

Open access in Southern European Countries

OPEN ACCESS IN SOUTHERN EUROPEAN COUNTRIES

OPEN ACCESS IN SOUTHERN EUROPEAN COUNTRIES



Editors:

Lluís Anglada, Ernest Abadal

Authors:

Francisca Abad, Ernest Abadal, Francis André, Lluís Anglada, Anne-Marie Badolato, Emilie Barthet, Maria Cassella, Rachel Creppy, Paola Gargiulo, Panos Georgiou, Gultekin Gurdal, Jean-François Lutz, Remedios Melero, Aynur Moral, Mariette Naud, Jean-François Nominé, Fiori Papadatou, Eloy Rodrigues, Josep-Manuel Rodríguez-Gairín, Ricardo Saraiva, Miquel Termens, Ata Turkfidani, Christine Weil-Miko

Editorial support:

Javier Guallar

© 2010, the authors

Published by:

FECYT Pedro Texeira, 8 28020 Madrid http://www.fecyt.es

Collaboration:

CBUC (Consorci de Biblioteques Universitàries de Catalunya) http://www.cbuc.cat Research group "Acceso Abierto a la Ciencia", funded by Plan Nacional de I+D (CSO2008-05525-C02/SOCI) http://www.accesoabierto.net

ISBN: 978-84-693-6792-6

Impreso en España - Printed in Spain



All the texts published in this book are licensed under a Creative Commons Attribution 3.0 Spain License. You may copy, distribute, transmit and adapt the works, provided you attribute it (authorship, book title, publisher) in the manner specified by the author(s) or licensor(s). The full text of the license is available at http://creativecommons.org/licenses/by/3.0/es/

CONTENTS

1	Pres	entation	11
2	Intro	oduction	13
3	Ope	n access in France	15
	3.1	Introduction	15
	3.2	Background	16
		3.2.1 Institutional background	16
		3.2.2 Historical background	20
	3.3	Open access journals in France	23
		3.3.1 How the list of open access journals was compiled	23
		3.3.2 Comments	25
	3.4	Open archives in France	27
		3.4.1 How the list of repositories was compiled	27
		3.4.2 Comments	29
	3.5	Large digitization programs	32
	3.6	Conclusions	34
	3.7	References	36
4	Ope	n access in Greece	39
	4.1	Introduction	39
	4.2	Scholarly publishing in Greece	40
		4.2.1 Book publishing	40
		4.2.2 E-books	40
		4.2.3 Journals	42
	4.3	OA in Greece: an overview	45
	4.4	Open access journals	47
	4.5	OA books.	51

52

4.6

		4.6.1	OA institutional repositories	52
		4.6.2	Digital collections	53
	4.7	Harves	ters, registries & related inititatives	53
		4.7.1	Directory of Greek digital resources	53
		4.7.2	Openarchives.gr	54
		4.7.3	Openaccess.gr	54
		4.7.4	MICHAEL Hellas	57
		4.7.5	Greek digital resources in the global perspective	57
	4.8		ning bodies & business models	58
	4.9		challenges	59
	4.10		asions	59
	4.11	Bibliog	graphy	60
5	Oper	1 access	in Italy	63
	5.1	Open a	access in Italy: an overview	63
	5.2	Italian	peer-reviewed journals	66
		5.2.1	Italian OA journals	68
		5.2.2	Open source software for OA journals	69
	5.3		onographs in Italy	70
	5.4	Institut	tional repositories and disciplinary based repositories	
		•	·	71
		5.4.1	Institutional repositories	71
		5.4.2	Repositories content	74
		5.4.3	OA mandates in Italy	75
		5.4.4	Disciplinary based repositories	76
	5.5		ructure and services provided by supercomputing	
			tia	77
		5.5.1	PLEIADI	77
		5.5.2	SURplus	79
	5.6		challenges and conclusions	80
	5.7	Bibliog	graphy	81
6	Oper	access	in Portugal	83
	6.1	Introdu	uction/Background	83
	6.2	Evoluti	ion of open access in Portugal	86

Repositories & digital collections.....

INDEX 9

	6.3	Current situation of open access journals	91
	6.4	Current situation of open access repositories	93
	6.5	Conclusions and recommendations	97
	6.6	Bibliography	98
7	Ope	n access in Spain	101
	7.1	Introduction	101
	7.2	Scientific journals	103
	7.3	Repositories	106
	7.4	Policies	108
		7.4.1 Mandates (regulation)	109
		7.4.2 Provision of services	110
		7.4.3 Communication and dissemination	110
		7.4.4 Economic incentives	111
		7.4.5 Institutional coordination	111
	7.5	Conclusions	112
		7.5.1 Journals	112
		7.5.2 Repositories	112
		7.5.3 Policies	113
	7.6	References	113
8	Ope	n access in Turkey	117
	8.1	Background	117
	8.2	Current situation of open access journals in Turkey	119
	8.3	The current situation of open access repositories in Turkey	120
	8.4	The New Turkish Open Access Archive Project: the National	
		Interuniversity Open Archive System (MITOS)	124
	8.5	Copyright in Turkey	125
	8.6	Conclusions and recommendations	127
	8.7	References	128
9	Con	clusions	129
	9.1	Journals	129
	9.2	Repositories	131
	9.3	Policies	132
	9.4	The future	

10	Alhai	mbra Declaration on open access	135
	10.1	Implementing policies for fostering open access to scientific	
		information	136
	10.2	Enhancing advocacy initiatives to promote open access	136
	10.3	Building sustainable alternative business models for publishing	137
	10.4	Assuring quality of open access journals and repositories	137
	10.5	Fostering repositories	138
11	Anne	exes	141
	11.1	France	141
		11.1.1 List of French open access journals	141
		11.1.2 List of French open repositories	153
		11.1.3 Memorandum of understanding for a coordinated	
		approach on a national level to open archiving of	
		scientific output	157
	11.2	Greece	164
		11.2.1 E-books market in Greece	164
		11.2.2 Greek OA e-journals in DOAJ	165
		11.2.3 OA digital collections with books	166
		11.2.4 Greek institutional repositories	167
		11.2.5 OAI-PMH compliant digital collections	169
		11.2.6 Non OAI-PMH digital collections	170
	11.3	8	173
		11.3.1 Open access italian journals	173
		11.3.2 Italian repositories	177
	11.4	Spain	180
		11.4.1 Spanish repositories	180
	11.5		183
		11.5.1 Turkish institutions included in OpenDOAR	183
		11.5.2 Turkish institutions included in ROAR	183
12	Abou	t the outhors	105

1 PRESENTATION

The Spanish Foundation for Science and Technology (FECYT) is a public foundation under the Spanish Ministry of Science and Innovation whose mission is to strengthen the value chain of knowledge by fostering science and innovation and trying to integrate them and bring them closer to society, in response to the needs and expectations of the Spanish science, technology and enterprise system. The Foundation's goal is to be recognized by Spanish society as a key reference in the dissemination, information and measurement of science and innovation. It also wishes to contribute to the development of a knowledge-based economy.

One of the main challenges of the Foundation is to lead the integration and rationalization of scientific information and science, technology and innovation metrics, described as the "integrate and measure vector" in its 2010-2012 strategic plan. FECYT already has considerable experience in managing national scientific information. It is the national licensee of the Thomson Reuters Web of Knowledge accessed by the Spanish scientific community. It is also firmly committed to establishing itself as the Spanish hub in favour of the open access (OA) movement (for free access to scientific information available on the Internet), in combination with supporting the traditional markets of scientific information. In 2010 FECYT organized the 5th International Conference on Open Repositories in Madrid, with the aim of positioning Spain in the debate on emerging trends in the management of scientific information. The authorities are opening the door to the open access movement, under the belief that publicly funded research should be freely available. Among other initiatives, the 2010 Spanish Bill on Science, Technology and Innovation urges researchers to deposit their research papers produced with public funding in institutional repositories.

Aware that the time has come to discuss issues such as the impact of open access, in May 2010 the FECYT, in collaboration with the Consortium

of Academic Libraries of Catalonia (CBUC), organized an international seminar including all the actors involved in open access (publishers, authors, policymakers, etc.) in Southern European countries (Portugal, Spain, France, Italy, Greece and Turkey). The purpose of this meeting was to discuss the strengths, weaknesses, opportunities and threats of the OA movement from the particular perspective of non-English-speaking countries, which share characteristics in relation to scientific production. The final goal was to analyse the state of the art of the OA movement in those countries, and to issue a joint statement of recommendations and guidelines which will henceforth facilitate the advancement of universal access to scientific production in Southern Europe countries. The Alhambra Declaration issued in May 2010 commits the signatories to implement policies to promote open access to scientific information, to better support OA initiatives, to develop alternative and sustainable business models for academic publication, to ensure the quality of open access journals and repositories, and to promote repositories through long-term conservation strategies accompanied by technological guidelines to ensure interoperability.

This publication is the result of the contributions made by each of the participating countries and by the Alhambra Declaration, which aims to disseminate the experts' recommendations to encourage the open access movement worldwide, and to provide it with the necessary infrastructure. Finally, it should be mentioned that this publication belongs to FECYT's ICONO Knowledge Observatory, as part of its works at the service of the Spanish Science, Technology and Enterprise System.

Lourdes Arana Uli General Manager of the FECYT

2 INTRODUCTION

The principles of open access are now widely known by all the actors involved in the scientific communication process (researchers, publishers, managers, academics, etc.). However, there is a clear need for practical studies of the situation of open access in certain areas that will allow us to take action to improve the results.

One of the references has undoubtedly been the report *Open access in the Nordic countries*,¹ which shows the state of affairs in Denmark, Finland, Iceland, Norway and Sweden and was drawn up within the Nordbib project to serve as a basis for discussion and work at a workshop held in the spring of 2007.

The countries of Southern Europe have unique characteristics as regards participation in the scientific communication process: they use languages that have a long tradition but are not the usual channel for scientific communication, they do not have a powerful publishing industry, they spend a smaller percentage of GDP on research and scientific data acquisition, etc.

The present report arose from the activities of the Southern European Libraries Link (SELL),² which represents library consortia of six countries (France, Greece, Italy, Portugal, Spain, and Turkey). Although this organization was created to exchange experiences and to act as a pressure group in relation to scientific and technical publishers, its founding charter also states clearly that one of its main goals is "to draw common policies towards information acquirement and provision".

In order to move towards common policies for open access to science, experts in each country were asked to provide reports on the situation of open access. We used a common template including three main sections: scientific journals (number, format, quality, subject specialization, type of publishers, type of

Hedlund, Turid; Rabow, Ingegerd (2007). Open access in the Nordic Countries: a state of the art report. Nordbib. (http://www.nordbib.net/Initiatives---Reports/Reports/OA-in-the-Nordic-countries.aspx). [Accessed: 1/07/2010].

² http://www.heal-link.gr/SELL/index.html

access, etc.); institutional repositories and harvesters; and policies supporting open access. Common data sources were used as far as possible (Ulrich's directory, OpenDOAR, DOAJ, ROAR, etc.), and were complemented in most cases by directories and other national sources.

Preliminary versions of the national reports were submitted and discussed at a conference held in Granada in May 2010, and served as a starting point for drafting a declaration of principles (the Alhambra Declaration) that aims to foster open access and the involvement of the various actors of the scientific communication process.

The published document contains updated and revised versions of the national reports, along with general conclusions, the Alhambra Declaration, and several appendices which offer more detailed information on journals and repositories in each of the countries. Statistical data included in the reports and in the appendices were updated as of May 2010. As such, this is the temporal reference for tables and figures if no other date is indicated.

This report is addressed especially to authorities and academic managers, to make them aware of the importance of encouraging actions to promote open access to science; to publishers, especially those of the public sector, to make them aware of the benefits of the open access model and to encourage them to adopt it; to academics; and to library professionals, who have played a significant role in the movement for the free dissemination of knowledge and must continue to do so.

3 OPEN ACCESS IN FRANCE

Francis André, Rachel Creppy, Emile Barthet, Jean-François Lutz, Mariette Naud, Anne-Marie Badolato, Jean-François Nominé, Christine Weil-Miko

André, Francis; Creppy, Rachel; Barthet, Emile; Lutz, Jean-François; Naud, Mariette; Badolato, Anne-Marie; Nominé, Jean-François; Weil-Miko, Christine (2010). "Open access in France". In: *Open access in Southern European countries*. Lluís Anglada, Ernest Abadal (eds). Madrid: FECYT, p. 15-37.

3.1 Introduction

This report has been collaboratively produced by representatives of several bodies:

- the scientific and technical information and libraries network Unit of the Ministry of Higher Education and Research (Francis André, Rachel Creppy);
- the academic consortium Couperin (Emilie Barthet, Jean-François Lutz, Mariette Naud);
- the Institute for scientific and technical information INIST-CNRS (Anne-Marie Badolato, Jean-François Nominé, Christine Weil-Miko).

It is the wish of the SELL consortium (Southern European Libraries Link) to produce a state of the art of open access in the participating countries. It will serve as an input to an international seminar aiming at establishing a set of actions favoring open access in Southern European countries.

The first part of the report provides some background information on the French public research environment, which is essential to understand the national development of open access, and an historical overview on the development of both the green and golden roads to open access. It is not intended to be exhaustive but to highlight the major institutional entities in the French open access movement.

The second and third parts respectively describe and comment on the current situation of French open access journals and open access repositories.

The fourth part describes the major mass digitisation programs which are related to open access.

3.2 BACKGROUND

3.2.1 Institutional background

The French environment of public research

It is important to shortly present the French environment of public research in France as it differs significantly from other European countries and because it has many impacts in the area of open access.

At the national level three major types of institutions are involved in the research process:

Universities

France has 86 universities (including the three "instituts nationaux polytechniques") which gather most researchers. Due to this aspect, French universities are often small or medium-size when compared with other countries. An important milestone in the French higher education system was the adoption in August 2007 of a law granting increased autonomy to universities in terms of budget and human resources (Loi sur les libertés et responsabilités des universités - LRU). Meanwhile, a process of consolidation was undertaken by many universities, either in the form of a PRES (Pool of Research and Higher Education) i.e. a federation of different institutions on a regional basis) or as a merger of several institutions (as in the case of the university of Strasbourg in January 2009).

Grandes Écoles

Grandes Écoles have been designed historically to train engineers for the civil service. In 2010 France has around 230 grandes écoles that train students in the fields of engineering, commerce or humanities and have the particularity to recruit their students through competitive examinations. While some of the grandes écoles do not have a research structure of their own, research is

a significant part or their activities (e.g. Ecole Polytechnique, Ecole Normale Supérieure).

Research organisations

Unlike universities and grandes écoles, research organisations have no teaching departments and focus on research. With the exception of CNRS which works in many subject areas, most organisations have a chosen field like computer sciences (INRIA), life sciences (INSERM), marine sciences (IFREMER), etc. They vary in size a great deal, with CNRS being the biggest one with ten institutes, some 20,000 scientists and bringing together 48,000 researchers in units jointly run with universities and other research organisations.

It is interesting in terms of scholarly communication ecology to stress that some of these institutions also play the role of publishers either through a university press (e.g. the universities of Lyon, Rennes or Strasbourg) or as a standard publisher (like Quae, for instance).

Research operator	Life sciences	Material sciences	Humanities	All fields
Universities and gran-	16,010	20,628	21,252	57,890
des écoles	(56%)	(49.4%)	(76.8%)	(59.1%)
D	12,581	21,129	6,420	40,130
Research organisations	(44%)	(50.6%)	(23.2%)	(40.9%)
Total	28,591	41,757	27,672	98,020

Table 3.1. Number of researchers by institution type and subject (2005)

Source: Les compétences scientifiques et techniques de la France, OST, 2008, p. 73

This distinction in three separate sets looks somewhat blurred when one takes the research structure level into account. It is very common for a single laboratory to belong both to one university or more and to a research organisation, and possibly also to a grande école. The human resources and funding of the laboratory come from these different sources, but the research work is conducted in joint teams. In this case the laboratory is called a "joint research unit" (Unité Mixte de Recherche - UMR).

One should finally mention the three public bodies central to the consolidation of the French academic research at national level. The main institution is of course the Ministry of Higher Education and Research which defines the French research strategy and relies on two nationwide agencies for:

- Funding with the ANR (Agence Nationale de la Recherche National Research Agency).
- Assessment with the AERES (Agence d'Evaluation de la Recherche et de l'Enseignement Supérieur - Research and Higher Education Assessment Agency).

Publication activity of affiliated researchers in France

The two series of figures below compile the number of publications by researchers affiliated to French institutions. A few points should be kept in mind about the data in these tables:

- Figures were extracted from the Scopus database and are therefore closely linked to the scope of this database where both Humanities and Social Sciences and French-language journals are underrepresented.
- The document types taken into account are articles and conference papers only. It is important to mention this characteristic, because one can find a wider variety of document types in open archives (book chapters, research reports, posters, electronic theses and dissertations).

Table 3.2 shows the annual number of articles and conference papers published by researchers affiliated to French research institutions and referenced in the Scopus database from 2003 to 2009.

2003	2004	2005	2006	2007	2008	2009	Total
54,194	56,115	60,824	64,168	67,911	71,085	68,843	427,821

Table 3.2. Total of publications from institutions affiliated in France

Table 3.3 shows the number of articles, conference papers and papers in press published by researchers affiliated to French research institutions and sorted by subjects. The subjects used here are those of the Scopus database which do not represent the distribution of the number of publications very clearly in terms of research institution type. It would also be worthwhile analyzing this distribution.

Some publications titles are indexed with several subject headings, which is why the number of publications by subject is greater than the total number of publications by year.

Table 3.3. Number of publications by subject

	2003	2004	2005	2006	2007	2008	2009
Medicine	12,165	10,767	12,033	12,552	13,734	15,307	16,588
Physics and Astronomy	10,061	11,144	11,459	9,677	12,567	13,875	14,855
Biochemistry, Genetics and Molecular Biology	9,146	8,714	8,916	8,964	10,981	11,861	11,096
Engineering	6,566	9,525	10,501	11,023	10,227	9,975	10,345
Chemistry	5,528	5,150	5,546	6,139	6,634	8,904	9,065
Materials Science	5,340	5,300	5,215	5,981	6,266	7,720	8,525
Mathematics	4,176	4,402	4,411	5,339	5,806	7,000	8,075
Computer Science	3,330	3,268	3,839	5,114	5,804	6,946	7,533
Agricultural and Biological Sciences	4,101	4,095	4,319	4,839	5,128	5,565	5,870
Earth and Planetary Sciences	4,005	3,881	4,200	4,773	4,918	5,226	4,635
Immunology and Microbiology	2,724	2,580	2,829	2,906	2,961	2,986	3,098
Chemical Engineering	1,926	2,101	2,112	2,572	2,620	2,881	2,671
Neuroscience	2,020	1,888	1,915	2,039	2,202	2,192	2,204
Pharmacology and Toxicology	1,787	1,535	1,724	1,749	1,985	2,163	2,010
Environmental Science	2,023	2,027	2,240	2,587	1,919	2,014	2,006
Social Sciences	1,192	1,129	1,284	1,608	1,753	1,820	1,894
Energy	616	645	730	923	1,244	1,377	1,670
Psychology	654	697	757	823	959	1,062	1,135
Health Professions	711	680	750	741	848	865	884
Economics, Econometrics and Finance	382	456	508	572	677	796	877
Decision Sciences	311	310	341	478	615	778	838
Multidisciplinary	393	387	509	488	527	554	735
Veterinary	430	459	468	443	491	509	627
Business, Management and Accounting	245	230	254	324	487	508	522
Arts and Humanities	323	344	408	434	435	489	469
Nursing	127	100	250	291	311	459	345
Dentistry	75	69	116	97	141	165	130

3.2.2 Historical background

Research organisations

In November 2000, prior to the various statements related to the open access movement, CNRS created the Centre for Direct Scientific Communication (CCSD). The Centre developed the HAL platform which is used by many research organisations to build their institutional repository. The initial idea was to create an open archive similar to arXiv but open to all disciplines.

The French institutions began to express their strong commitment in October 2003 when CNRS and Inserm were the first in the country to sign the Berlin Declaration on open access to Knowledge in the Sciences, Life Sciences, Social Sciences. Other French research organisations signed the Declaration in the following years, the first university to sign the Declaration in 2006 being the University of Lyon 2.

This commitment to open access brought about the setting up of archives (generally linked to the national platform HAL) by several other institutions: Institut Français d'exploitation de la mer (Ifremer) with Archimer, Institut national de la recherche agronomique (Inra) with Prodinra archive, the Institut de recherche pour le développement (IRD) and Horizon / Pleins Textes, to name a few.

All these archives are visible through the repositories access service established under the european project DRIVER.

Following an international conference held in Paris in January 2003 "open access to Scientific and Technical Information: State of the Art and Future Trends", Inist-CNRS launched a website (openaccess.inist.fr) aiming at raising awareness on OA issues amongst the scientific and information professional communities.

