch/index.php?mos\\_lng=en](http://www.oai.uzh.ch/index.php?mos_lng=en)

**Slovakia:**

Central Information Portal: <http://www.vedatechnika.sk>

**Turkey:**

Turkey Academic Network and Information Centre:

<http://www.ulakbim.gov.tr/eng/cabim/about/>

## **UK:**

Department for Innovation, Universities and Skills : <http://www.dius.gov.uk/>

Department for Business, Enterprise and Regulatory Reform: <http://www.berr.gov.uk/>

Digital Curation Centre: <http://www.dcc.ac.uk>

Intellectual Property Office of the UK <http://www.ipo.gov.uk/>

Joint Information Systems Committee: <http://www.jisc.ac.uk/>

Open Access and Institutional Repositories with EPrints (University of Southampton): <http://www.eprints.org/>

Research Councils UK (RCUK): <http://www.rcuk.ac.uk>

Research Information Network (RIN): <http://www.rin.ac.uk/>

SHERPA (University of Nottingham): <http://www.sherpa.ac.uk/about.html>

Universities UK: <http://www.universitiesuk.ac.uk>

## **Co-ordination initiatives**

Alliance for permanent Access: <http://www.alliancepermanentaccess.eu/>

Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities: <http://oa.mpg.de/openaccess-berlin/berlindeclaration.html> (20-22 October 2003)

European Heads of Research Councils (EUROHORCS)'s Recommendations on Open Access (OA) (18 April 2008):

[http://www.eurohorcs.org/SiteCollectionDocuments/EUROHORCS\\_Recommendations\\_OpenAccess\\_200805.pdf](http://www.eurohorcs.org/SiteCollectionDocuments/EUROHORCS_Recommendations_OpenAccess_200805.pdf)

e-Infrastructure Reflection Group (e-IRG): <http://www.e-irg.eu/>

European Research Advisory Board Final Report: Scientific Publication: Policy on Open Access (December 2006)

[http://ec.europa.eu/research/eurab/pdf/eurab\\_scipub\\_report\\_recomm\\_dec06\\_en.pdf](http://ec.europa.eu/research/eurab/pdf/eurab_scipub_report_recomm_dec06_en.pdf)

Statement from the EUA Working Group on Open Access:

[http://www.eua.be/fileadmin/user\\_upload/files/newsletter/EUA\\_WG\\_open\\_access.pdf](http://www.eua.be/fileadmin/user_upload/files/newsletter/EUA_WG_open_access.pdf)

Europeana (European Digital Library): <http://www.europeana.eu/>

Common European Research Information Format (CERIF) / Current Research Information Systems (CRIS): <http://cordis.europa.eu/cerif/>, <http://www.eurocris.org/>

DRIVER (Digital Repository Infrastructure Vision for European Research):

<http://www.driver-repository.eu/>

ICOLC: <http://www.library.yale.edu/consortia/>

Knowledge Exchange: <http://www.knowledge-exchange.info/>

Memorandum of understanding "European initiative to facilitate access to research data":

<http://www.icsti.org/documents/PressReleaseMarch2009-JointDOIforData.pdf>; see also <http://www.tib-hannover.de/en/the-tib/doi-registration-agency/>

Organisation for Economic Co-operation and Development (OECD)'s Principles and Guidelines for Access to Research Data from Public Funding (2007):

<http://www.oecd.org/dataoecd/9/61/38500813.pdf>

Petition for guaranteed public access to publicly-funded research results: <http://www.ec-petition.eu/>

Permanent Access to the Records of Science in Europe (PARSE.Insight):

<http://www.parse-insight.eu/>

Publishing and the Ecology of European Research (PEER): <http://www.peerproject.eu/>

Sponsoring Consortium for Open Access Publishing in Particle Physics (SCOAP<sup>3</sup>):

<http://scoap3.org/index.html>

Study of Open Access Publishing (SOAP):

[http://cerneu.home.cern.ch/cerneu/eu\\_projects/fp7/#SOAP](http://cerneu.home.cern.ch/cerneu/eu_projects/fp7/#SOAP)

### **European Commission documents**

Communication on scientific information in the digital age: access, dissemination and preservation (COM(2007)56): [http://eur-](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0056:EN:NOT)

[lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0056:EN:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0056:EN:NOT)

Commission Recommendation on the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organisations (COM(2008)1329): [http://eur-](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008H0416:EN:NOT)

[lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008H0416:EN:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008H0416:EN:NOT)

Competitiveness Council adopted Conclusions on scientific information in the digital age: access, dissemination and preservation (14865/07):

<http://www.consilium.europa.eu/App/NewsRoom/related.aspx?id=353&lang=1&bid=88&grp=12589&version=&from=>

Green Paper on "The European Research Area: New Perspectives" European Research (COM(2007)161): [http://eur-](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0056:EN:NOT)

[lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0056:EN:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0056:EN:NOT)

Study on the economic and technical evolution of the scientific markets in Europe:

[http://ec.europa.eu/research/science-society/pdf/scientific-publication-study\\_en.pdf](http://ec.europa.eu/research/science-society/pdf/scientific-publication-study_en.pdf)