The second road (gold road) advocated by the Budapest initiative is also being explored by the research organisations, particularly in the life sciences area. Thus the Department of Life Sciences of CNRS and Inserm supported both BioMedCentral and PLoS initiatives.

In the field of humanities and social sciences, CNRS and the Ministry of Higher Education and Research have supported since 2000 the Revues.org project, promoting open access scientific publishing. This service, operated today by the Centre pour l'Edition Electronique Ouverte (CLEO) gives access to more than 240 electronic publications and represents a successful collabo-

ration between CNRS and higher education institutions and research (EHESS, University of Provence and Avignon). This success relies on the software platform Lodel developed by the CLEO.

The launch in 2003 of the Persée digitisation program by the Ministry of Higher Education and Research was also an important milestone in the French open access landscape (see page 32).

Since 2006, CNRS is also involved in the SCOAP3 initiative –led by CERN– through the IN2P3 institute dedicated to research in nuclear physics and particle physics.

Universities

The University of Lyon 2 is typical of the involvement of universities in open access. It was one of the first universities to develop an archive, it was also involved very early in a project of online theses called Cyberthèses and was the first university to sign the Berlin declaration in 2006. In 2008, the Presses Universitaires de Lyon became a partner in the OAPEN European project which aims to publish books in humanities and social sciences as "a model of print and digital publishing in open access."

During this period, several academic institutions developed local archive of electronic theses: INP Toulouse, University of Strasbourg, Paris Tech grandes écoles, University of Lille 1, INSA Lyon, etc. Some of these local archives are now linked to the national archive HAL.

To manage the production of scientific and learning materials more efficiently, universities launched some software development projects: document management software (ORI-OAI for example) or GRAAL, more oriented towards research activities management. These platforms are designed to be connected to HAL as well.

In the area of electronic publishing in open access, the University of Nice launched in 2004 a service of online electronic journals called Revel, based on the already mentioned Lodel software. This was also the time when the Couperin consortium published a manifesto calling for promoting "open and alternative publishing", of which Revel appears as the first example.

After having set up of a large working group on open archives (2007-2008), Couperin has been continuing to work on open access issues both along the green road with its involvement in the EU-funded OpenAIRE project (2009-2012) and along the golden road of open access through a partnership with DOAJ (2010).

Since 2008 Couperin has been operating a website dedicated to open archiving (www.couperin.org/archivesouvertes), to foster the development of open archives in higher education institutions.

Funding agencies

The main French funding body, the Agence Nationale de la Recherche (ANR) stated that "all publications produced during funded projects have to be deposited by researchers in the HAL open archive system with which it will collaborate".

For the ANR, HAL contributes "to strengthen the visibility and attractiveness of French research" and simplifies "monitoring and evaluation to avoid multiple entries of information and making records easily accessible to all researchers involved in various stages of these processes". HAL is now seen as the centralised archive on behalf of the ANR.

Publishers

The publishers' national union (SNE) took positions based on the recognition of their role in the promotion of research, pointing up the cost of the publishing process. They stressed the importance of considering open access according to scientific disciplines, and the need to build the dissemination of scientific and technical information process on a viable and sustainable economic model.

The SNE also agreed in 2010 to work with other open access stakeholders on the establishment of a "French Romeo database" that would offer information on the publishers' policies towards depositing in open repositories.

Beyond the "moving wall" model tested by some publishers, or the "authorpays" model set up by some research institutes which fund the publication of articles of their researchers in open access journals, their concern is that the implementation of open access to scientific publications, may put the economic viability of their industry at risk.

Towards a national policy

In order to coordinate the political achievements and to support the open access movement, the major research institutions, the CPU (Conférence des présidents d'universités) and the CGE (Conférence des grandes écoles), signed in July 2006 a Memorandum of understanding for "a coordinated approach on a national level to open archiving of scientific output" (see Annex 11.1.3).

This memorandum stated that the signatories wished to acquire the necessary means to identify, disseminate, develop, promote and monitor the scientific output of their researchers and faculty within their research units and laboratories and, where applicable, of affiliated research teams. Joining forces to acquire a common platform for archiving scientific findings seemed at that time the best way to maximize the chances to achieve this goal.

Signed for a period of two years, this agreement has not been renewed. Nevertheless, it paved the way to the development of many institutional repositories in connection with the HAL platform, which was to be inevitably necessarily tailored to the needs of different organisations (especially so, by linking HAL-Inserm and PubMedCentral repositories and interconnecting the universities' local systems).

However, this agreement did not lead to a common statement - not even at each institution level - for the implementation of depositing in an archive or supporting open access journals. France has not yet implemented any mandates regarding article deposits. Some research institutions merely have filing requirements, while some agencies, universities or disciplinary entities enforce more or less effective incentive policies (INRIA, HSS, etc.).

The Berlin7 conference held in Paris in December 2009 gave the opportunity for the major stakeholders to reassert their willingness to cooperate. Moreover the open archiving issue is part of a ministry program to establish a large digital library for scientists and researchers in state-run institutions.

3.3 OPEN ACCESS JOURNALS IN FRANCE

3.3.1 How the list of open access journals was compiled

Sources used: this list of 167 open access journals (see Annex 11.1.1) has been established from four different sources:

- The Directory of open access Journals (DOAJ) where an important part of the listed titles is missing in the database.
- Ulrich's periodical directory database for double-checking.
- The website of Revues.org (a large platform in humanities and social sciences, see page 8 of this report for a more detailed presentation).



Figure 3.1. Revues.org

- The website of I-Revues (dissemination platform operated by INIST-CNRS, see page 22 for more details).
- Some publishers' websites (EDP Sciences in particular).

Selection criteria: only full open access journals have been listed, i.e. journals with no embargo period, the latest issues of which are freely available online.

Six of them only are referenced in the Thomson Journal of Citation Report. They are indicated by an asterisk.

Only journals published in France or by French research institutions, publishers or societies have been taken into account. The list does therefore not include open access titles that are run by international structures such as the European Transport Research Review (ETTR) launched by the European Conference of Transport Research Institutes (ECTRI) in which the French organisation INRETS plays an important role.

3.3.2 Comments

Full open access journals

Three major types of journals publishers among the ones represented in the list can be identified: public research institutions (universities, laboratories, etc.), scholarly societies or associations (including the 15 I-Revues journals) and "traditional" commercial publishers. In order to point out the importance of the Revues.org platform (which hosts journals from both public research institutions and scholarly societies), this fourth category has been taken into account in the table below.

Type of publisher	Number of journals	Percentage
Commercial publisher	11	6.5%
Public research institution	33	19.5%
Revues.org platform	86	51%
Scholarly society	38	23%
Total	167	100%

Table 3.4. Publishers of OA journals

Three major comments can be made:

- Publisher type and business model: the major role of Revues.org in terms of online dissemination of French Humanities and Social Sciences journals clearly appears in this table. As previously mentioned, Revues.org is funded by public research institutions and hosts a very large part of publicly funded journals. This means that if one adds the Revues.org titles and the public research institutions' journals, it appears that more than 70% of French open access journals rely mostly on public funding. Two conclusions can be drawn:
 - The "author-pay" model that is very often associated to open access journals is clearly hardly used for the financial sustainability of French open access journals. Such a conclusion concurs with the one made on a global scale by Peter Suber in his open access newsletter (April 2009). He referred to studies showing that between 67% and 83% of open access journals do not charge any fee (either on the author or the reader side) and rely on other subsidies.

- With the notable exception of EDP sciences, French commercial publishers are clearly not engaged in an open access policy. This is certainly because there are only a few French STM publishers, but this reason could also be used to facilitate an open access transition to increase international and online visibility.
- In terms of scientific fields: the journals list confirms that a vast majority of French open access journals cover humanities and social sciences related subjects. STM disciplines as well as economics or law are clearly underrepresented. This clearly contrasts with the predominance of these areas in the list of repositories (see part 4 of this report). An explanation of this situation is that open archives are mainly set up by organisations with an interest to disseminate their scientific output but which are also integrated in the classical publication process traditionally held by commercial publishers.
- In terms of journals visibility: the main international database for open access journals, the DOAJ, only refers to 90 out of the 167 French academic journals, which is slightly over half of the total. Revues.org journals are especially under-referenced as only 29 out of the 90 journals are in the DOAJ (33%). These figures are somewhat worrying because the DOAJ database is used worldwide to automatically feed e-journals lists or library catalogs. Hence the visibility of French OA journals is sensibly undermined. A cooperation with the DOAJ team could prove helpful in solving this issue. This is the main goal of the partnership established between Couperin and DOAJ in 2010.

Embargoed journals

As the main scope of this report is about open access as defined in the Budapest Declaration (both green and gold open access roads), no comprehensive list of online journals that are freely available after an embargo period has been worked out.

However, the three following major French platforms that host such journals should be mentioned:

Revues.org which offers access to 87 embargoed journals besides the 86 full open access titles. Journals are free to define the extent of their embargo, which goes from 3 months up to 4 years. Revues.org hosted journals are encouraged by the CLEO either to lower the duration of the embargo or to

move towards full open access, but these changes are not compulsory. It is also important to say that Revues.org does not give access to the embargoed material through a subscription system, as opposed to Cairn.

- I-revues, operated by INIST-CNRS which offers access to 9 embargoed journals and 15 fully open access. The service is designed to help anyone wishing to put a journal online through all steps of the technical electronic publishing process including the digitisation of back issues. Although the final decision is left to the journals, they are encouraged to move to open access.
- Cairn, a platform that offers access to 242 journals, especially in the fields of humanities and social sciences and of economics. Cairn offers a subscription model for institutions in order to get access to the journals' latest issues. Journals are freely available online once the embargo period defined by their publisher is over. Cairn works with some important French and belgian academic publishers like De Boeck, L'Harmattan or the Presses Universitaires de France (PUF).

Hybrid journals

To our knowledge, there are currently very few French publishers offering a hybrid publishing model, i.e. an author-fee enabling the article to be freely available online even if the rest of the journal is not open access at all.

It is worth mentioning that EDP Sciences publisher has an open access option for some of its journals. Moreover, in an original way, the same publisher offers for some journals (EJP AP European Physical Journal Applied Physics Journals for example) the "latest articles free" model, which allows access to full-text articles and references in HTML of the most recent issues. This could be seen as a "reverse embargo" model.

3.4 Open archives in France

3.4.1 How the list of repositories was compiled

Sources used

The list of 69 repositories (see annex 11.3.2) has been established using two main types of sources: the OpenDOAR and ROAR registries and the list of

portals hosted on the HAL platform. One should note that the visibility of French repositories in international tools like OpenDOAR can still be enhanced as they do not cover many HAL portals yet.

Selection criteria

The list includes all institutional, central and thematic repositories launched and managed by French institutions. Those repositories allow self-depositing by the researchers themselves and host recent scholarly publications (articles, conference papers, thesis, monographs...).

The repositories set up at laboratory level have not been taken into account. There were more than 200 of them at the beginning of 2010, a vast majority being hosted by HAL like the Centre d'Etudes Supérieures sur la Renaissance (University of Tours and CNRS).

It is finally worth mentioning the fact that if the scope of this study focuses on research material, there is in France a growing number of repositories hosting digital learning objects. There are currently seven Thematic Digital Universities (Universités Numériques Thématiques - UNT) which are networks of universities and grandes écoles sharing openly learning objects on an disciplinary basis. See for example UNIT, the UNT specialized in technology and engineering: (http://www.unit.eu/).

Domain of publication

It proved quite difficult to add a column taking the subject fields of publication into account, as OpenDOAR and HAL do not use the same typology. For instance, HAL does not identify each repository with a general area of knowledge, but goes into details and lists all the subject areas covered by the repository. We have tried to mention only the most represented subjects for each repository in this table, but it would probably be very interesting to get more accurate statistics about this matter.

Number of full-text publications and references

The figures indicated for each repository, and especially for those hosted in HAL, must be taken cautiously because the same publication can be counted in several entries. For instance, an article about history or sociology could be found in the general list of HAL, in the subject-based repository HAL-SHS dedicated to humanities, and in one of HAL institutional portals.

3.4.2 Comments

The repository list has been divided into four major categories, depending on the type of content hosted:

Document type			repositories	
	Central & subject-based	6	57	
Scholarly publications (articles, proceedings)	Institutional	51	57	
Electronic theses and dissertations)	
Books and monographs			1	
Research reports			2	
Total		69)	

Table 3.5. Number of repositories

ETDs: regarding ETDs management and open dissemination, it is important to mention that French universities are moving towards an electronic-only deposit scheme with a systematic online dissemination if accepted by individual authors. A common tool called STAR has been established by ABES (French higher education bibliographic agency) in 2008. It enables universities both to perform long-term archiving of their digital material and to send the ETD to a dissemination website such as HAL-TEL.

Books and monographs: It must be mentioned that the only institution currently involved in the open access movement is the Presses Universitaires de Lyon, also a partner in the OAPEN European initiative.

Scholarly publications (mainly research articles): 57 out of the 69 repositories listed are mainly dedicated to the deposit and open dissemination of scholarly publications (peer-reviewed articles, conference proceedings, reviews...). It is interesting to have a closer look at the 50 institutional repositories in order to see the distribution in terms of research institution type.

These figures show very clearly the fact that the current situation regarding repositories is very different depending on the type of research institutions:

 A large part of the major research organisations set up an institutional repository. As previously mentioned, these institutions adopted HAL as their open archive platform after its launch in 2001.

Research institution type			Percentage
University	86	19	20%
Grande école	around 230	113	5%
Research organisation ⁴	around 36	22	61%

Table 3.6. Number of repositories by research institution types

Some of them collect metadata from HAL (articles references for instance) and use them in a locally managed information system (e.g., IRD, CEMAGREF, INRA) where publications references are consolidated with other data.

IFREMER (a French research organisation for marine sciences) built an important self-managed repository called Archimer which collects around 80% of its current research output (October 2009).

 Universities and grandes écoles followed suit at a somewhat slower pace in the construction of open archives. The figures speak for themselves, as only a minority of institutions joined the movement.

This very slow uptake contrasts with conclusions that could have been drawn from the 2007 survey on open archives projects conducted by Couperin. Among the participating institutions of this study (almost only universities and grandes écoles), 64 had either a running open archive or intended to launch one at short or medium-term. The scope of some of these projects was only concerning ETDs, but one is bound to consider that there is an important gap between their intent as expressed in the survey and actual availability three years later.

It would be risky and long to try in this report to find explanations for this situation, but one can assume that one reason is a lack of political incentive at local level.

Note that some repositories collect material from more than one grande école like the ParisTech (12 institutions) or the Institut Telecom (4 institutions). The percentage may then lie somewhere between 10% and 15% of all grandes écoles.

Research organisations are to be understood as institutions officially chartered as "Public Institutions with a Scientific and Technical Character", or so-called EPSTs (CNRS, INED, INRA, IRD, CEMAGREF, INRETS, INSERM, INRIA, LCPC), EPIC (ADEME, ANDRA, INERIS, CNES, CEA, IFREMER, IRSN, BRGM, ONERA, CIRAD, IFP, LNE), EPA (AFSSA, CEE, CEREQ, IGN, INRP, INRAP, Météo France), or as "Higher Institutions" (Grands Etablissements) (MNHN, Observatoire de Paris, INSEP), as Public Interest Groups or GIP (ANRS, Genopole, IPEV) or as Foundations (Institut Curie, Institut Pasteur) which are assigned with important research missions in addition to the higher education system of universities and grandes écoles.



Figure 3.2. HAL: articles en ligne

It is possible to distinguish three ways and lines of action likely to be explored to encourage research institutions to set up open archives:

- After the non-renewal of the 2006 agreement (see page 10), a new impulse regarding open access at national level is now sought by all stakeholders. This renewed movement could hopefully follow up the Berlin 7 conference held in Paris in December 2009 and should, among others, address the issue of governance for HAL, now that its central role has achieved recognition and needs to be strengthened.
 - The fact that some institutions (Sciences Po and INP Toulouse) have recently connected their local repository to HAL could also be a strong incentive to help universities and grandes écoles build new open archives.
- As it was demonstrated several times at a global level, deposit mandates prove to be very useful, if not essential, in order to feed repositories with scholarly material (see, as examplified in Europe, the Liège and Minho repositories). In France there are still no institutional nor funder deposit mandates imposed.
 - However, it should be noted that the ANR has issued an open access policy in November 2007, strongly encouraging, but not mandating, the deposit of

funded publications in open archives systems and in HAL in particular. Only the CNRS Humanities and Social Sciences department adopted a stronger policy mandating systematic deposit of publications in HAL-SHS.

Regarding institutional policies, some research institutions strongly encourage their researchers to deposit their publications, as in the case of INRIA, INSU and the ISAE grande école.

- The involvement of French research institutions in European projects can also be a powerful way of fostering open repositories. Here are two examples:
 - Three French universities (Sciences Po, Paris Dauphine and Toulouse 1) are members of NEEO, a network of universities in the field of Economics which leads the Economists Online project. In this context these three universities had to set up an open archive to contribute to the project.
 - When the European Commission decided to mandate deposits of funded publications for 20% of the FP7 budget, the OpenAIRE project set up plans to establish a European-wide infrastructure designed to help researchers in complying with this European mandate. This could be a very interesting opportunity and leverage for the promotion of open access and open archives in French higher education and research institutions.

3.5 Large digitization programs

Persée

Persée, a large digitisation program of scientific journals in Humanities, was launched in 2003 by the French Ministry of Higher Education and Research. In March 2010 Persée gives access to 89 journals. The printed collections of these journals are entirely digitised and published online and are selected by an editorial board, thereby guaranteeing the scientific coherence of the collection. Persée is mainly run at the University of Lyon 2 and since 2008 at the University of Paris Descartes.

One of the goals of Persée, beyond digitising the printed journal collections and giving online access to them, is to provide tools and services enabling enhanced browsing of the documents such as full-text searches, thus offering the same type of technological features as electronic journals from commercial publishers.

The main goal of Persée project is to widely disseminate the French scientific output in Humanities on the internet (also note that Persée has an OAI-PMH compliant repository). Considered as a part of the French heritage, these collections can be freely accessed by anyone often back to the first issues of the journals. As to recent publication years, all of the journals hosted on the Persée portal imposed an embargo period (2-5 years) during which issues are not freely available online in order to maintain paper subscriptions at a sufficient level.

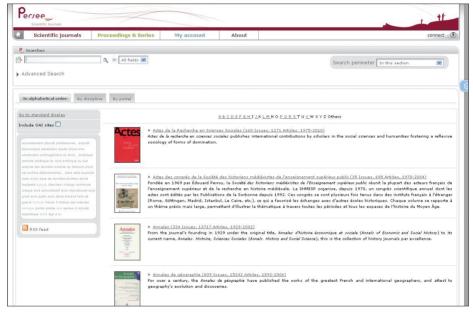


Figure 3.3. Persée

Numdam

A second example of large digitisation projects is the Numdam platform specialised in the online dissemination of French mathematical research journals. Operated by the MathDoc unit in Grenoble, Numdam gives access to 30 journals and 29 seminars.

Numdam is an initiative which shares common features with Persée:

Journal collections are very often digitised starting from the first issue. This
aspect is very important as backfiles are quite important for researchers in
Mathematics as well as in Humanities and Social Sciences.

- The latest issues are not available. Numdam has digitised journals issues up to 2000. After this date, articles can be accessed through a subscription system.
- Numdam is expected to maximize the visibility of the digitised content through good practices (persistent URLs) and an OAI-PMH repository.

Numdam differs from Persée in its origin in that this project emerged from the French community of mathematicians which is very active in the field of academic publications and scientific information and technology.

Gallica

Launched in 1997, Gallica is the digital library of the Bibliothèque nationale de France (BnF). As opposed to Persée or Numdam, its main focus is not on academic journals but on a large variety of document types (books, press titles, maps, recordings, etc.) that are useful for researchers and others. A vast majority of Gallica's content is non-copyrighted material and hence freely accessible online through a web 2.0 search interface.

From 1997 to 2007 digitisation followed a roadmap planning to digitize 5 to 6,000 documents per annum. In 2008 a major change in policy occurred and led to a new workplan aiming to digitize 100,000 per annum in coordination with other european partners involved in the Europeana project.

In 2010, Gallica is the largest French digital library (offering also metadata harvesting through an OAI-PMH compliant repository) with more than 1,000,000 documents online.

3.6 Conclusions

The development of open access in France is already a long story full of twists, alliances, statements not always followed by achievements, full of aborted projects but also widely acclaimed successes. This report reflects this diversity and richness, without claiming to be exhaustive.

The movement towards open access unquestionably finds a rational and convergent support from higher education and research institutions, which is to be reflected into common general principles applicable to all researchers, but also allowing for adjustments to the specificities of individual disciplines.

The availability of the national scientific output centrally through the HAL platform is complementary to the legitimate ambition of academic institutions to make their scientific results (and educational materials) public. This complementarity should be expressed fully and sustainably. This implies to revitalize the dynamics of national cooperation for both open archives and open access journals.

The French open access policy should constitute a credible part of a sustainable infrastructure for scientific and technical information by:

- Supporting researchers in the dissemination process of their research outputs.
- Encouraging deposits in open archives.
- · Raising long-term funding and hiring permanent staff.

These are the current challenges we are facing.



Fig. 3.4. Couperin.org: Les archives ouvertes

3.7 References

- Ametist (2008). Numéro spécial archives ouvertes, n° 2, mars 2008. (http://Maquettewicri.loria.fr/fr.artist/index.php5?title=AMETIST_numéro_2). [Accessed: 5/06/2010].
- André, Francis; Charnay, Daniel (2006). "Support of open archives at national level: the HAL experience". Proceedings of ISTISAN 07/12 Istituto superiore di Sanitá: Institutional archives for research, experiences and projects in open access, Rome (Italy). (http://archivesic.ccsd.cnrs.fr/sic_00187260/en/). [Accessed: 5/06/2010].
- André, Francis; Foulonneau, Muriel; Badolato, Anne-Marie; Charnay, Daniel (2007). "The repository jigsaw". *Research Information*, April-May 2007. (http://www.researchinformation.info/features/feature.php?feature_id=128). [Accessed: 5/06/2010].
- Couperin (2010). Les archives ouvertes pour les établissements d'enseignement supérieur et de recherche. 2007-2010. (http://www.couperin.org/archivesou vertes/). [Accessed: 5/06/2010].
- Creppy, Rachel (2007). "Archives ouvertes, archives institutionnelles et protocole français", *BBF*, 2007, n° 6, p. 42-45. (http://bbf.enssib.fr/consulter/bbf-2007-06-0042-008). [Accessed: 5/06/2010].
- Filliatreau, Ghislaine (dir.) (2008). *Indicateurs de sciences et de technologies: edition 2008: Rapport de l'Observatoire des Sciences et des Techniques*. Paris: Economica; OST, 2008. (http://www.obs-ost.fr/fr/le-savoir-faire/etudes-en-ligne/tra-vaux-2008/rapport-biennal-edition-2008.html#c700). [Accessed: 5/06/2010].
- France. Ministère de l'Enseignement Supérieur et de la Recherche (2009). L'état de l'Enseignement supérieur et de la Recherche en France, 35 indicateurs. n° 3, décembre 2009. (http://media.enseignementsup-recherche.gouv.fr/file/Evaluation_statistiques/50/1/Etat_de_l_enseignement_superieur_et_de_la_recherche_137501.pdf). [Accessed: 5/06/2010].
- France. Ministère de l'Enseignement Supérieur et de la Recherche (2009). Rapport sur les politiques nationales de recherche et de formations supérieures: annexe au projet de loi de finances pour 2009. (http://www.performance-publique.gouv. fr/farandole/2009/pap/pdf/Jaune2009recherche_formationsuperieures. pdf). [Accessed: 5/06/2010].
- *HAL: Hyper Articles en Ligne*. (http://hal.archives-ouvertes.fr/). [Accessed: 5/06/2010].

Libre accès à l'information scientifique et technique. INIST-CNRS. (http://openaccess.inist.fr/). [Accessed: 5/06/2010].

Revues.org. (http://www.revues.org). [Accessed: 5/06/2010].

4 OPEN ACCESS IN GREECE

Panos Georgiou, Fiori Papadatou

Georgiou, Panos; Papadatou, Fiori (2010). "Open access in Greece". In: *Open access in Southern European countries*. Lluís Anglada, Ernest Abadal (eds). Madrid: FECYT, p. 39-62.

4.1 Introduction

This report deals with the current status of scholarly communication and open access in Greece and in particular focuses on e-publications and related content available in digital format on the web.

Greek scientific and research community has always been "productive" in terms of publications of all kinds of types and formats: articles, monographs, book chapters, conference papers etc. Since the establishment of the modern Greek state, about 150 years ago, several hundreds journals and magazines have been publishing the work of the Greek authors, researchers and scientists.

However, these published works represents only a small proportion of the total research output of the country, as the majority of these works was, and still is, being published in international journals.

This landscape remained rather unchanged until the end of '90s and the beginnings of 2000, when the improved telecommunication infrastructure and the considerable EC and national funding for related projects, escalated the process: new publications, adoption of peer review processes, new ejournals, online versions of printed titles, massive digitization of journals archives etc.

Although this evolutionary process took quite a long time to shape, this report states that during the last years the progress concerning scholarly communication and open access in the digital environment is accelerated.

This report has facilitated data and information from: Directory of Greek Digital Resources (http://www.lis.upatras.gr/Libworld/gr_resources_EL.php)

which has been developed and is operated by the Library & Information Center of the University of Patras (http://www.lis.upatras.gr/index_EL.php) (see paragraph 4.7.1), National Book Center of Greece (EKEBI) (http://www.ekebi.gr/frontoffice/portal.asp?cpage=NODE&cnode=138), Open archives (http://en.openarchives.gr/), OAI harvester (see paragraph 4.7.2), ISI Web of Knowledge, Scopus and Ulrich's Web.

4.2 SCHOLARLY PUBLISHING IN GREECE

Scholarly publishing in Greece, as the following data shows, deals mainly with printed formats. Nevertheless, although still rather insignificant, there is an increasing activity in e-book market and publishing, while on the other hand we notice a more clear and significant progress in journals e-publishing initiatives.

4.2.1 Book publishing

According to the National Book Center of Greece (EKEBI) data (see table 4.1) the Greek book market is still on a complete print environment. By scientific terms and criteria it is obviously oriented to Humanities and Literature, as titles in Natural & Applied Sciences represent a small proportion of the total production and actually seem to have a declining tendency.

4.2.2 E-books

Until November 2009, only three (3) Greek publishers and vendors have been reported to have developed online services for access to Greek books. Within the next 5 months there has been a significant increase of this kind of activity, as 16 publishers and retailers in total have already involved in this business. A detailed view of current e-books market in Greece is presented in Annex 11.3.1 (e-books market in Greece). Beyond these cases all other initiatives concern digitized old historical books as part of wider digital collections with multiple types of material (see paragraph 4.5 below).

Table 4.1. Book titles production per year, subject and language

Subject	2002	2003	2004	2005	2006	2007	2008
Humanities ⁵	2,037	2,126	2,278	2,349	2,469	2,554	2,420
Greek books	1,548	1,542	1,632	1,737	1,698	1,772	1,695
Translated books	489	584	646	612	771	782	725
Natural & applied sciences ⁶	593	667	639	635	631	614	696
Greek books	351	454	401	417	358	315	345
Translated books	242	213	238	218	273	299	351
Literature	1,720	1,784	1,795	1,947	2,035	2,157	2,117
Greek books	942	990	958	1,095	1,093	1,150	1,263
Translated books	778	794	837	852	942	1,007	854
Children books	1,479	1,490	1,723	1,826	2,117	1,799	2,088
Greek books	553	556	614	558	668	669	662
Translated books	926	934	1,109	1,268	1,449	1,130	1,426
School & educational books	907	644	628	487	822	807	713
Greek books	879	629	610	464	816	794	700
Translated books	28	15	18	23	6	13	13
Art	420	455	576	547	702	759	671
Greek books	292	276	355	336	364	400	312
Translated books	128	179	221	211	338	359	359
Other ⁷	737	910	1,022	949	1,006	1,225	1,050
Greek books	417	418	579	488	528	685	577
Translated books	320	492	443	461	478	540	473
Total	7,893	8,076	8,661	8,740	9,782	9,915	9,755
Greek books	4,982	4,865	5,149	5,095	5,525	5,785	5,554
Translated books	2,911	3,211	3,512	3,645	4,257	4,130	4,201

Source: National Book Center of Greece (EKEBI), 2008

⁵ Includes law, political & economical sciences, education.

⁶ Includes medicine.

⁷ Travel guide, maps, gastronomy, practical guides etc.

4.2.3 Journals

Taking as a starting point a past study carried out by students of the Department of Librarianship of the Technology Educational Institute of Thessaloniki, we began a deeper and more systematic study of the Greek scholar journals landscape. After the first systematic screening in March 2009, we concluded that a number of 250 journal titles can be considered as scholarly titles or titles of a considerable scientific interest and importance to academics and researchers. This estimation was based upon criteria such as the content, the editorial team, the publishing body, the subject, the review policies, the publishing procedures and in some cases the history of the journal.

Getting further with our analysis since then, and after continuous monitoring, this number has currently been raised to a total of 328 journal titles. The analytical data gathered for each title helped us determine that a number of 163 journals currently adopt a clear stated peer review policy in article submission, editing and publishing processes. In table 4.2 (Greek "scientific" journals overview), below we present an overview of these titles.

In table 4.3 (peer review journals - publishing bodies), we present an analysis of the publishing body types of current peer review journals. It is obvious that the majority of journal titles are published by scientific and professional societies in the area of medicine.

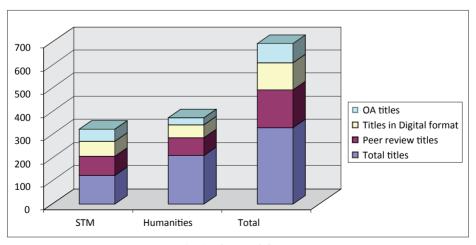


Figure 4.1 Greek journals by main areas

The vast majority of the articles published by these titles are in Greek language, while English is the second most popular language used in some of these titles. Most of these journals are published in irregular basis, and within those which are circulated on a regular basis, the most common are semi annually and quarterly published. According to rough estimations for the last couple of years, more that 4,000 articles are published annually in these titles.

Table 4.2. Greek "scientific" journals overview by subject

Subject	Total titles	Peer review titles	Titles in digital format
Subject	Total titles	Peer review titles	(full text)
Agriculture	1		1
Anthropology	11	2	
Applied sciences & technology	12	8	5
Archaeology	6	2	
Arts	3		
Biology	9	9	7
Earth sciences	4	4	3
Economics	13	8	8
Education	22	8	5
Environmental sciences	6	4	3
History	14	8	4
Law	45	17	18
Librarianship	1		
Literature	34	7	6
Mathematics	2		1
Medicine	87	60	43
Political sciences	11	2	
Social sciences	32	17	10
Sports & recreation	6	4	2
Theology	7	2	1
Veterinary sciences	2	1	1
Total	328	163	118

Table 4.3. Peer review journals - publishing bodies

			Types	of publishing	bodies	
Subject	Peer review titles	Academic	National/ government	Private	Research	Societies
Agriculture						
Anthropology	2				1	1
Applied sciences & technology	8	4				4
Archaeology	2				1	1
Arts						
Biology	9	2		1	3	3
Earth sciences	4	2				2
Economics	8	6		1		1
Education	8	3	3			2
Environmental sciences	4	1		2	1	
History	8			2	4	2
Law	17			14	1	2
Librarianship						
Literature	7	2			3	2
Mathematics						
Medicine	60	2	1	4	1	52
Political sciences	2			1		1
Social sciences	17	2	2	5	2	6
Sports & recreation	4	2				2
Theology	2			1		1
Veterinary sciences	1					1
Total	163	26	6	31	17	83

To get a comparative picture, this number represents about 25-30% of the total number of articles published in international peer review journals by authors affiliated with Greek institutions, according to Web of Science and Scopus data (see table 4.4 Articles by authors affiliated with Greece in international peer review journals).

	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Science & technology	12,026	12,591	12,145	11,101	9,673	8,892	7,499	6,949	6,293	5,847
Social sciences	946	1,159	1,097	1,076	970	827	826	714	667	624
Arts & humanities	113	127	117	112	77	89	94	92	101	89
Total (WoS)	13,085	13,877	13,359	12,289	10,720	9,808	8,419	7,755	7,061	6,560
Total (Scopus)	15,246	14,584	13,830	13,072	11,173	9,757	8,170	7,142	6,548	6,194

Table 4.4. Articles per year by authors affiliated with Greece in international peer review journals

Sources: WoS (lines 2-5, Scopus (line 6)

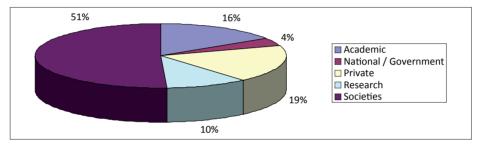


Figure 4.2. Greek journals publishing bodies

4.3 OA IN GREECE: AN OVERVIEW

As one may notice in the following paragraphs, although there is significant progress in Greece in the open access issues, which is mainly the result of the rapid evolution in the content management approach driven mainly by academic libraries during the last 5 years.

Nevertheless we ought to pay a tribute to pioneer digital efforts back in late '80s and early '90s, such as:

- The National Documentation Center (NDC) efforts with Journal Holdings Union Catalog, and the Online Catalogue of the National Archive of Print PhD Theses.
- The first Greek bibliographic databases (NDC's ARGO suite of databases,⁸ IATROTEK⁹).

⁸ http://argo.ekt.gr/

⁹ http://www.iatrotek.org/

• The first digital collection, ¹⁰ (practically the first institutional repository using Dienst protocol) by the University of Crete back in 1997.

However the most important progress of the Greek digital efforts materialized due to the EC funded National Projects for the development of new services in Greek academic libraries (1996-2000).

The following can be mentioned as the highlights of that period:

- the Greek libraries got the infrastructure and resources needed;
- the foundation of Hellenic Academic Libraries Link (HEAL-Link);
- the Greek Union Catalogue development;
- the development of the first federated Digital Library system for Grey Literature (Artemis) using Dienst.

The next boost came with the continuation of these programs for the next 8 years (2000-2008). During that period the majority of the digitization and indexing projects were carried out. Important developments of that period are:

- HEAL-Link's portal (2001).
- Zephyros, virtual Union Catalogue (2003).
- First Greek signatory of the Berlin Declaration: National Hellenic Research Foundation (2003).
- Kosmopolis digital collection (2004), the first Greek OAI-PMH digital collection by the University of Patras.
- First DSpace instance in Greece: Psepheda by the University of Macedonia (2004).
- First CDSware instance in Greece: Digital Collections of Aristotle University of Thessaloniki (2003).
- First OAI Harvester: openarchives.gr. 11
- Pilot version of the Directory of Greek Digital Resources. 12.
- The University of Patras becomes the 4th Greek signatory of the Berlin Declaration (2009) after University of Macedonia (2006) and Alexander Technological Educational Institute of Thessaloniki (2007).

¹⁰ http://dlib.lib.uoc.gr/

¹¹ http://www.openarchives.gr/

¹² http://www.lis.upatras.gr/Libworld/gr_resources_EL.php

4.4 OPEN ACCESS JOURNALS

If OA success was only a matter of raw numbers, and not also a matter of advanced services, publishing and editorial processes, and mostly a matter of compliance with open technologies and standards, the case of Greek scientific journals, would have been a success story.

In a total of 118 journal titles with online full text content, 84 of them are providing open access to their full text contents (see table 4.5. Online full text publication types & subjects), while 73 of them are clearly stated as peer review journals. Exactly a year ago, during our last inventory, 65 titles with full text online have been reported while 55 of them OA!

The most interesting remarks from the analysis of the online and OA journal landscape in tables 4.4 - 4.7 can be the following:

- Almost 40% of the titles are published both in print and online while 36% are practically digital archives of active journal titles.
- Fully e-journals represent only 24% (29 journals) of the total digital titles although all but one of them are open access journals.
- The majority (≈40%) of the journals are published in the field of Medicine (mainly by related scientific Societies), with journals in the area of natural & applied sciences accounting for a small number of titles.
- Overall, the various societies seem to be more active in digital publishing, than other types of organizations, while at the same time they lead the race in pure e-journals publishing along with the academic institutions.
- Private publishing houses, although clearly they are still oriented to print & web publications, overall they hold a significant share of the total online market (23%). The most important fact is that they almost doubled their online publications (of any type) since last March (13 titles) and 9 of these titles are OA.
- Despite this ongoing progress, only 21 Greek journals are indexed in the Directory of open access Journals DOAJ. A fact which brings into discussion the issue of promotion and sharing of content in a global perspective (see 7.5).

Do all the above prove that OA is a success? No doubt that there has been a huge progress, but there is still a long way to success, as there are essential aspects of OA where improvement is needed:

Table 4.5. Online full text publication by types & subjects

		<u> </u>		_					Ь	Publication types	on type	(A)				
Subject	5	line rul	Online rull text titles	les		e-Jon	e-Journals		Inof	Journals in print & web	rint &	web	Jour	nal digi	Journal digital archives	ives
	To	Total	Peer r	Peer review	Total	tal	Peer review	eview	Total	Įę.	Peer review	eview	Total	tal	Peer review	eview
	Total	OA	Total	OA	Total	OA	Total	OA	Total	OA	Total	OA	Total	OA	Total	OA
Agriculture	1	0	0	0						0			1	0		
Applied Sciences & Technology	5	5	5	5	4	4	4	4		0			1	1	1	1
Biology	7	7		7	3	3	3	3	3	3	3	3	1	1	1	1
Earth Sciences	3	3	3	3					1	1	1	1	2	2	2	2
Economics	8	9	8	9	1	1	1	1	4	3	4	3	3	2	3	2
Education	5	5	4	4					2	2	1	1	3	3	3	3
Environmental Sciences	3	3	8	3	2	2	2	2		0			1	1	1	1
History	4	4	4	4	2	2	2	2	2	2	2	2		0		
Law	18	0	4	0					18	0	4			0		
Literature	9	6	1	1	1	1	1	1		0			5	5		
Mathematics	1	1	0	0						0			1	1		
Medicine	43	33	39	31	12	12	12	12	15	11	14	11	16	10	13	8
Social Sciences	10	8	8	7	2	1	1	1	1	0	1		7	7	9	9
Sports & Recreation	2	2	2	2	2	2	2	2		0				0		
Theology	1	1	0	0						0			1	1		
Veterinary Sciences	1	0	1	0					1	0	1			0		
Total	118	84	89	73	29	28	28	28	47	22	31	21	42	34	30	24

Table 4.6. Online full text publication types & publishing body types

	Publication type			e-journals	Print & web	Archives	Total
		T 1	Total	11	3	3	17
	Academics	Total	OA	11	3	2	16
	Academics	Peer review	Total	11	3	3	17
		Peer review	OA	11	3	2	16
		Total	Total	_	1	3	4
	National	Iotai	OA	_	1	3	4
	Government	D	Total	_	1	3	4
		Peer review	OA	_	1	3	4
		Total	Total	4	22	11	37
Publishing	Private	Total	OA	3	5	10	18
body types	body types Private	Peer review	Total	3	7	2	12
	Research		OA	3	4	2	9
			Total	4	4	3	11
			OA	4	3	2	9
			Total	4	4	3	11
			OA	4	3	2	9
		Total	Total	10	17	22	49
	Societies	10141	OA	10	10	17	37
	Societies	Peer review	Total	10	16	19	45
		reer review	OA	10	10	15	35
				29	47	42	118

Table 4.7. Online full text journals subjects & publishing bodies types

										,	2	Lucan	edu emos guinand - confone commo forma ma quino		1						
									Publ	l guidsi	Publishing body types	bes									
Subject		Acad	Academics		Natio	nal – (National – Government	ment		Private	ate			Research	ırch			Socie	Societies		
	To	Total	Peer r	Peer review	Total	tal	Peer review	eview	Total		Peer review	view	Total		Peer review	sview	Tot	Total	Peer r	Peer review Total	Total
	Total	OA	Total	OA	Total	OA	Total	OA	Total	OA	Total OA		Total	VO	Total	OA	Total	OA	Total	OA	
Agriculture									1	0											1
App. Sciences & Technology	4	4	4	4						0							1	1	1	1	5
Biology	2	2	2	2					1	1	1	1	3	3	3	3	1	1	1	1	7
Earth Sciences	1	1	1	1						0							2	2	2	2	3
Economics	9	5	9	5					1	1	1	1					1		1		8
Education					ε	3	3	3	1	1							1	1	1	1	5
Environ, Sciences	1	1	1	1					1	1	1	-1	1	-	1	П					3
History										0			3	3	3	3	1	1	1	1	4
Law									17	0	3						1		1		18
Literature									5	5			1	1	1	1					9
Mathematics										0							1	1			1
Medicine	2	2	2	2					4	4	3	3	1		1		36	27	33	26	43
Social Sciences					1	1	1	1	5	4	3	3	2	1	2	1	2	2	2	2	10
Sports & Recreation	1	1	1	1						0							1	1	1	1	2
Theology									1	1											1
Veterinary Sciences										0							_		1		П
Total	17	16	17	16	4	4	4	4	37	18	12	6	=	6	11	6	49	37	45	35	118

- still no compliance with open standards and technologies: OAI-PMH, metadata schemas, standardized software (like OJS), etc.;
- poor services for the users: search and retrieval, browsing by various fields, quality of the digital items;
- unspecified business models, which are essential for the viability of the publication;
- unspecified short or long term preservation policies and practices.

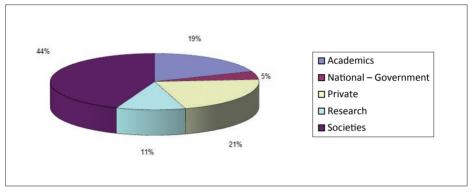


Figure 4.3. OA journals publishing bodies

4.5 OA BOOKS

As far as private bodies are concerned, only two cases are reported that provide total or partial OA to the content of their current publications:

- eBookShop platform (http://www.e-bookshop.gr/) (partially).
- John S. Latsis Public benefit Foundation Electronic Library (http://www.latsis-foundation.org/ldlib/books.aspx?cat=1) (totally).

Other OA books initiatives mainly concern project oriented initiatives of public, academic, research and non for profit institutions. Furthermore in most of these cases OA book content is part of a wider digital collection that often hosts other material as well (See annex 11.2.3. OA digital collections with books).

4.6 Repositories & digital collections

4.6.1 OA institutional repositories

Usually an institutional repository (IR), is defined as such, by content criteria. A pure IR, if we could say so, would host, manage, preserve and provide access to the whole research output of the institution, namely: PhD and related postgraduate theses and dissertations, reports, data sets, and most important specific versions of institution's staff publications.

Since the software platforms widely used for these purposes (Dspace, Invenio, Fedora, Eprints, etc.), could also handle more types of content, it is more common these days for an IR to host different kinds of collections with different types of content. In most cases these collections consist of journals archives, the institution's historical archives, and all kinds of special collections that the institution may have in its possession. Taking all these into account you can hardly distinguish a pure IR anymore.

This is also the case for the Greek IRs. In most of the cases the IR platforms are being used to host and handle multiple types of collections: grey literature, archives, journal archives, multimedia collections etc. Although this is not an essential issue, is certainly an issue when it comes to specific search and retrieval needs of the end user: along with the research output of the institution's faculty on e.g. water treatment, one might get also a picture of the Minister of Environmental affairs visiting the waste water treatment plant of the institution!

In any case formal OAI IRs are growing rapidly among academic institutions as 17 out of the total 33 academic institutions run their own OAI IRs while two more run a non OAI-PMH compliant IR, based on custom/commercial applications and finally two more keep operating their "IR" on an obsolete Dienst platform. Concerning the rest of the academic institutions, some are already in a transition phase to a new OAI IR, some are rather newly established institutions and they hardly have any data/content at all, and some are very small ones with limited resources to develop and maintain such a service. See a detailed view of Greek IRs in annex table 11.2.4 Greek institucional repositories.

Another significant issue is the absence of Research centers IRs in the relevant list where only Helios, the IR of the National Hellenic Research Foundation is

listed. Out of a total of another 14 research centers nationally, there is no reported activity on management and preservation of their research output.

4.6.2 Digital collections

Along with online journals and IRs there was significant progress during the last years concerning the overall digital resources development in Greece, mainly thanks to EU and National funding projects. According to current data of the Directory of Greek Digital Resources (see paragraph 4.7.1) there are more than 200 active resources, including e-journals, journals archives and IRs.

Taking into consideration the previous argument on the IR definition (see paragraph 4.6.1), among these registered resources there is a significant number of OAI compliant digital collections (Annex 11.2.5. OAI-PMH compliant Digital Collections) with about 187,000 additional documents. Thus the total number of documents in all OAI digital collections rises up to 462,000.

Furthermore the Directory of Greek digital resources records a considerable number of non OAI-PMH compliant digital collections, with unfortunately no current data on number of documents of each collection. A comprehensive list of these resources is presented on annex 11.2.6 Non OAI-PMH digital collections.

4.7 Harvesters, registries & related initiatives

4.7.1 Directory of Greek digital resources

The Directory is an initiative of the Library & Information Center of the University of Patras, and runs in a pilot version since February 2008 at: (http://www.lis.upatras.gr/Libworld/gr_resources_EL.php).

The directory aims to be the unique access point of useful information to all scholarly and related Greek digital resources available on the web

 by continuous monitoring and record of all resources: content, access policies, etc.;



Figura 4.4. Directory of Greek digital resources

 by recording and analysing all basic functional information and parameters for each resource: services, technologies, standards, protocols, business models, etc.

The directory collects data from the following types of resource:

- Bibliographical databases.
 - Library catalogs, bibliographies, journal articles.
- Digital collections.
 - journals archives, books, texts & articles collections, images & multimedia collections.
- Institutional repositories.
 - Grey literature, Publications, Educational material, Archives.
- E-journals (fully e-published).
- Experimental & Research data collections.

4.7.2 Openarchives.gr

Openarchives.gr is a "private" OAI harvester. It is the first and currently the only Greek harvester, collecting data from 41 resources in Greece and Cyprus.

4.7.3 Openaccess.gr

Openaccess.gr is an online platform, operated by the Greek National Documentation Centre (NDC), providing information on:



Figura 4.5. Openarchives.gr



Figura 4.6. Openaccess.gr

Table 4.8. Greek OAI-PMH digital collections in international harvesters & registries (April 2010)

)		ì					
No	Collection	OAI ster	BASE	Scientific commons	ROAR	Open Euro- DOAR peana		DRIVER
1	Anaktisi Institutional Repository of TEI of Western Macedonia		х	Х	Х			
2	Anemi Digital Library of Modern Greek Studies					×		
3	Aristotle University of Thessaloniki Document Server	×	×	×	×	×		×
4	Aristotle University of Thessaloniki, Department of Electrical and Computer Engineering: Repository		×		×			
~	Bulletin of the Geological Society of Greece	×						
9	Computational Systems and Software Engineering Laboratory - University of Macedonia				х			
7	Dexameni - University of Patras	×	×		Х			
8	DSpace at NTUA		×		х	х		
6	Educational Repository at the University of Patras	×	×		×	×		
10	Elocus - Institutional Repository of the University of Crete Library			x		×		
11	ESTIA - Harokopio University of Athens				×	×		
12	Eurekal Technological Educational Institute of Thessaloniki	x	x	Х	Х	х		
13	Helios (National Hellenic Research Foundation)		x	Х	Х	х		X
14	Institute for Byzantine Research: Byzantina Symmeikta		×					
15	Kosmopolis - University of Patras	×	×		×	×	×	
16	Ktisis - Institutional Repository of the Technological University of Cyprus	×						×
17	Nemertes - University of Patras	×	×	х	×	×		
18	Pandektis - Major digital collections of Greek history and culture				X	х		
19	Pandemos				X			
20	Pleias - University of Patras	×	×		×			
21	Psepheda - Digital Library & Institutional Repository University of Macedonia	×	×	x	×	×		
22	University of Piraeus Library				×			
	Total	10	13	7	16	12	1	3

- Open access issues and latest trends.
- Open access infrastructure currently being developed by NDC.

Within this activities' framework, NDC has recently (April 2010) launched a blog on open access (http://www.openaccess.gr/blog/). The blog aims to promote the dialogue on open access, the adoption of open access policies in research organizations and the effective dissemination of research performed in Greece.

4.7.4 MICHAEL Hellas

MICHAEL Hellas is the Greek portal of the MICHAEL European project. It is actually a directory of digital collections from museums, archives, libraries and other cultural institutions from across Greece. It focuses almost exclusively to cultural content and currently provides information for 116 digital collections.

4.7.5 Greek digital resources in the global perspective

Like many others around the world, we strongly believe that one of the key issues for the success of the various OA initiatives is to get the full benefits that OA offers from a political as well as from a technological point of view.



Figura 4.7. MICHAEL Hellas

In simple words we think that every OA collection, especially in the case of small countries like Greece, "ought" to take advantage of the unique promotion and data search & retrieval opportunities that the various OA registries, OAI harvesters and aggregators offer now days.

The increase of access and use of the 'OA collections' from a global target group is a critical issue for the viability of each collection.

Taking this into account, one of our team's tasks is the continuous monitoring of the most important registries and harvesters worldwide, for registered Greek resources in order to get a view about the publicity and possible impact the Greek resources have in the global community. Such data from the most famous international registries and harvesters is presented in the following table 4.8 Greek OAI-PMH digital collections in international harvesters & registries.

4.8 Publishing bodies & Business models

The major players in OA publishing are currently the various scientific and professional societies with the academic and research institutions following in distance.

Private & traditional publishers are not yet strong players in e-publishing and even less in OA publications. Still it seems that they are falling into pace day after day. Important issues for that can be considered:

- Lack of cost analysis efforts and tools to compare e-publishing vs. traditional
 publishing models. Apart from the medical and law fields, scientific publications, either books or journals, account for a small income to publishing
 companies in general.
- A series of psychological (fear for the unknown and not to lose the few subscribers and the subsequent small income), technological and funding barriers.

Regarding OA publishing by private bodies and publishers, it is rather early to reach any secure conclusion for the future, as the Greek market is not really a significant one and further studies must be carried out in the near future on the OA business models that might be adopted by the Greek publishers.

Public funding and sponsoring are the main funding sources while membership and advertisements are also sources of income in the case of societies journals. On the other hand subscriptions, where applicable in OA journals, concern obviously the print version of the journal and they are not a considerable source of income.

4.9 FUTURE CHALLENGES

What is it expected in the near future in Greece can be summarized as follows:

- Spin off cases from previous projects.
- New opportunities from new projects:
 - "Digital convergence" EC and national funding.
 - Digitization, indexing and digital storage of old and current Greek journals.
 - More academic e-publishing initiatives. We expect to see important collaboration schemes between the academics and the private publishers and/or information services providers.
 - OA e-books projects initiated mainly by academic institutions.

Libraries' specific projects focused on University press OA publications, National OAI Harvester, CRIS tools, New federated search and retrieval tools, Web 2.0 applications etc.

• More e-publications from publishers mainly in the area of e-books. Adoption of new (to Greek situation/tradition) access and business models.

4.10 Conclusions

Today 20 out of the 33 academic institutions in Greece operate an IR. The academic institutions that do not have an IR are either very small or recently established.

Most IRs host not only the scientific publications of the academic institutions but also journal archives, digitized special collections of the institution etc.

There are 29 e-journals most of them published either by academic institutions or by societies and in their majority the journals are OA.

Another 47 journals are published in both print and electronic format, and almost half of them provide their electronic version in a OA status. There are further 42 digital journal archives and again most of them are OA.

For all the progress of the last few years in OA publishing in Greece, there is still a long way to go in improving the provided services, the sustainability and preservation of the content and the cooperation of public and private sector. The small involvement of the private sector in these activities is due to the very small market and pilot projects and studies should be carried out in the future.

4.11 BIBLIOGRAPHY

- Banou, G.C.; Kostagiolas, A. P. (2007). "Managing Expectations for open access in Greece: Perceptions from the Publishers and Academic Libraries". In: *Proceedings ELPUB2007 Conference on Electronic Publishing Vienna, Austria June 2007.* (http://elpub.scix.net/data/works/att/121_elpub2007. content.pdf). [Accessed: 5/06/2010].
- Chantavaridou, E. (2009). "Open access and institutional repositories in Greece: progress so far". *OCLC Systems & Services*, vol. 25, n° 1, p. 47-59. (http://www.emeraldinsight.com/10.1108/10650750910931922). [Accessed: 5/06/2010].
- Georgiou, P.; Koumoutsos, K.; Papadatou, F. (2008). "Directory of Greek Digital Resources". In: 17th Hellenic Academic Libraries Conference, University of Ioannina, Greece, 24-26 September 2008. (http://nemertes.lis.upatras.gr/dspace/handle/123456789/2640). [Accessed: 5/06/2010].
- Georgiou, P.; Papadatou, F. (2007). "Digital content and open access in Greece". In: 16th Hellenic Academic Libraries Conference, University of Piraeus, Greece, 1-3 October 2007.
- Georgiou, P.; Papadatou, F. (2007). "open access issues in Greece". In: Academic Libraries: From Information Society to Society of knowledge, Technological Educational Institute of Piraeus, Syros Island, Greece, 18-19 October 2010. (http://nemertes.lis.upatras.gr/dspace/handle/123456789/2633). [Accessed: 5/06/2010].

- Georgiou, P.; Papadatou, F. (2009). "Scholarly publishing & open access in Greece: Warming up?". In: *Berlin 7 open access Conference: open access reaching diverse communities, Paris, France, 2-4 December 2009.* (http://nemertes.lis.upatras.gr/dspace/handle/123456789/2633). [Accessed: 5/06/2010].
- Georgiou, P.; Papadatou, F. (2009). "Digital scholarly publishing in Greece". In: *Academic Publishing in the Mediterranean Region, University of Florence, Italy, 19-20 March 2009.* (http://nemertes.lis.upatras.gr/dspace/handle/123456789/2638). [Accessed: 5/06/2010].
- Kallinikou, D. (2008). "Re-examining the limits of regulation for intellectual property protection on the eve of Openness I". In: *International Conference* "open access Infrastructures: The Future of Scientific Communication", National Documentation, Athens, Greece, 15 December 2008. (http://helios-eie.ekt.gr/EIE/handle/10442/8288). [Accessed: 5/06/2010].
- Makridou, E. (2008). "Initiative for the Certification of the Greek Institutional Repositories". Technological Educational Institute of Thessaloniki. (http://eureka.lib.teithe.gr:8080/handle/10184/446). [Accessed: 5/06/2010].
- Moreleli-Cacouris, M.; Makridou, E.; Asmanidis, Y. (2007). "Institutional Repositories: A Proposal for a national policy based upon a Greek case". In: 16th Hellenic Academic Libraries Conference, University of Piraeus, Greece, 1-3 October 2007. (http://eureka.lib.teithe.gr:8080/handle/10184/657). [Accessed: 5/06/2010].
- Nikolaidou, M. (2008). "An Overview of Digital Repositories Initiatives in Greece". In: *International Conference "open access Infrastructures: The Future of Scientific Communication", National Documentation, Athens, Greece, 15 December 2008.* (http://helios-eie.ekt.gr/EIE/bitstream/10442/8282/1/Νικολαιδου.pdf). [Accessed: 5/06/2010].
- Papadopoulos, M. (2008), "Re-examining the limits of regulation for intellectual property protection on the eve of Openness II". In: *International Conference* "open access Infrastructures: The Future of Scientific Communication", National Documentation, Athens, Greece, 15 December 2008. (http://helios-eie.ekt.gr/EIE/handle/10442/8289). [Accessed: 5/06/2010].
- Sachini, E.; Tsoukala, V.; Housos, N.; Stathopoulou, I.-O.; Pasxou, Ch.E. (2009). "open access Journals: A Case-Study in the Humanities". In: 18th Hellenic Academic Libraries Conference, University of Patras, Greece, 4-6 November 2009. (http://helios-eie.ekt.gr/EIE/handle/10442/8209). [Accessed: 5/06/2010].

- Sachini, E.; Tsoukala, V.; Houssos, N.; Stathopoulou, I.-O.; Paschou, Ch.-E.; Paraskevopoulou, A. (2009). "open access in the Humanities: a case study of developing three open-access electronic journals in Greece". In: 13th International Conference on Electronic Publishing: Innovation in Communication Paradigms and Technologies, 10-12 June 2009, Milan, Italy, p. 543-556. (http://conferences.aepic.it/index.php/elpub/elpub2009/paper/view/150). [Acces-sed: 5/06/2010].
- Vlachaki, A.; Urquhart, Ch. (2010). "Use of open access journals in biomedicine in Greece". *Library Management*, vol. 31, n° 1/2), p. 19-26. (http://www.emeraldinsight.com/10.1108/01435121011013368). [Accessed: 5/06/2010].

5 OPEN ACCESS IN ITALY

Paola Gargiulo, Maria Cassella

Gargiulo, Paola; Cassella, Maria (2010). "Open access in Italy". In: *Open access in Southern European countries*. Lluís Anglada, Ernest Abadal (eds). Madrid: FECYT, p. 63-82.

5.1 OPEN ACCESS IN ITALY: AN OVERVIEW

In Italy the OA movement has mainly pursued a "bottom up approach". Librarians, IT professionals, senior researchers, early adopters in individual universities and research centres have been actively involved in promoting awareness on OA issues, in implementing repositories, in planning projects, writing policies, developing tools. Initially, the academic institutional hierarchies failed to take any clear stand on the issue.

No specific national funding has been allocated for open access initiatives and in most cases the implementation of the Open Archive was financed with ordinary budget expenditures.

In a limited number of cases (i.e. University of Cagliari, University of Naples Parthenope, University of Sassari, and University of Trieste) the repositories were successfully funded under regional spending.

To date neither the government nor the Ministry of Education and Research have made any recommendations on this matter or provided any funding. Parliament has made no stand on the issue.

An important breakthrough, however, was marked by the conference on open access to scholarly literature held in Messina on November 4-5, 2004, promoted and organised by the Library Committee of the Italian Council of Rectors (CRUI), in collaboration with the University of Messina.

During this conference more than 30 academic institutions agreed on the principle of open access to scholarly literature, and signed the "Messina Declaration" in support of the Berlin Declaration on open access to knowledge in

the Sciences and Humanities. This is the first institutional action on the part of Italian university rectors to support OA.

This event helped foster the awareness of open access issues and has boosted interest in open archives and related technologies for a more effective dissemination of scholarly content.

Since the Messina Declaration 74 out of 80 Italian universities have signed the Berlin Declaration.¹³ By signing this Declaration these universities have committed themselves to achieve the goals set by the University of Southampton at the Berlin 3 open access Conference: a) to implement a policy to require their researchers to deposit a copy of all their published articles in an open access repository, b) to encourage their researchers to publish their research articles in open access journals where a suitable journal exists and provide the support to enable that to happen.

Following the Messina Declaration in 2006 the Conference of Italian Universities Rectors (CRUI) decided to create a working group on OA as part of the CRUI Library Committee. This decision was a significant step in promoting and supporting OA in Italian universities both in political and practical terms. Subsequently the activities of the CRUI OA Working Group led to the publication of the *Linee guida* per il deposito delle tesi di dottorato negli archivi aperti, October 2007 (Guidelines on depositing doctoral dissertations in open access repositories). Evidence of the impact of these guidelines has been the wide adoption of thesis mandates among Italian universities (see 5.4.3).

Later, in April 2009, the CRUI OA Working Group also published the following three guidelines:

- Raccomandazioni su open access e la valutazione dei prodotti della ricerca scientifica (Recommendations on OA and research evaluation) (http://www.crui.it/HomePage.aspx?ref=1782).
- Riviste ad accesso aperto: linee guida (Guidelines for OA journals) (http://www.crui.it/HomePage.aspx?ref=1789).
- Linee guida per gli archivi istituzionali (Guidelines for institutional repositories) (http://www.crui.it/HomePage.aspx?ref=1781).

¹³ Signatories of the Berlin Declaration can be found at (http://oa.mpg.de/openaccess-berlin/signatories.html).

OPEN ACCESS IN ITALY 65

The recommendations on OA and research evaluation seek to link the development of IRs with the research assessment process. Hence in Italy some IRs have been implemented with the function of CRIS (see paragraph 5.4.1). The CRUI guidelines recommend OAI-PMH compliant CRIS, possibly by adopting an open source software, encourage the depositing of full text research outputs, and suggest a minimum set of metadata to be adopted.

The Guidelines for OA journals foster the transition of scholarly journals from toll access (TA) business models to OA business models for those journals which are publicly funded, recommend the adoption of open source software for their publication (e.g. Open Journal System or Hyperjournal) (see 5.2.2), as well as foster the experimentation in OA journals of new peer review forms, i.e. soft peer review, social peer review.

The goal of the Guidelines for institutional repositories is to give repository managers suggestions on how to implement IRs: from the technical, organizational and legal challenges, policies to support action's repository, promotion and advocacy issues, to the economic viability of a repository.

To foster further OA advancements in Italy a very interesting bottom-up initiative was launched on 9 April 2008: the Italian wiki on open access (http://wiki. openarchives.it/index.php/Pagina_principale). The wiki is managed by a group of Italian experts on open access. Only member of the wiki working group can



Fig. 5.1. Home page of the Italian wiki on open access

insert news and update pages. The aim of the wiki is to offer a one stop shop to the main concepts of the OA movement, to foster sharing knowledge of Italian projects and best practices, to promote OA initiatives in Italy.

The wiki TOCs include: OA definitions, history of the movement, the green road and the Italian mandates (see 5.4.3), the gold road and OA journal business models, the OA and the intellectual property rights, FAQ on OA and OA resources in the different disciplines. The wiki working group also maintains a rich bibliography of articles in Italian or translated in Italian on open access (http://wiki.openarchives.it/index.php/Bibliografia_in_lingua_italiana).

The wiki has become very popular in Italy since its publication on the web. The conjoint advocacy action of the CRUI OA working group, of the wiki OA working group, of the entire community of Italian academic librarians community devoted to OA and faculty early adopters yielded a considerable number of initiatives this year alone: (http://wiki.openarchives.it/index.php/Open_access_Week_-_2009) hosted by Italian universities during the OA week (19-23 October 2009), culminating in the first Italian open access conference day (http://host.uniroma3.it/biblioteche/page.php?page=Programma) on 23th October in Rome. The OA conference day was hosted by the University of Roma Tre, organized in collaboration with CASPUR, an Italian interuniversity supercomputing consortia, and AIDA, the Associazione italiana of Documentazione Ayanzata.

Apart from promotion and advocacy current projects in favour of open access in Italy embrace:

- a. OA journals and monographs;
- b. Infrastructure and services provided by supercomputing consortia;
- c. Institutional repositories and disciplinary based repositories.

5.2 Italian peer-reviewed journals

According to Ulrich's periodicals directory 334 active peer-reviewed scholarly journals were published in Italy in 2009. 97 of these are indexed in the Journal Citation Reports.

According to the Web of Science in Italy in 2008 41,736 articles were published by researchers affiliated to Italian institutions. According to Scopus

OPEN ACCESS IN ITALY 67

in the same year 46,000 articles were published by researchers affiliated to Italian institutions. It should be kept in mind that italian-language journals are underrepresented both in WOS and Scopus.

	_	•		*-				
	2008	2007	2006	2005	2004	2003	2002	2001
Total (WoS)	41,736	34,675	33,794	33,371	29,177	29,892	27,304	26,719
Total (Scopus)	46,000	43,811	40,649	35,731	33,218	33,170	30,143	31,255

Table 5.1. Articles published by researchers affiliated to Italian institutions by year

Updated: 04/08/2010

In Italy the need for a solid infrastructure for producing, promoting, and disseminating Italian culture electronically is strongly perceived.

Most of the scholarly publishing in Italy is managed by medium size commercial publishers and small publishing houses, both of which are financially supported by universities; therefore moving to the electronic version or even taking a further step and embrace open access should not be too difficult. For various reasons the situation is at standstill, or to be more precise, is very slow to change.

A project called District Architecture for Networked Editions (DAFNE) was launched by the Universities of Padua, Florence, and Bologna, and the Central National Library of Florence, together with Casalini Libri and other partners, to build an infrastructure for e-publishing. The project unfortunately ended in 2002. This infrastructure is currently used by the University of Padua to test the peer reviewing process using Zope, an open source CMS software.

Few Italian universities run e-presses (University of Florence, University of Lecce, University of Bologna, Polytechnic of Milan and a few others) and mainly do so in cooperation with commercial publishers. Some of their journals and monographs are available open access (see paragraph 5.2.1 and 5.3).

In most universities electronic publishing is not centrally coordinated. Often single departments take the initiative to publish a journal electronically and make it available on the web.

Therefore there is an unmanaged presence of scholarly journals freely accessible on the web. Most of these journals cannot be considered OA according to the "standard definition" as they are not compliant with OAI-PMH standards

or to any other standard, peer reviewing is not always performed, generally authors do not retain copyright, the rights being transferred to the publisher and, furthermore, the technological infrastructure and technical quality of the journals are not exceptionally high.

However, there are some signs of change and new OA journals, compliant to OAI-PMH and to the BOAI definition of open access have begun to emerge in the last years.

5.2.1 Italian OA journals

According to the Directory of open access Journals (DOAJ) 131 OA peer-reviewed journals are published in Italy (http://www.doaj.org/doaj?func=f indJournals&hybrid=&query=italy). Unfortunately not all the Italian open access journals are registered in DOAJ. In some cases this may be because, as mentioned, a journal does not fulfil all the necessary requirements to be strictly defined OA. This is the case of the successful journal Hystrix: the Italian journal of mammalogy (http://www.italian-journal-of-mammalogy. it/) which adopts a one year content embargo. In other cases it might be a publisher's choice i.e. the case of the two social sciences OA journals published by Il Mulino (Bologna): Aedon (http://www.aedon.mulino.it/) and Sociologica (http://www.sociologica.mulino.it/main).

The great majority of Italian OA journals is published by universities, academic departments, university presses or with the contribution of university funds.

Among the university presses the Firenze University Press publishes 12 OA journals, followed by the University of Lecce, Coordinamento SIBA, that publishes 8 titles, and by the University of Milan (6 titles).

Among the publishers PAGEPress (Pavia) publishes 15 OA journals all in the medical field.

The great majority of Italian OA journals belong to Humanities (strictly 51 titles). The remaining journals are in Agriculture, Biomedicine, Civil Engineering, Computer Science, Diplomatics, Forestry, Ethnology, Ecology, Earth Science, Law, Mathematics, Physics, Psychology, and Social Sciences.

The dominance of OA journals in the Humanities is not surprising.

In Italy many journals in Humanities are published by universities rather than by for-profit publishers. Doubtless the adoption of the OA model is

OPEN ACCESS IN ITALY 69

an easier choice for the universities as all costs are covered by public funds. Moreover the open access model is very attractive for humanists since it provides broader dissemination and fosters the internationalisation of research outputs in Humanities.

Almost all OA Italian journals are multilingual. A fair number of them have an international editorial board i.e. Acta Otorihnolaryngologica italica, The African Physical review, Artifara, Basic and Applied Myology, Biblica, Capsula Eburnea, Cromhos, Erasmus Law and Economics Review, eSamizdat, Ethnorema, Etica & Politica/ Ethics & Politics, European Diversity and Autonomy Papers, The European Journal of Comparative Economics, European Journal of Legal Studies, European Journal of Histochemistry, European Papers on the new Welfare, Haematologica, Heart International, Gastroenterology Insights, Idee, iForest, Ignaziana, Infectious Disease Reports, Information Philosophica, International Journal of Spatial Data Infrastructures Research, International Journal of Speleology, InTRAlinea, Invertebrate Survival Journal, Italian Journal of Engineering Geology and Environment, The Italian Journal of Pediatrics, Italian Labour Law e-journal, JCOM, JLIS.it, JOP, Journal of Formalized Reasoning, Journal of Infection in Developing Countries, M@ gm@, Montesquieu.it, Music & Anthropology, Neuropsychological Trends, Nephrology reviews, Note di Matematica, Orthopedic Reviews, Pediatric Reports, Philomusica on-line, PsychNology Journal, PoS, Psychofenia, Rare Tumors, Rheumatology Reports, Ricerche di Pedagogia e Didattica, Segni e comprensione, Snippets, Storicamente, TeMA, Transitional Waters Bullettin, Transitional Waters Monographs, Web Journal on Cultural Patrimony.

28 journals have applied creative commons licenses.

The most used software for publishing an OA journal in Italy is Open Journal System.

5.2.2 Open source software for OA journals

In 2004 the Dipartimento di Scienza della Politica (Department of Political Science) of the University of Pisa developed in collaboration with public and private sponsors an open source software which handles the complete journal publishing process and it is fully compliant to OAI-PMH.

This software is called "Hyperjournal" (http://association.hjournal.org/index_en.html).

In 2005 the HyperJournal Association was founded as a no-profit organization, whose goals are to promote, care for and help the circulation of scientific, artistic and cultural heritage, supporting the free use of the intellectual production.

5.3 OA MONOGRAPHS IN ITALY

In Italy the number of scholarly OA monographs is slowly increasing.

Some university presses, faithful to their mission of supporting academic research and teaching, publish OA monographs.

The ESE Salento University Publishing of the University of Lecce has published 240 OA e-books to date.

The Firenze University Press (FUP) has a catalogue of 460 monographs. 120 of these titles are OA (http://www.fupress.com/openaccess.asp). The FUP is also an active partner of the European project Open Access Publishing in European Networks (OAPEN) (http://www.oapen.org/).

Edizioni PLUS of the University of Pisa authorizes OA e-publishing in author website (about 60 OA e-books).

The University Presses of Bolzano and Trieste publish OA books with POD.

The UniTN Eprints repository of the University of Trento has recently signed an agreement with the Department of Social Sciences of the same university. All monographs published in print by faculty of the Department are also deposited in OA in the UniTN repository So far there are 47 OA monographs in the repository (http://eprints.biblio.unitn.it/view/department/scienzeg.html).

A handful of for profit Italian publishers are also experimenting OA publishing models for monographs in combination or not with print on demand.

CLUEB in Bologna has many OA books and is partner in SHARE-TEC.

The Polimetrica publisher's catalogue includes more than 50 OA monographs.

In 2008 Polimetrica also launched a very interesting project: Libri Gratuiti in Ateneo/Free Books at your University (http://www.polimetrica.com/?p=p_24&iPage=4). The publisher set a proposal to Italian Rectors and faculty to publish OA scholarly books with the formula print on demand: each scholarly book will be published in two editions: a printed edition, available on the market, and an electronic edition, freely available through the web.

OPEN ACCESS IN ITALY 71

Each electronic edition is covered by copyright, which stipulates how these works may be used. In 2010 Polimetrica is also going to launch a new Project: Open Textbooks whose goal is to develop a web Portal to publish e-textbooks in OA + POD.

The LED edizioni (http://www.ledizioni.it/) is also adopting a OA + POD model in 2010 for publishing scholarly monographs.

5.4 Institutional repositories and disciplinary based repositories in Italy

5.4.1 Institutional repositories

Since 2001 the implementation of digital OA repositories in Italy has steadily increased.

Generally speaking, in each university it is the library that usually takes the initiative to select, evaluate and install the institutional repository with the support of the ICT group. Therefore any attempts to gain the Rector's or the Senate's approval, institutional repository planning, policy strategies, metadata creation, selection of a classification scheme, training, promotion, copyright help-desk are all handled by the library in cooperation with researchers, early adopters and IT staff.

The different types of digital content deposited include refereed e-pre-print/post print articles, conference proceedings, teaching material, doctoral theses, working papers, technical notes and, in some cases, digital objects related to cultural events held by the universities (recordings of lectio magistralis, of the rector's academic year opening lecture, lectures given by, etc.).

To date in Italy 59 repositories have been implemented 55 are listed in OpenDOAR as operational repositories, 4 more repositories (i.e. the Eprints repository of the University of Ferrara, the repository of the University of Macerata, the repository of the University Parthenope of Naples, the repository of the University of Palermo) have been very recently implemented and are not yet registered in OpenDOAR.

42 out of the 59 are university institutional archives. Out of the 42 archives 3 repositories are implemented by individual university departments (i.e. the Dipartimento di Fisica e Astronomia, University of Catania, Catania, the

Dipartimento di Scienze del Linguaggio, Università Cà Foscari, Venice, and the Dipartimento di Matematica, Polithecnic of Milan, Milan).

Some universities (Bologna, Milan, Padua, Pisa, and Trento) have implemented more than one repository.

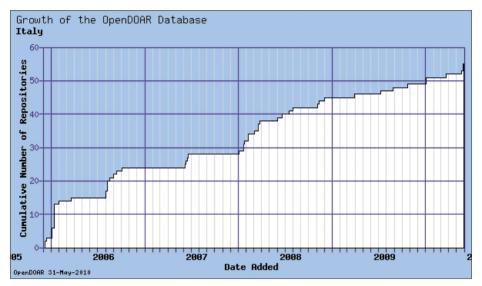


Figure 5.2. Italian repositories growth (source: OpenDOAR)

The remaining repositories belong to different typologies of research centres: the Istituto Superiore di Sanità (ISS) = the Italian National Health Institute, the Consiglio Nazionale delle Ricerche (CNR) = National Research Center, ¹⁴ the Istituto Nazionale of Geofisica e Vulcanologia (INGV) = the National Institute of Geophysics and Vulcanology, the Istituto Italiano di Medicina Sociale (IIMS) = Italian Social Health Institute, the Scuola Superiore della Pubblica Amministrazione Locale (SSPAL) = The Higher School of Public Local Administration, the Abdus Salam International Centre for Theoretical Physics, and a handful of other research centres.

¹⁴ The National Research Center covers 107 institutes all over Italy. It maintains a centralised archive PUMA (http://puma.isti.cnr.it//index.php?langver=) while the institutes manage their own local repositories.

OPEN ACCESS IN ITALY 73

Among the main Italian research centres ISS, INGV, CNR, and the Istituto Nazionale di Fisica Nucleare (INFN)= the National Institute of Nuclear Physics all have implemented an open access repository to date.

The INFN IR dates back to 1954 and it has been recently made available in electronic format (http://www.lnf.infn.it/sis/preprint). The INFN researchers work in the context of nuclear and high-energy physics, where the free circulation of preprints is standard procedure since well before the WWW was invented at CERN. In the high-energy physics community, scientific papers are submitted to arXiv, the well-known international repository. The INFN has signed the Berlin Declaration, and joined very early the SCOAP3 consortium, the new OA financing model for high energy physics journals (http://scoap3. org/). The SCOAP3 consortium aims to define a new financial model where the principles of OA meet the commercial needs of the free market of publishers, as well as the imperative necessity of rigorous peer-review. The INFN and the SCOAP3 consortium have been key players in the full support to OA given by all experiments at the LHC accelerator (CERN, Geneva Switzerland), whose copious production of OA scientific papers will dominate the scenario of high-energy physics in the next decade: "We strongly encourage the usage of electronic publishing methods for our publications and support the principle of open access publishing, which includes granting free access of our publications to all. Furthermore, we encourage all collaboration members to publish in easily accessible journals, following the open access paradigm".

The European University Institute, the American University of Rome and the FAO also maintain archives located in Italy, though strictly speaking they are not Italian institutions.

A very interesting case study is the repository of the Gruppo Frattura italiano (http://www.gruppofrattura.it/index.php?option=com_frontpage&Itemid=1).

It serves both as a repository, but also as a platform to publish the OA journal: Frattura ed Integrità Strutturale (see paragraph 4.1). In the near future we will probably see more cases of "mixed repositories", where the differences between repositories and journals blur, reinforcing the idea that self-archiving and the publication in OA journals are complementary strategies to open access.

Two institutional repositories are planned to be launched over the next months, e.g. at the University of Piemonte Orientale and at the Istituto Agrario San Michele all'Adige.

5.4.2 Repositories content

In December 2009 the total number of items archived in Italian repositories was 200,872. A typical research repository in Italy contained 3,652 items as assessed in December 2009.¹⁵

The number and the types of items deposited varies hugely among the installations and is not really comparable.

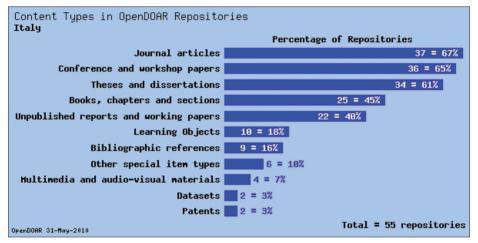


Figure 5.3. Content types in Italian repositories (source: OpenDOAR)

Some Italian repositories only contain a limited area of academic output: either doctoral dissertations (i.e. Padua@Thesis, one of the two archives of the University of Padua, PADIS of the University "La Sapienza", Rome, DocTA of the Cattolica University in Milan, ETD University of Pisa, and Unitheprints PhD, university of Trento) or didactic material (the DSpace Archive of the University of Parma and Armida, University of Milan). The majority of repositories continue to contain more metadata than accessible full-text papers, though it is their intention to provide wider access to their institutional academic output. In two cases, i.e. AIR of the University of Milan and

According to Maurits van der Graaf, "The European Repository Landscape 2008: i Inventory of digital repositories for research output", AUP, 2009 in 2008 the mean number of items archived in a research repository in Europe was 8,545.

OPEN ACCESS IN ITALY 75

the Bicocca Open Archive, Bicocca University, Milan the choice was made to devote the repositories to the Current Research Information System and only where possible to add the full-text article to the metadata records.

In OpenDOAR among the Italian repositories E-Lis is also listed, the well-known subject-based repository for library and information science (see paragraph 5.4.4).

In Italy the most used OA software is Eprints (29 installations) followed by Dspace (17 installations). The latter however is by far the most used software by academic institutions. There are also two CDSInvenio installations (Messina, La Sapienza, Rome) and one VT ETD (Electronic Thesis and Dissertation Archive, University of Pisa).

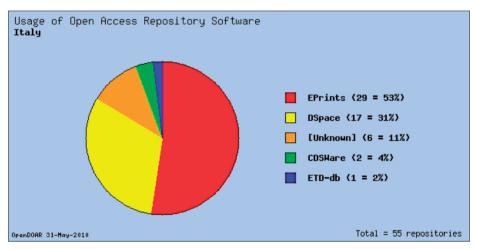


Figure 5.4. Usage of Open Access software in Italian repositories (source: OpenDOAR)

5.4.3 OA mandates in Italy

To date in Italy we register two institutional mandate policies, i.e. the one of the National Health Institute and the one adopted by the Libera Università Internazionale degli Studi Sociali Guido Carli (LUISS), and one soft Institutional mandate adopted in 2010 by the University of Sassari.

The mandate of the Italian National Health Institute (http://dspace.iss. it/dspace/handle/2198/352) was the first mandate in Italy. It was signed by Enrico Garaci, President of the ISS, on 23 January 2008 and states:

"All scientific works produced by ISS staff must be transmitted in electronic format (author's final copy, after peer-review: "post-print") to the Publishing Activities Unit of ISS, at the moment of acceptance for publication. This Unit will immediately make them available on the ISS Intranet. The metadata will also be made available on the Internet, via DSpace.ISS and, after the publisher embargo period has expired, the full texts will be made available too. During the embargo period, individual works can be requested from their authors through an automated function of DSpace"

The LUISS adopted its institutional mandate in February 2010.

In July 2010 Telethon (http://www.telethon.it/Pagine/homepage.aspx), the second most important Italian charity, will adopt a Funder mandate. Following this mandate by the date of 2010 all research articles funded by Telethon should be deposited in UK PubMedCentral or published in an open access journal by adopting the author-pays model. The costs of the option author-pays will be funded by Telethon.

To encourage self-archiving an increasing number of Italian universities have succeeded in adopting a thesis mandate upon the publication in October 2007 of the Linee guida per il deposito delle tesi di dottorato negli archivi aperti/Guidelines on depositing doctoral dissertations in open access repositories of the CRUI Working Group on open access (see paragraph 5.1).

Currently 22 Italian universities have adopted a thesis mandate. An updated list of these Universities can be found on the Italian wiki on open access (http://wiki.openarchives.it/index.php/Applicazione_delle_linee_guida). The number of Thesis mandates is fast increasing in Italy.

5.4.4 Disciplinary based repositories

With reference to discipline-based repositories, E-Lis on library and information science is worth a mention. E-Lis is the first international e-server implemented in 2003 for the deposit of documents in library and information science (LIS). It is hosted at CILEA (Milan), one of the two Italian interuniversity supercomputing consortia. E-Lis relies on the voluntary work of Library and information science experts from a wide range of backgrounds from 33 different countries.

In December 2009 E-Lis has reached the remarkable number of 10,000

OPEN ACCESS IN ITALY 77

items deposited. This number is growing daily. E-Lis accepts published or unpublished documents in scientific or technical areas related to library and information science in any language and format.

5.5 Infrastructure and services provided by supercomputing consortia

The two publicly funded interuniversity supercomputing consortia CASPUR, based in Rome, and CILEA, based in Milan, have developed, within the AEPIC project, a joint programme aimed at providing Italian universities with technical support for implementing and/or hosting open archives and OA journals creation.

5.5.1 PLEIADI

Within the framework of the AEPIC, CASPUR and CILEA have also been working on a project to implement an Italian national platform to provide central access to digital contents deposited in the Italian open archives. The platform, PLEIADI (http://www.openarchives.it/pleiadi/) (stands for Portal for Italian Electronic Scholarly Literature in Institutional Archives), was launched at the Messina Conference.

The goal of this initiative is to offer the Italian academic and research community solutions to some of the problems that are arising in the OA world regarding locating and retrieving OA full text scholarly documents, the need for metadata harmonization, lack of awareness of existing OA data providers, as well as the need for better integration between OA and commercial resources. At the same time PLEIADI aims to promote awareness of OA issues in Italy, to contribute to the debate on OA and to the advancement of technical knowledge and expertise in this field by offering its forum as an arena for information exchange among the OA community members (from university and research centres policymakers, researchers, IT people, librarians, students, press, etc.).

The platform allows federated search on the different Italian open archives as long as they are OAI-PMH compliant. It also provides the end-user with a personalized environment offering several services of high interest to the researcher and to his/her work, and it aims at keeping the end-users abreast



Figure 5.5. PLEIADI

with what is going in the OA realm and contributing to his/her awareness and support of OA. Personalised services include users profile creation, alerting services, search and citations savings, personalized news services (news, forum, RSS).

The PLEIADI platform is composed of a two-tiered architecture. Under the visible portal layer, there is a complex infrastructure of service providers.

PLEIADI offers a federated search interface and a series of user-centred services that supplement the platform offer. It is possible to identify several functional blocks in the portal architecture:

- a search & retrieval area, encompassing the Z39.50 connection with the harvester and a sorter module for retrieved documents. This area manages search performance in the Italian archives. Two search modules have been designed, simple and advanced, the latter encompassing different search fields, filtering functionalities, search results sorting, search history savings, search savings, etc.;
- a personalized area, comprising user's front-end, multi-language support and authentication/authorization system. This area represents the personalized environment where the user creates a personal profile, activates different features from language selection, alerting services related to news, FAQ, forum, search savings, citation savings;

OPEN ACCESS IN ITALY 79

 an information area, based on news, forum and RSS blocks, together with FAQ, useful links and document sections. This area aims at collecting and disseminating information on OA issues, at the same time keeping track of and registering all Italian open archives;

- an e-content management area, with an intuitive content management engine, this area handles all the website contents and web presentations through an intuitive and simple-to-use graphic interface;
- a log & stats area, for useful statistical information on search activities and access to documents in open archives. This area has not yet been implemented.

PLEIADI as a service provider performs a series of back-end activities designed to discover, retrieve, access open access content from all Italian open archives. Metadata related to OA content are harvested from institutional or disciplinary repositories (data providers), where they are deposited by authors according to their affiliation or scientific interest.

Once harvesting, filtering, harmonization and indexing activities have been performed, a new collective database becomes available and searchable via HTTP and Z39.50. Its availability through the Z39.50 interface enhances the opportunity for the OA content to be exposed and searched by the various federated searching tools. The Z39.50 interface allows the integration of open-access archives, journals with other information sources, such as the library catalogue and bibliographic references from databases and commercial publishers, that constitute the traditional core of information.

5.5.2 SURplus

In 2007 CILEA also developed SURplus (http://www.cilea.it/index.php?id=SURplus), a suite of software modules to collect and organize data on research activities and output at institutions. SURplus is interoperable with legacy systems: a business intelligence application gathers data from different modules, turns them into organized information (e.g. connecting publications to research groups and structures, connecting research projects to budgets), provides reports, metrics, statistics and predictive analysis tools. One main component of this architecture is the institutional repository for research outputs, where open access to publications is supported by the technical infrastructure.

To date the SURPlus software has been implemented by fourteen universities, 13 in Italy plus the Hong Kong University. Four Italian universities out of the 14 (University of Milan, Milan Bicocca University, University of Palermo, University of Tor Vergata, Rome) have adopted the complete SURPlus software suite.

5.6 Future challenges and conclusions

In Italy the future of the open access movement should be closely connected to a national funded planning strategy. However, such a strategy is totally lacking at the moment. Hence, this renders the long term sustainability of what are mainly voluntary driven OA initiatives (i. e. PLEIADI) somewhat uncertain. As previously written a very significant step both in political and practical terms in promoting and supporting OA in Italian universities was the decision by CRUI to create the OA working group in 2007. The four guidelines published to date by the CRUI OA working group, notably the Guidelines on depositing doctoral dissertations in open access repositories, are having a practical impact on the successful development of the Italian universities' repositories.

As far as the research output dissemination is concerned the most effective strategy in Italy is certainly the connection between the repositories and the current Research Information System, both at institutional and national levels. All OA initiatives and strategies to be supported will need a strong position statement and a collaborative programme from Italian policy makers, i.e. from the ministries potentially involved in the OA action: the Ministry for the Research and the University System (MIUR), the Environmental and Cultural Ministry (MiBAC), the Ministry for the Public Administration and Innovation, and the Health Ministry (MS). The statement should reinforce the idea of the importance of open access for the economic and social development of the country, for the competitiveness of its entrepreneurship and for the citizens well-being. In combination with such a position statement an open access funding strategy is absolutely necessary in Italy in order to foster the participation of Italian repositories' infrastructure in european research projects.

Acknowledgements: the authors wish to acknowledge Mary Joan Crowley for her kind collaboration in the preparation of the english version of this report.

5.7 BIBLIOGRAPHY

- Bianco, Stefano (2010). "La libera diffusione della scienza nell'era dell'LHC: l'INFN e l'open access". In: *Proceedings "Comunicare fisica 2010"*, Frascati, Italy, 12-16 April 2010. (http://agenda.infn.it/conferenceDisplay.py?confId= 1538). [Accessed: 15/07/2010].
- Caso, Roberto (ed.) (2009). "Pubblicazioni scientifiche, diritti d'autore e open access, Atti del Convegno tenuto presso la Facoltà di Giurisprudenza di Trento il 20 giugno 2008". (Quaderni del Dipartimento Scienze giuridiche; 79). Trento: Università degli Studi. (http://eprints.biblio.unitn.it/archive/00001589/). [Accessed: 15/07/2010].
- Cassella, Maria (2008). "L'open access nelle scienze umane". *Biblioteche oggi*, n. 10, p. 40-49. (http://www.bibliotecheoggi.it/content/20081004001.pdf). [Accessed: 15/07/2010].
- De Paoli, Nilde, Mornati, Susanna (2009). "SURPlus OA: il repository istituzionale a servizio della ricerca". *Bollettino del CILEA*, n. 113, p. 16-19. (http://bollettino.cilea.it/viewarticle.php?id=763). [Accessed: 15/07/2010].
- De Robbio, Antonella (2007). "Analisi citazionale e indicatori bibliometrici nel modello openaccess". *Bollettino AIB*, n. 3, p. 257-288. (http://eprints.rclis.org/archive/00011999/02/valutazione-23gennaio2008.pdf). [Accessed: 15/07/2010].
- Di Cesare, Rosa et al. (2009). "Per un Institutional repository del Consiglio Nazionale delle Ricerche: indagine sulle esperienze "Open access" nelle strutture scientifiche dell'Ente". *IRPPS Working paper*, no. 27. Roma: Istituto di ricerche sulla popolazione e le politiche sociali. (http://www.irpps.cnr.it/sito/download/wp27_09.pdf). [Accessed: 15/07/2010].
- Gargiulo, Paola et al. (2005). "PLEIADI: a portal solution for scholarly literature". In: *ELPUB Proceedings*, Leuven-Heverlee, Belgium, 8-10 June, 2005. (http://eprints.rclis.org/4442/1/Pleiadi_ELPUB2005_paper.pdf). [Accessed: 15/07/2010].
- Guerrini, Mauro (2009). "Nuovi strumenti per la valutazione della ricerca scientifica. Il movimento dell'open access e gli archivi istituzionali". *Biblioteche*

- oggi, n. 8, p. 7-17. (http://www.bibliotecheoggi.it/content/20090800701. pdf). [Accessed: 15/07/2010].
- Mornati, Susanna (ed.) (2008). "Open access in Italia". *AIDAinformazioni*, n. 3-4. (http://www.aidainformazioni.it/2008/342008monografia.html). [Acce-ssed: 15/07/2010].
- Tammaro, Anna Maria De Gregori, Teresa (2004). "Ruolo e funzionalità dei depositi istituzionali". *Biblioteche oggi*, n. 10, p. 7-19 (http://www.bibliotecheoggi.it/2004/20041000701.pdf). [Accessed: 15/07/2010].

6 OPEN ACCESS IN PORTUGAL

Ricardo Saraiva, Eloy Rodrigues

Saraiva, Ricardo; Rodrigues, Eloy (2010). "Open access in Portugal". In: *Open access in Southern European countries*. Lluís Anglada, Ernest Abadal (eds). Madrid: FECYT, p. 83-99.

6.1 Introduction/Background

In the terms of one of the most important declarations of the open access (OA) movement, the Budapest Open Access Initiative (BOAI),

"An old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet. The public good they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds. Removing access barriers to this literature will accelerate research, enrich education (...)".16

According to BOAI, OA can be achieved by two complementary ways or means. The first one, usually called "gold OA", is open access journals that do not use subscription or access fees and copyright to restrict access to the articles they publish. The second one, usually called "green OA", is self-archiving a copy of journal articles in open access repositories.

In brief, open access advocates the free dissemination on the Internet of scholarly literature, allowing anyone to read, download, copy, distribute, print, search or reference the full text of documents.

¹⁶ Budapest Open Access Initiative (2002). (http://www.soros.org/openaccess/read.shtml). [Accessed: 31/05/2010].

As in many other countries, open access initiatives in Portugal are relatively new (see section Evolution of open access in Portugal), with the first initiatives dating from 2003, but only getting general attention after 2006. On top of the factors that are common to most countries, the slow uptake of the open access agenda in Portugal can also be explained by the particular conditions and situation of portuguese research and publications.

In fact, Portugal hadn't a strong scientific tradition and infrastructure before the end of the last millennium. The number of researchers and the number of publications, especially in international peer-reviewed journals, was very small until recently. Just as an illustration, the number of Portuguese articles per year referenced on ISI databases was under 1,000 until 1990 and only after 2003 the number is bigger than 5,000 (see table 6.1).

The structural setback of the Portuguese science and the significant efforts made by Portugal to modernize its scientific system and higher education since the mid-1990s can also be confirmed by the growth rate in the number of publications since 2000, which was one of the biggest of the European Union (see figure 6.1).

	1990	1991	1992	1993	1994	1995	1996	1997	1998
[1] Publications in non classified journals	13	12	2	4	5	4	6	1	4
Exact Sciences	343	415	427	521	575	600	713	870	925
Natural Sciences	192	205	256	286	322	401	402	552	630
Engineering & Technology Sciences	148	148	199	185	229	306	353	385	477
Ciências Médicas e da Saúde	205	214	286	315	388	494	462	558	602
Agriculture Sciences	26	20	36	33	63	73	89	94	132
Social Sciences	30	27	53	48	48	63	90	53	75
Humanities	9	23	18	18	35	18	27	22	22
[2] Publications in multi- disciplinary journals	5	4	1	6	5	7	10	3	17
Publications Total [1] + [2]	970	1,068	1,277	1,415	1,669	1,966	2,152	2,538	2,883

Table 6.1. Number* of Portuguese scientific

Source: GPEARI - Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais / Ministério da Ciência, Tecnologia e Ensino Superior

^{*} Finding done by the method of fractional counting from: Thomson Reuters, National Citation Report for Portugal 1981/2008

^{**} Provisional figures

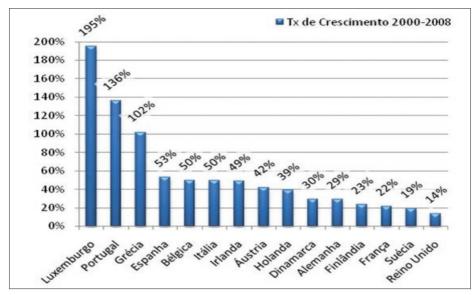


Figure 6.1. Number of publications growth rate, by European Union countries and per million of inhabitants, between 2000 and 2008 (Source GPEARI)

publications by scientific area

NCR 1981-2008						T . 1				
1999	2000	2001	2002	2003	2004	2005	2006	2007	2008**	Total
9	1	1		1	2	1	1	5	1	73
1,184	1,279	1,489	1,482	1,827	1,943	2,086	2,341	2,134	2,191	23,347
725	742	900	999	1,060	1,221	1,379	1,725	1,936	1,965	15,894
547	621	638	818	775	1,115	1,013	1,403	1,158	1,250	11,767
809	782	762	1,064	1,143	1,285	1,447	1,837	2,051	2,110	16,814
122	147	167	200	222	212	236	332	367	389	2,959
86	166	122	131	148	185	227	289	326	340	2,507
40	50	33	35	29	30	33	42	56	51	588
4	5	4	21	16	12	13	32	18	34	214
3,525	3,792	4,115	4,748	5,221	6,005	6,435	8,002	8,051	8,331	74,163

On the other hand, library collections, especially journal collections, were very scarce and insufficient (the average number of subscribed journals on academic libraries was around 1,000 in 2003). The creation of the national journal subscription consortium B-on - Online Knowledge Library, ¹⁷ in 2004, dramatically improved the accessibility of scientific journals in Portugal, and eased the access problem to Portuguese libraries and researchers.

Finally, despite the fact that several hundred scientific related publications were published in Portugal in the last decades, there is no really strong tradition of scholarly journals. Most of the publications are connected with scientific societies, many of them have no periodicity, or have severe problems complying with announced periodicity, and some have no real peer-review process. So, if the criteria of periodicity and peer-review are strictly applied, the number of Portuguese scholarly journals published in the last two decades will be probably under 100.

All this contextual background (limited dimension of research and research output, small number of scholarly journals and increased access to scientific literature after 2004) must be taken into account on the analysis of the Portuguese situation.

6.2 EVOLUTION OF OPEN ACCESS IN PORTUGAL

In Portugal, the development of open access has been mostly carried out by the universities, who have taken different initiatives to further promote access to research information. The first Portuguese open access initiatives were initiated by the University of Minho with the creation of RepositóriUM,¹⁸ its institutional repository which was publicly presented in November 2003. One year later, in November 2004, as a symbolic act to celebrate the university's institutional repository first anniversary, the rector of University of Minho formally signed the Berlin Declaration.¹⁹

At the same time, a world pioneering institutional self-archiving policy was established (December 2004) and was implemented in January 2005. Some months later, University of Minho organized the 1st Open Access Conference

¹⁷ B-on: http://www.b-on.pt

¹⁸ RepositóriUM: http://repositorium.sdum.uminho.pt

¹⁹ Signatories of Berlin Declaration: http://oa.mpg.de/openaccess-berlin/signatories.html

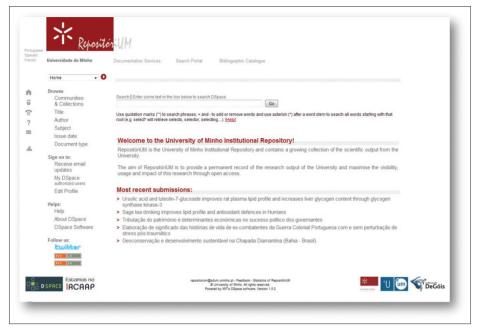


Figure 6.2. RepositóriUM

(May 2005) held in Portugal with the contribution of some of the most prominent protagonists and representatives of various organizations related with open access worldwide.

Also in 2005, the first Portuguese initiative concerning open access publication was set up, with the availability of the portal from the Portuguese section of the Scielo project²⁰ (March 2005). The Scientific Electronic Library Online (SciELO) is an electronic virtual library covering selected scientific journals collections from Latin America, Spain and Portugal. The library is an integral part of a project being developed by FAPESP - Fundação de Amparo à Pesquisa do Estado de São Paulo, in partnership with BIREME - The Latin American and Caribbean Center on Health Sciences Information.²¹ The SciELO Portugal²² collection results from the efforts of GPEARI - Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais (former

²⁰ More information about the SciELO project available on the WWW at: http://www.scielo.org

More information about BIREME - The Latin American and Caribbean Center on Health Sciences Information available on the WWW at: http://www.bireme.br/bvs/I/ihome.htm

²² SciELO Portugal: http://www.scielo.oces.mctes.pt

 $OCES)^{23}$ and the MCTES - Ministério da Ciência, Tecnologia e Ensino Superior 24 to promote quality Portuguese scientific journals and disseminate worldwide the Portuguese scientific publication.

Until the last quarter of 2006, the only two Portuguese open access initiatives remained RepositóriUM and SciELO Portugal. But the situation started to change on the last months of that year, with the emergence of new repositories, the dissemination of an open access declaration issued by CRUP - Conference of Rectors of the Portuguese Universities²⁵ (November 2006), and the organization by the University of Minho of a very successful 2nd Open Access Conference (November 2006) with the contribution of some of the most prominent protagonists and representatives of various organizations from Portugal and other countries like Brazil, Spain, United Kingdom, Hungary, Holland, Armenia, Mozambique and Japan.

During the 2nd Open Access Conference, as the result of the debate and contributions presented in the pre-conference Workshop: "Acesso Livre em Países Lusófonos: Iniciativas e Perspectivas", aiming to promote open access and the creation of new repositories and within the Portuguese speaking scientific community it was produced and submitted to public subscription a commitment named: "Compromisso do Minho: Compromisso Sobre Acesso Livre à Informação Científica em Países em Lusófonos".

In the subsequent months several other Portuguese universities started the installation and creation of open access repositories, but most of them were not publicly presented or were made available with a very small number of documents.

At that time, following its declaration endorsing open access, CRUP established a working group on open access and developed efforts to involve representatives of governmental agencies in the discussions and additionally CRUP's president signed the Berlin Declaration (January 2007). The purpose was to promote OA at each Portuguese university, helping the establishment of institutional repositories and the definition of open access self-archiving policies in all of them, as well the creation of a national aggregator for Portuguese repositories. During 2007, a CRUP representative (from Minho University) was also

²³ GPEARI - Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais: http://www.gpeari. mctes.pt

²⁴ MCTES - Ministério da Ciência, Tecnologia e Ensino Superior: http://www.mctes.pt

²⁵ CRUP - Conference of Rectors of the portuguese Universities: http://www.crup.pt

actively involved in the European Universities Association (EUA) open access working group, contributing for the definition and final writing of EUA Open Access Recommendations.²⁶

Earlier 2008, CRUP addressed to the Portuguese Ministry of Science, Technology and Higher Education (MCTES) by resending the CRUP's Declaration on open access and stating its support to the recommendations from the European University Association (EUA) Working Group on Open Access.

In March 2008, UMIC - Knowledge Society Agency²⁷ developed some contacts with FCCN - National Foundation for Scientific Computation²⁸ and University of Minho, setting the foundations for a project to build a national aggregator for Portuguese repositories and also promote, help and hosting the establishment of new institutional repositories. That project was named RCAAP (Repositório Científico de Acesso Aberto de Portugal = Portugal Open Access Science Repository) and started in July 2008 as an initiative promoted by the UMIC, in collaboration with the FCCN, offering an advanced service on the Portuguese Network of Science and Education (Rede de Ciência e Educação)²⁹. The University of Minho was responsible for the scientific and technical work on the project.

The first phase of RCAAP, from July to December 2008 produced, as planned, three significant deliverables for a short period of time:

- RCAAP Portal:³⁰ aiming to collect, aggregate and index open access scientific contents from Portuguese institutional repositories, forming a single entry point for searching, discovery and recall of thousands of scientific and scholarly publications.
- SARI (ASP service for institutional repositories): allowing institutions to create and completely "brand" their repositories as desired.
- Project support website:³¹ website with information about the RCAAP project, as well several pertinent documentation for different types of audiences (researchers, repository managers, general public).

²⁶ EUA Open Access Recommendations available on the WWW at: http://www.eua.be/index.php?id=396

²⁷ UMIC – Knowledge Society Agency: http://www.infosociety.gov.pt

²⁸ FCCN – National Foundation for Scientific Computation: http://www.fccn.pt

²⁹ More information about the Portuguese Network of Science and Education available on the WWW at: http://www.english.umic.pt/index.php?option=com_content&task=view&id=29&Itemid=187

³⁰ RCAAP Portal: http://www.rcaap.pt

³¹ Project support website: http://projecto.rcaap.pt/index.php?lang=en



Figure 6.3. RCAAP

The main component of the RCAAP project, the national aggregator for Portuguese repositories, the RCAAP Portal (http://www.rcaap.pt), was unveiled to the public during the 3rd Open Access Conference that took place at University of Minho on the 15th and 16th December 2008.

Also during this period, the University of Coimbra, the oldest Portuguese university, presented its repository, Estudo Geral, and the University of Porto unveiled its repository, Repositório Aberto, as well its institutional self-archiving policy.

In 2009, besides the organization of the 4th Open Access Conference (November 2009), integrated in the work plan of the RCAAP project various initiatives and activities were completed:

- Creation of Repositório Comum, a common platform for researchers working at institutions without their own repository set in place.
- Interconnection with the B-on Online Knowledge Library.
- Interconnection with the national Current Research Information System platform DeGóis.³²

³² DeGóis Curricula Platform: http://www.degois.pt/index.jsp?lang=en



Figure 6.4. Interconnection with the national Current Research Information System platform DeGóis

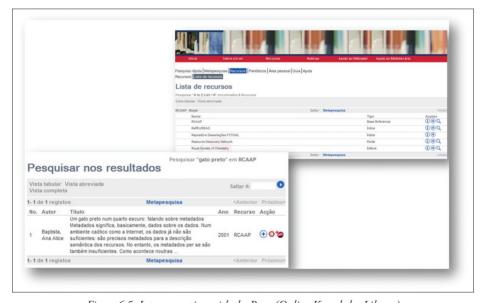


Figure 6.5. Interconnection with the B-on (Online Knowledge Library)

6.3 Current situation of open access journals

In Portugal the publishing of scientific journals is mainly administered by the active scientific societies within each respective research field. In most cases, journal subscription is connected to a membership and is offered as a membership benefit, mostly in printed form.

Some figures about journal publication in Portugal are shown in the tables below obtained from a search in Ulrich's Periodicals Directory,³³ a commercial

³³ Ulrich's Periodicals Directory: http://www.ulrichsweb.com

database of all types of serial publications. Academic and scholarly journals published in Portugal, or published in Portuguese language, have been also searched. The search criteria used are listed in the tables 6.2-6.3 below, as well as the results. Ulrich's designation for academic/scholarly journals has been used consistently. Journals with peer review are presented separately.

These tables show that most of the journals are still published in printed form, and that the number of open access journals in Portugal is low.

Concerning the open access journals spectrum, the Portuguese section of the SciELO project, SciELO Portugal, currently hosts 24 open access journals published by Portuguese entities. The Directory of open access journals (DOAJ),³⁴ which gathers information from 5,049 OA journals worldwide, is referring an increasing number of journals from Portugal in its database.

Academic/Scholarly, active journals published in Portugal (possibly co-published with another country) Online and ICR and Total number Online **ICR** OA online 60 4 4 203 31 0 Peer reviewed 30 17 Not peer reviewed 173 24 0

Table 6.2. Number of academic/scholarly journals published in Portugal

Source: Ulrich's Periodicals Directory

Table 6.3. Number of academic/scholarly journals from published in Portugal with material in Portuguese

Academic/Scholarly, active journals published in Portugal with material in portuguese (may also contain material in another language)							
Total number	Online	Online and OA	JCR	JCR and online			
167	44	21	0	0	0		
	Peer reviewed						
21	8	4	0	0	0		
Not peer reviewed							
146	36	17	0	0	0		

Source: Ulrich's Periodicals Directory

³⁴ Directory of open access Journals (DOAJ): http://www.doaj.org

Throughout the first months of 2010, 5 new journals have been added, making a total of 44 scientific journals Portuguese open access registered in DOAJ so far.³⁵

Finally, in Portugal there aren't many examples of institutional memberships for publishing on OA journals. The only two examples registered in recent years were University of Minho and Faculty of Medical Sciences - New University of Lisbon that had a membership with BioMed Central³⁶ currently discontinued.

6.4 CURRENT SITUATION OF OPEN ACCESS REPOSITORIES

There are 16 public universities in Portugal and combined with polytechnic institutes or smaller private universities that are focused mainly on teaching activities, the number increases approximately to 40 higher education institutions. As earlier reported the Conference of Rectors of the Portuguese Universities (CRUP), consisting of the rectors of the above-mentioned 16 public universities, has signed the Berlin Declaration on open access and recommended that all universities should build an institutional repository and implement a policy for self-archiving.

Prior the RCAAP project 11 repositories, in production or installation phases, were known in Portugal. During the first phase of the RCAAP project (2nd semester of 2008), five brand new repositories were created using the SARI infrastructure (University Aberta; University of Açores; Technical University of Lisbon; University of Coimbra Hospitals; University of Algarve).

In the first half of 2009, within the working plan of RCAAP project five repositories were created or installed in the SARI service. Three were new institutional repositories (University of Beira Interior, Polytechnic Institute of Leiria, Gulbenkian Institute of Science), one a renewed version of a previously existing repository (Polytechnic Institute of Bragança) and a fifth (Repositório Comum) is a common infrastructure for researchers working at institutions without their own repository (like the Depot repository³⁷ in the UK). In the

³⁵ Portuguese Journal referred on DOAJ in 2010: http://www.doaj.org/doaj?func=journalsByCountry&cId=158 &vear=2010

³⁶ BioMed Central: http://www.biomedcentral.com

³⁷ Depot repository: http://depot.edina.ac.uk

last months of 2009, envisaged on a 2nd call of the RCAAP project, four new repositories were developed and installed in the SARI infrastructure (National Laboratory of Engineering and Geology; Hospital Dr. Fernando Fonseca, Institute of Applied Psychology and Polytechnic Institute of Castelo Branco.

So, at the time of writing (May 2010) there are in Portugal 25 scientific open access repositories (http://www.rcaap.pt/directory.jsp) in a production stage and aggregated in the national portal - RCAPP Portal. Altogether, the running IR's, currently collect more than 42,400 scientific documents (see figures 6.6 and 6.7).

In the universe of Portuguese repositories, there has been significant progress in recent years, but the degree of development has been diverse, differing from institution to institution, in general the scientific output deposited in repositories is still low (estimated less than 10% of what is actually produced within the institutions). Regarding the types of documents publicly available, there is also some diversity in the overall, about 44% of them are scientific articles, 30% doctoral thesis and dissertations, 12% papers resulting from communications to congresses and conferences and 14% other types of documents. The repositories which seem to have higher degrees of success are those with self-archiving policies implemented.

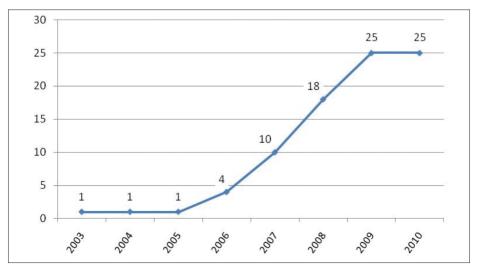


Figure 6.6. Evolution of the repositories number established in Portugal

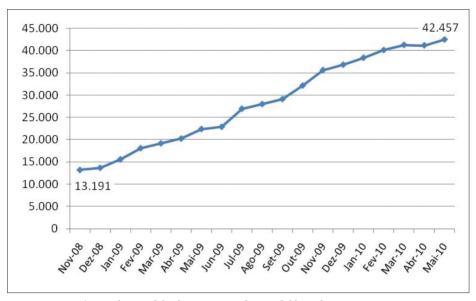


Figure 6.7. Evolution of the documents number available in the Portuguese repositories

The repositories more mature and/or with self-archiving policies associated also seem to enjoy some competitive advantage in terms of its visibility on the Web, as noted by the Ranking Web of World Repositories³⁸ (established from a universe of 1,418 repositories worldwide). Since the visibility of their repositories also contributes to the position of the Portuguese universities in Webometrics Ranking of World Universities.³⁹

These findings were the inspiration for producing, under the RCAAP Project, a document designated: "Open Access Policies Kit",⁴⁰ which gathers useful information and resources for formulating and implementing OA policies in the institutions (especially universities) and funding organizations.

The repository software presently most used in Portugal is DSpace, followed by Digitool and SinBad. But in terms of repositories platforms it has been noticed that institutions have been relying furthermore on the SARI infrastructure provided by the RCAAP project over proprietary solutions.

³⁸ Ranking Web of World Repositories available on the WWW at: http://repositories.webometrics.info

³⁹ Webometrics Ranking of World Universities available on the WWW at: http://www.webometrics.info

⁴⁰ Portuguese version of the "Open Access Policies Kit" available at: http://bit.ly/6zzW6H

In the Portuguese IR's community there has been a strong commitment to comply with the DRIVER Guidelines,⁴¹ endorsed both by the University of Minho (a DRIVER partner) and by the RCAAP initiative.

The institutional teams and repositories managers have the overall responsibility for the content of the local repositories since the quality assessment of the archived data is very important. The RCAAP Portal also requires quality metadata and has therefore developed its own OAI-PMH harvester and validator tool, ⁴² which daily harvests and validates metadata accordingly to the DRIVER guidelines to ensure the quality of the local repositories. Data differing from the metadata standard are normalized by the repository managers which are contacted with suggestions for corrections. Data coming in from many different sources can then be presented uniformly to the user.

RCAAP project support website presently provides information about publishers' policies for self-archiving and refers to the Sherpa/RoMEO database.

It has been a libraries' task to produce instructions, guidelines and templates for agreements regarding self-archiving, yet the available information about Portuguese journals/editors spectrum is scarce or inexistent; many Portuguese journals don't have formal policies or have it only for the printed version. For this reason, in the context of RCAAP, a project lead by Faculty of Sciences and Technology - New University of Lisbon was engaged with the collaboration of other Portuguese institutions to foster the identification and provide wider information about Portuguese publishers' policies towards open access.

For what has been seen until now, the main driving factor for engaging with the development and maintenance of IR's in Portugal has been the increasing awareness of the open access movement and the need to showcase the institutional research outputs. On the contrary, the main inhibitors are the low level of awareness on open access in some scientific areas and institutions and the doubts or fears with regard to the copyright situation for published research output.

⁴¹ Portuguese version of the DRIVER Guidelines available at: http://www.driver-support.eu/documents/ DRIV22ER_Guidelines_v2_Final__PT.pdf

⁴² RCAAP validator tool URL: http://validador.rcaap.pt

6.5 Conclusions and recommendations

The universe of Portuguese scientific publication is relatively small, but has been growing consistently in the last two decades. Although there isn't any comprehensive and reliable data on the Portuguese scientific output, we estimate that the number of journal articles published yearly by Portuguese researchers is around 20,000. From those, more than 1/3 are published in ISI referenced international journals and less than 2/3 in other non-ISI referenced international journals or Portuguese journals.

As revealed in this study, the number of Portuguese scientific journals is low, many are still published in printed form, and consequently the number of OA journals is also low. Most of Portuguese journals are from social sciences and humanities, and on some of those areas Portuguese journals and conference proceedings are the main venue for publishing research results. On the contrary, in most of science and technology areas (and even in some social sciences like economy), a big percentage of the Portuguese scientific output is published in international journals. Anyway, in almost all the areas (from humanities to science), there is a growing trend for internationalization of research and research publication.

Concerning institutional repositories, there was a significant progress on the last years. Since 2007 several institutional repositories were created in Portugal. After CRUP's declaration on open access, and the creation of CRUP's OA working group, the leaderships on most of the Portuguese universities have take action on this matter. At present time almost all Portuguese universities with significant research output have already or are creating their own institutional repository.

The development of Portuguese repositories has been very diverse, from institution to institution. In general, the percentage of the institutional research output archived in those repositories is still relatively small (less than 10%). The most successful repositories, like RepositóriUM, from Minho University, are associated with institutional self-archiving policies, requiring, encouraging and/or rewarding deposition of publications.

From the information collected in this report, there is a clear conclusion that open access developments in Portugal have been done mainly by institutional repositories and self-archiving (green OA), with open access publishing (gold OA) being also important but less significant. Taking into consideration

the dimension and weaknesses of Portuguese journals, the growing proportion of research output published in international journals and the limited financial resources of universities and other research institutions for supporting publication fees, it's natural that in the near future the focus for open access progress in Portugal remains repositories and self-archiving.

From these conclusions, some recommendations can be suggested for the development of open access in Portugal within RCAAP project:

- 1. Continue to provide support for the establishment of repositories in research institutions (universities and research centers) where they don't exist yet.
- 2. Provide guidance and help to the definition and implementation of OA mandates in universities and other research institutions.
- 3. Provide guidance and help to the definition and implementation of OA mandates for research funding organizations (public and also private), including the possibility to fund gold OA publication for funded research.
- 4. Reinforce dissemination and advocacy activities for open access repositories and RCAAP portal.
- 5. Influence B-on negotiations, to include clauses for OA publishing (when that option is available) in the journals subscribed by the consortium, at no extra cost for authors, researchers funders or the consortium itself.
- 6. Study, analyze and define possible scenarios for RCAAP intervention and collaboration on OA publishing (relation with SciELO, offering OA journal hosting service, etc.).

6.6 BIBLIOGRAPHY

Moreira, João Mendes, et al. (2010). "Repositório Científico de Acesso Aberto de Portugal: uma ferramenta ao serviço da ciência portuguesa". In: Congresso Nacional de Bibliotecários, Arquivistas e Documentalistas (10, Guimarães, Portugal, 2010). "Políticas de informação na sociedade em rede: actas" [CD-ROM]. [S.l.]: APBAD, 2010.

Portugal. Ministério da Ciência, Tecnologia e Ensino Superior. Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais. Direcção de Serviços de Informação Estatística em Ciência e Tecnologia (2009). *Produção científica portuguesa, 1990 - 2008: séries estatísticas*. Lisboa: GPEARI, cop.

- 2009, actual. Out. 2009. (http://www.gpeari.mctes.pt/archive/doc/SE2008_22-10-09.pdf). [Accessed: 5/06/2010].
- Portugal. Ministério da Ciência, Tecnologia e Ensino Superior. Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais. Direcção de Serviços de Informação Estatística em Ciência e Tecnologia (2009). *Produção Científica Portuguesa*, 1981-2008: Indicadores Bibliométricos. Lisboa: GPEARI, cop. 2009, actual. Out. 2009. (http://www.gpeari.mctes.pt/archive/doc/Indicadoresbibliometricos_1981_2008__2_0.pdf). [Accessed: 5/06/2010].
- Rodrigues, Eloy (2004). "Acesso livre ao conhecimento: a mudança do sistema de comunicação da ciência e os profissionais de informação". *Cadernos BAD*, vol. 1 (2004), p. 24-35. (http://repositorium.sdum.uminho.pt/handle/1822/670). [Accessed: 5/06/2010].
- Saraiva, Ricardo; Rodrigues, Eloy (2010). "O Acesso Livre à literatura científica em Portugal: a situação actual e as perspectivas futuras". In: Congresso Nacional de Bibliotecários, Arquivistas e Documentalistas (10, Guimarães, Portugal, 2010). "Políticas de informação na sociedade em rede: actas" [CD-ROM]. [S.l.]: APBAD, 2010. (http://repositorium.sdum.uminho.pt/handle/1822/10528). [Accessed: 5/06/2010].

7 OPEN ACCESS IN SPAIN

Ernest Abadal, Lluís Anglada, Remedios Melero, Francisca Abad, Miquel Termens, Josep-Manuel Rodríguez-Gairín

Abadal, Ernest; Anglada, Lluís; Melero, Remedios; Abad, Francisca; Termens, Miquel; Rodríguez-Gairín; Josep-Manuel (2010). "Open access in Spain". In: *Open access in Southern European countries*. Lluís Anglada, Ernest Abadal (eds). Madrid: FECYT, p. 101-115.

7.1 Introduction

The history of open access (OA) in Spain goes back to the beginning of 2000 and includes pioneering steps in the creation of repositories, adhesion to international initiatives and dissemination of open access through journals, conferences and specialized user groups.

The first open access repository was TDX (Tesis Doctorals en Xarxa or Online Doctoral Theses), created by the Consortium of Academic Libraries of Catalonia (CBUC) in 2001 for the archiving of doctoral theses. Spain was



Figure 7.1. TDX

also very active in the creation of the E-LIS thematic repository in 2003. Since 2006 the number of repositories has shown sustained growth, rising from 12 to the present 62 to 65 (62 in BuscaRepositorios, 63 in OpenDOAR, 65 in ROAR).

In 2008, Recolecta –the Spanish harvester of academic information– was created by FECYT (Spanish Foundation for Science and Technology) and Rebiun (Spanish University Libraries Network). The aim of the project is to promote and coordinate an integrated network of digital repositories for open access, and the dissemination and preservation of Spanish scientific output. Also, Recolecta works on the development of services and functionalities developed on this output (statistics, evaluation, citation, etc.) and also for the interoperability of repositories (standards, protocols and international guidelines). Recolecta is the first approach on the national level to coordinate the infrastructure of Spanish repositories and its relationships with the international development of the global repository infrastructure.

Two major international initiatives have marked Spain's adoption of open access. In 2003, the Ministry of Education, Culture and Sport of the Canary Island government was the first Spanish institution to sign the Berlin Declaration, and in 2004 the University of Barcelona became the Spanish representative and an active promoter of the Creative Commons licenses.

The importance of open access as a subject of study in Spain is shown in the publication of several monographic issues of specialized journals (*El profesional de la información* and *BiD* published monographic issues in 2005 and 2008), in the holding of specific conferences (in 2005 REBIUN dedicated the Fifth Workshop to repositories, 2006 marked the beginning of the OS-REPOSITORIOS workshops, of which four have been held, and the 5th International Conference on Open Repositories took place in Madrid in July 2010), and in the creation of user groups and blogs dedicated to open access and repositories (such as the OS-REPOSITORIOS list, created in 2006, and the open access blog of the Community of Madrid).

The present report is of a descriptive nature. It is divided into three sections: scientific journals, repositories and policies. It uses international information sources in addition to national ones to facilitate comparison between countries.

7.2 Scientific journals

The main sources used to obtain quantitative data on Spanish journals were the journal directory of the Spanish National Research Council (CSIC) covering Spain, Latindex covering Latin America, the Caribbean, Spain and Portugal, and the international directories Ulrich's and DOAJ. Other useful sources for obtaining an overview are the studies by Adelaida Román (2005) and Julia Osca et al. (2008), and the study of university scientific journals by Abadal (2007). Though wherever possible we offer data from more than one source to ensure the highest level of reliability, the quantitative data we provide must be considered approximate.

In addition to the scientific journals published in Spain, which are the focus of this section, there are of course a large and increasing number of spanish authors publishing in international journals. According to the Web of Knowledge (Thomson-ISI), the number of Spanish documents published in international journals covered by Web of Science rose from around 11,000 in 1990 to around 58,000 in 2008. In SCIMAGO Journal and Country Rank the number of Spanish documents covered in 2008 was around 52,000 (http://www.scimagojr.com). Spain's share of scientific production rose from 1.77 % in 1995 to 2.44 % in 2002 and almost 3 % in 2006, to place it in tenth position in the international ranking, according to Thomson Scientific for the period 1996-2006 (Moya, 2008, p. 57) and the ninth position for the period 2000-2010. The figures provided by Scimago Journal Rank with data from Scopus, which contains a larger number of journals, are similar.

The figures on the total number of scientific journals published in Spain vary considerably according to the source: 2,014 titles in Ulrich's, 2,281 in the CSIC directory and 2,822 in Latindex.

Unlike in the leading markets (the United States, the United Kingdom, the Netherlands and Germany), commercial publishers are responsible for less than a quarter of the titles in Spain. The remaining three quarters are published by non-profit publishers depending on universities, public research centers, scientific societies and professional associations.

It should also be noted that the degree of concentration of journals in publishers is low in both the commercial and the non-profit sectors.

The Social Sciences and the Humanities are the predominant subjects

Publishers	Journals	Percentage				
Universities	773	34.78				
Royal academies and professional associations	535	24.07				
Commercial publishers	485	21.82				
Public administration	256	11.52				
Other research organizations	118	5.31				
CSIC	49	2.20				
International organizations	6	0.27				
Unknown	59	2.58				
Total	2,281	100.00				

Table 7.1. Type of publishers of scientific journals

Source: CSIC directory

covered by the journals, as shown in the following table. Biomedicine, Experimental Sciences and Technology are the most globalized fields (i.e. Spanish authors publish in international journals).

Table 7.2. Thematic distribution of scientific journals

Area	Titles
Biomedicine	236 (10.34%)
Social Sciences and Humanities	1,738 (76.19%)
Science and Technology	307 (13.45%)
Total	2,281

Source: CSIC

One of the ways of measuring the quality rating of the journals is indicated by their presence in the WoK and Scopus. The Web of Science database includes 165 Spanish journals (January 2010) that form part of the ISI Science Citation Index, distributed as shown in table 7.3. It needs to be mentioned that, during 2009, 37 new Spanish journals were covered in the Journal Citation Report of Thomson Reuters, being 53 in 2008. This means that Spanish scientific coverage in this index rose 70 % in one year (http://www.accesowok.fecyt.es).

The Scopus database (http://info.scopus.com/), produced by the Elsevier group, includes a total of 257 Spanish scientific journals. Latindex offers a selective catalogue of scientific publications according to 33 quality criteria.

OPEN ACCESS IN SPAIN 105

Table 7.3. Spanish journals in the citation index

Web of Science database	Titles
Science Citation Index Expanded (SCIE)	74
Social Science Citation Index (SSCI)	40
Arts & Humanities Citation Index (A&HCI)	38
SCIE + SSCI	3
SSCI + A&HCI	9
SCIE + SSCI + A&HCI	1
Total	165

Source: Rodríguez Yunta 2010

According to this catalogue, 1,365 quality scientific journals, representing 42.6% of the total, are currently published in Spain.

Ulrich's indicates that 860 Spanish journals (42.3% of the total) are accessible online. The DOAJ directory includes a total of 293 open access digital journals published in Spain. Ulrich's directory includes 271 open access scientific journals published in Spain (13.3% of the total of 2,032). The organizations responsible for these journals are distributed as follows:

Table 7.4. Publishers of Spanish open access journals

Publishing organization	Percentage
Public research centers	14.29
Private companies	8.16
Scientific societies	22.04
Universities	46.12
Other	9.39
Total	100.00

Source: DOAJ

The copyright policies and self-archiving conditions of the journals are provided by the Dulcinea database (http://www.accesoabierto.net/dulcinea/), created in 2008 with a similar structure to that established by SHERPA/ROMEO. At present Dulcinea contains information on copyright policies and self-archiving conditions of 809 Spanish scientific journals. Self-archiving is permitted by 76.15% of the journals, with the following options: pre-print (0.98%), post-print (81.90%) and pre-print i post-print (17.10%).

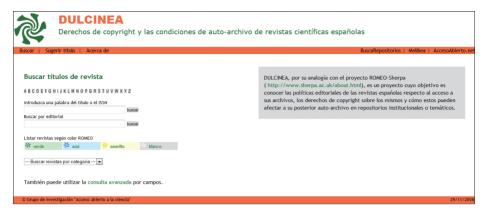


Figure 7.2. Dulcinea

Table 7.5. General data on active Spanish scientific journals

Journals	Online	Online and OA	JCR	JCR and online	JCR and OA	
2,032	860	271	56	46	18	
Peer-reviewed						
300	203	81	39	34	11	
Non-peer-rev.						
1,732	657	190	17	12	7	

Source: Ulrich's.

7.3 Repositories

In recent years there has been an increase in both the number of institutional repositories and the number of digital objects deposited in them. According to the BuscaRepositorios directory, 62 repositories –most of them being less than 3 years old– have been implemented since TDX was created in 2001.

In this section, the sources consulted were the BuscaRepositorios, OpenDOAR and ROAR directories. A complete report was also drawn up from surveys of the managers of Spanish open access institutional repositories (Melero et al, 2009).

The number of Spanish repositories is 63 according to OpenDOAR, 62 according to BuscaRepositorios and 65 according to ROAR. Universities and research centers are predominant among the institutions that have created repositories, with 43, representing 69.3% of the total. Special mention should be made of the role played by the CBUC, which has created 5 repositories,

OPEN ACCESS IN SPAIN 107

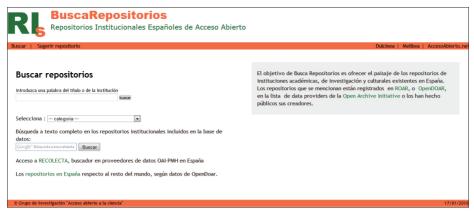


Figure 7.3. BuscaRepositorios

8.06% of the total. The vast majority of repositories are fairly new, with 35.48% being created in the last 2 years, and 74.19% in the last 4 years.

•	
Year	Repositories
2001	1
2004	2
2005	5
2006	8
2007	12
2008	12
2009	19
2010	3

Table 7.6. Year of creation of Spanish repositories

Source: BuscaRepositorios

Journal articles and theses are predominant among the documents included in the repositories, though learning objects have risen to 14% of the total.

Dspace is clearly the predominant technology platform, far ahead of the others with half the installations.

Finally, there are two service providers. In 2006 Hispana (http://hispana.mcu.es/es/inicio/inicio.cmd) was created by the Ministry of Culture and in 2008 Recolecta (http://www.recolecta.net) was created jointly by the Spanish

4 (6.34%)

Type of document	Percentage
Articles	38 (60.31%)
Theses	35 (55.55%)
Chapters and books	28 (44.44%)
Conference proceedings	18 (28.57%)
Unpublished working papers	14 (22.22%)
Multimedia and audiovisual	13 (20.63%)
Learning objects	9 (14.28%)

Table 7.7. Type of documents included in the repositories

Source: OpenDOAR

Patents

Table 7.8. Programs used

Program	Installations
Dspace	37
CDSWare	2
Eprints	3
DigitTool	2
Fedora	1
Html	1
OAICat	0
OJS	1
Unknown	8

Source: OpenDOAR

Academic Library Network (REBIUN) and the Spanish Science and Technology Foundation (FECYT) to, among other projects related to repositories and open access, harvest the metadata of Spanish repositories.

7.4 Policies

Open access policies pursue two main objectives: to help researchers to archive their publications in repositories and to encourage them to publish in open access journals. Mandate policies are clearly the most effective. However, one must also consider service creation, communication and dissemination,

OPEN ACCESS IN SPAIN 109



Figure 7.4. Recolecta

economic incentives and institutional coordination. We will use these categories to present the main actions carried out in Spain at present.

Unlike the factors dealt with in the previous sections, open access polices are not well-known and little global information is available on them. Therefore, the actions presented below are not intended to be an exhaustive list but merely to show the main lines and most active players at present.

7.4.1 Mandates (regulation)

There are currently three mandates for open access dissemination of publicly-funded research outcomes:

- The universities of the Community of Madrid (the Complutense University, the Carlos III University, the Rey Juan Carlos University and the University of Alcalá) jointly with the Spanish National University for Distance Education (UNED) and the CSIC (Comunidad, 2008). It made obligatory to provide open access to the outcomes of research funded by these universities grants.
- The Principality of Asturias (Principado, 2009). This mandate has a very broad scope, since it involves all of the regional government councils.
- The Polytechnic University of Catalonia (UPC, 2009). This is the most

important mandate. It requires that academic and research staff employed by the university deposit their academic publications in its own institutional repository.

The provisional draft bill of the Science and Technology Law (España, 2010) includes a section on open access to science (Chapter III. Dissemination of scientific and technological outcomes and culture. Article 36. Open access dissemination) which encourages the creation and development of repositories and open access dissemination of publicly-funded research outcomes. Furthermore, in the framework of the Inter-University Council of Catalonia, the Catalan universities have approved a document expressing their support for open access through several measures (dissemination, mandates, etc.) that will be put into practice in the period 2009-2011.

7.4.2 Provision of services

Platforms to disseminate scientific journals

The aim of these platforms is to give visibility and access to Spanish journals. Examples are RACO (http://www.raco.cat), Scielo España (http://scielo.isciii. es/scielo.php), e-Revistas (http://www.erevistas.csic.es) and RECYT (http://recyt.fecyt.es/).

Offices providing advice on open access and licenses

Units or offices (normally forming part of larger services) offer dissemination and advice on open access and the legal aspects of publishing and depositing of research articles. Three examples are the Open Knowledge Office (University of Salamanca) (http://oca.usal.es/index.php?option=com_content&task=view&id=100&Itemid=1), the Knowledge Dissemination Office (University of Barcelona) (http://www.bib.ub.edu/serveis/odc/) and the Intellectual Property Service (SEPI) of the Polytechnic University of Catalonia (http://bibliotecnica.upc.es/sepi/).

7.4.3 Communication and dissemination

Institutional campaigns

Most universities and research centers (e.g. the University of Barcelona, the Polytechnic University of Catalonia, the University of Alicante and the CSIC)

have carried out promotion campaigns, normally related to the setting up of a repository or the approval of regulations on open access. However, no campaigns have been aimed at informing publishers of the characteristics and possible advantages of the open access model.

Conferences and seminars

Since about 2007 conferences on a variety of subjects have included sessions on open access (e.g. Fesabid). There is a national conference on repositories (OS-REPOSITORIOS), and specific seminars of many universities (e.g. Córdoba, Girona and Valencia) have dealt with the subject.

7.4.4 Economic incentives

Budget allocations based on open access objectives

The criteria for allocating budgets to departments, research institutes, etc. include aspects related to open access, particularly the number of documents in repositories. The Polytechnic University of Catalonia offers an example of this.

Direct grants for self-archiving in repositories

In the last few years the University of Alicante has awarded direct grants to departments and research groups according to the number of documents deposited in the institutional repository (http://www.boua.ua.es/pdf.asp?pdf=654.pdf), (http://www.boua.ua.es/pdf.asp?pdf=1102.pdf).

Institutional subscription to OA portals

Several Spanish academic and research libraries support portals such as BioMedCentral (with 13 supporter members) and PLOS. Payment per publication can be made individually, but institutions can also pay a collective fee so that their authors can publish their individual projects at a lower cost.

7.4.5 Institutional coordination

Establishment of joint policies and actions

The policies adopted by consortia and groups of organizations are more effective than those of isolated organizations. Examples of this are:

- The agreement of the universities of the Community of Madrid.
 This led to the approval of several mandates (e.g. the Juan Carlos I University and the Carlos III University of Madrid) explained before.
- The agreement of the Inter-University Council of Catalonia (CIC).
 Promoted by the CBUC and approved by the CIC, this agreement establishes a mandate from 2011 (the universities must specify the conditions).

Adhesion to declarations and manifestos

The Berlin Declaration is perhaps one of the most emblematic in favour of open access. In early 2009 as many as 25 Spanish institutions –mainly universities and research centers– had signed it.

7.5 CONCLUSIONS

7.5.1 Journals

The number of spanish scientific journals is high (nearly 3,000 titles). Furthermore, a large number of spanish authors publish in international journals. Commercial journal publishers are a small part of the total amount (22 %). About 40% of the journals are digitized and 15% are open access. It is important to increase both of these figures. Due to the type of publishers involved (75% are non-commercial) it should not be too difficult to progress towards open access if sufficient information is provided on its advantages.

7.5.2 Repositories

The data presented above, and particularly the number and rate of creation of repositories, indicate that Spain is progressing in the creation of infrastructures that facilitate open access. Universities have been the major promotors of repositories: over five of the spanish public universities now have one and many are developing one.

The health sector, which represents 40-50 % of all science publications, has so far been left out of this progress. No Spanish hospitals or public health organizations as yet have repositories (although there are advanced projects in Asturias and Andalucía). Furthermore, with the exception of those belonging to the CSIC, no public research organizations have repositories.

OPEN ACCESS IN SPAIN 113

The content of the existing repositories must now be increased, but this will depend largely on the institutional policies that are adopted.

7.5.3 Policies

Few policies are in place and they are not very strict. It is good news that there will be a section on open access in the future Science Law, but it will be of little use if open access is not fostered by research evaluation agencies. There is a great deal of awareness and drive among information and documentation professionals, but as yet researchers show little awareness and initiative with regard to depositing, demanding repositories and promoting changes in the journals in which they publish or sit on expert committees.

7.6 REFERENCES

- Abadal, Ernest; Abad, Francisca; Melero, Remedios; Rodríguez Gairín, Josep-Manuel (2010). "Acceso abierto a la ciencia: informe 2009 y prospectiva 2010". *Anuario ThinkEPI*, 2010, vol. 4, p. 285-292.
- Abadal, Ernest; Melero, Remedios; Abad, Francisca; Villarroya, Anna (2009). "Políticas institucionales para el fomento del acceso abierto: tipología y buenas prácticas". *Bollettino AIB*, Giugno 2009 (vol. 49, n° 2), p. 201-212. (http://www.aib.it/aib/boll/2009/0902201.htm). [Accessed: 5/06/2010].
- Abadal, Ernest; Rius Alcaraz, Lluís (2008). "Revistas científicas de las universidades españolas: acciones básicas para aumentar su difusión e impacto". *Revista Española de Documentación Científica*, vol. 31, nº 2, p. 242-262. (http://eprints.rclis.org/13422/1/2008-abadal-rius-redc.pdf). [Accessed: 5/06/2010].
- Anglada, Lluís (2008). "Accés obert, autoarxiu, repositoris i declaració de Barcelona = Acceso abierto, autoarchivo, repositorios y declaración de Barcelona", *BiD: textos universitaris de biblioteconomia i documentació*, nº 20, juny 2008. (http://www.ub.edu/bid/20angla3.htm). [Accessed: 5/06/2010].
- Anglada, Lluís; Reoyo, Sandra; Cambras, Joan; de la Vega, Ricard (2008). "Els dipòsits electrònics cooperatius de la Biblioteca Digital de Catalunya = Los repositorios electrónicos cooperativos de la Biblioteca Digital de Cataluña". *BiD: textos universitaris de biblioteconomia i documentació*, núm. 20, juny 2008. (http://www.ub.edu/bid/20angla1.htm). [Accessed: 5/06/2010].

- Anglada, Lluís; Huguet i Vega, Miquel; de la Vega, Ricard (2007). "Polítiques i experiències catalanes en dipòsits cooperatius". *Coneixement i societat*, nº 13, p. 114-129.
- BuscaRepositorios. Directorio de repositorios institucionales españoles de acceso abierto. (http://www.accesoabierto.net/repositorios).
- Comunidad de Madrid (2008). "Resolución del presidente del Consejo Superior de Investigaciones Científicas, por la que se convocan ayudas para apoyar las líneas de I + D en el programa de creación y consolidación de Grupos de Investigación del Consejo Superior de Investigaciones Científicas, en la Comunidad de Madrid". *Boletín Oficial de la Comunidad de Madrid*, 119, de 20 de mayo de 2008, p. 122-127.
- CSIC: Directorio de revistas. (http://bddoc.csic.es:8080/index.jsp). [Accessed: 5/06/2010].
- DOAJ: directory of open access journals. (http://www.doaj.org). [Accessed: 5/06/2010].
- España (2010). Proyecto de Ley de la Ciencia y la Tecnología y la Innovación. (http://www.micinn.es/stfls/MICINN/Ministerio/FICHEROS/Proyecto_de_Ley_de_la_Ciencia%20_la_Tecnologia_y_la_Innovacion.pdf). [Accessed: 5/06/2010].
- Latindex: sistema regional de información en línea para revistas científicas de América Latina, el Caribe, España y Portugal. (http://www.latindex.unam. mx/). [Accessed: 5/06/2010].
- Melero, Remedios (2008). "Elpaisaje de los repositorios institucionales openaccess en España". *BiD: textos universitaris de biblioteconomia i documentació*, 20. (http://www2.ub.edu/bid/consulta_articulos.php?fichero=20meler4.htm). [Accessed: 5/06/2010].
- Melero, Remedios; Abadal, E.; Abad, Fca.; Rodríguez-Gairín, JM. (2009). Situación de los repositorios institucionales en España: informe 2009. Barcelona-València, marzo 2009. (http://www.accesoabierto.net/sites/default/files/In forme2009-Repositorios_0.pdf). [Accessed: 5/06/2010].
- Minon, Marc; Chartron, Ghislaine (coord.) (2005). État des lieux compartif de l'offre de revues SHS: France, Espagne, Italie. Juin 2005. (http://hal.archivesouvertes.fr/sic_00001561/). [Accessed: 5/06/2010].
- Moya-Anegón, F. de (ed.), Chinchilla Rodríguez, Z. (coord.) (2008). *Indicadores bibliométricos de la actividad científica española 2002-2006*. Madrid: FECYT.

ESPAŃA 115

Rodríguez Yunta, Luis (2010). "Las revistas iberoamericanas en Web of Science y Scopus: visibilidad internacional e indicadores de calidad". En: VII Seminario Hispano-Mexicano de Investigación en Bibliotecología y Documentación, Ciudad de México, 7-9 de abril de 2010. (http://eprints.rclis.org/18343). [Accessed: 5/06/2010].

- Osca Lluch, María Julia et al. (2008). "Difusión y factor de impacto nacional e internacional de las revistas científicas españolas". *Anales de documentación*, nº. 11, pp. 145-164. (http://revistas.um.es/analesdoc/article/viewFile/24861/24171). [Accessed: 5/06/2010].
- OpenDOAR. Directory of open access repositories. (http://www.opendoar.org). [Accessed: 5/06/2010].
- Principado de Asturias. Consejo de Gobierno (2009). Acuerdo por el que adoptan medidas para favorecer el fomento del acceso abierto a la investigación fomentada por el Principado de Asturias. (http://ria.asturias.es/RIA/bitstream/123456789/84/6/Acuerdoconsejogobiernorepositorio.pdf). [Accessed: 5/06/2010].
- Registry of open access Repositories (ROAR). (http://roar.eprints.org/). [Accessed: 5/06/2010].
- *Ulrich's periodicals directory.* (http://www.ulrichsweb.com). [Accessed: 5/06/2010].
- Universitat Politècnica de Cayalunya (2009). *Política institucional d'accés obert: accés, visibilitat, impacte i preservació de la producció científica de la UPC a Internet.* Acord núm. 171/2009 del Consell de Govern pel qual es ratificar la Política Institucional d'Accés Obert: Accés, impacte i preservació de la producció acadèmica de la UPC a Internet. (http://bibliotecnica.upc.edu/sites/bibliotecnica.upc.edu/files/arxius_site/file/open_acces/mandatcat. pdf). [Accessed: 5/06/2010].

8 OPEN ACCESS IN TURKEY

Ata Turkfidani, Aynur Moral, Gultekin Gurdal

Turkfidani, Ata; Moral, Aynur; Gurdal, Gultekin (2010). "Open access in Turkey". In: *Open access in Southern European countries*. Lluís Anglada, Ernest Abadal (eds). Madrid: FECYT, p. 117-128.

8.1 BACKGROUND

Open access (OA) makes the scientific literature accessible and readable through the Internet without financial, legal and technical barriers. Documents can be saved, copied, printed and scanned. The full text is available, and the information can be transferred and used by the public for any legal purpose free of charge.

In Turkey, the open access activities of universities began to increase in December 2005, after the 10th Internet in Turkey Conference held in İstanbul Bahçeşehir University. In the framework of this conference a panel on open access was organized. At the end of the meeting, it was decided to create the National Open Access Policy for the purpose of carrying out common work towards forming an institutional archive in Turkey.

In early 2006, the 4th Academic Informatics Conference was held in Denizli. At this conference open access was one of the main themes. The participants were provided with general information on the definitions and uses of open access, institutional repositories (IRs) and institutional archives. In the last session called "Towards national open access", the conference stated its adhesion to the Berlin Declaration drew up the "Open Access Declaration".

At the end of the conference, a Board of Open Access and Institutional Archive Advisors was formed as a concrete example of the Declaration. The Board comprised members from Anatolian University Libraries Consortium (ANKOS), The Turkish Library Association (TKD), the University and Research Libraries Association (ÜNAK) and the Turkish Academic Network

and Information Centre (ULAKBİM). The Board, which was formed for the purpose of helping institutions to set up open archives, also created a website with this aim.

Also at the end of the same conference, ANKOS announced the formation of an open access and Institutional Repository Working Group. The group's mission was determined as "creating awareness of open access and institutional archives among information professionals in Turkey, providing cooperation between ANKOS, information professionals and researchers with regard to the applications, and working in cooperation with the institutions working on this matter in Turkey and abroad".

The Open Access and Institutional Repository Working Group developed new channels for creating awareness of open access among academics. One of these channels is the "ANKOS Open Access and Institutional Repository" web page (http://www.ankos.gen.tr/acikerisim). In November 2009 ANKOS started an inter-university project under the name "National University Open Access Project": all the Turkish universities produced the scientific content of various types of publications of the author's approval in a common national archive.

The goal of this project, as authors and users, is to share information to the benefit of scientific knowledge.

Universities	Records added				
Ankara Uni.	5,125				
Ataturk Uni.	586				
Atılım Uni.	15				
Bahçeşehir Uni.	1,887				
Bilgi Uni.	0				
Çukurova Uni	0				
Istanbul Technical Uni.	4				
Izmir Uni.	6				
Izmir Institute of Technology	703				
Yaşar Uni.	0				
Yuzuncu Yıl Uni.	0				
Total	8,326				

Table 8.1. Turkish universities that support MITOS

MITOS, a repositories software, written by supporting objective of our country in our other academic institutions and their own open archives data base to establish long-term national qualifications in an open access system developed. On the other hand, also the data which were placed in the system have been prepared appropriately to the international standards.

The entire software system is developed using local resources of institutions according to the continuous demands of these institutions and the necessary international standards.

Currently 11 Turkish universities are participating in this project (the numbers of records were examined on 15/03/2010).

8.2 CURRENT SITUATION OF OPEN ACCESS JOURNALS IN TURKEY

Ulrich's Periodicals Directory is a commercial database on all types of serial publications. In tables 8.2-8.4 are the results of a search for scientific journals using several search terms: "situation: active", "periodical type: academic/scientific". Journals with peer review are presented separately. The search was carried out on 28/03/2010.

The Directory of Open Access Journals (DOAJ) covers free, full-text, peer-reviewed scientific and scholarly journals in all fields and in all languages. The

 Total number
 % online
 % OA
 % JCR

 417
 71.94
 30.21
 2.64

Table 8.2. General numbers of scientific journals published in Turkey

Source: Ulrich's Periodicals Directory

Table 8.3. Number of scientific journals published in Turkey

Total number	Online	Online-OA JCR		JCR, online	JCR, online, OA			
417	300	126	11	10	8			
	Not-peer reviewed							
229	147	34	1	1	1			
	Peer reviewed							
188	153	92	10	9	7			

Source: Ulrich's Periodicals Directory

DOAJ contains 4,847 journals and 377,300 articles, including 137 Turkish journals (28/03/2010).

Total number Online Online-OA **JCR** JCR, online JCR, online, OA 287 188 64 Non-peer-reviewed 171 102 0 Peer-reviewed 116 86 45 3 2 2

Table 8.4. Number of scientific journals with material in Turkish

Source: Ulrich's Periodicals Directory

Table 8.5. Turkish journals in DOAJ

2004	2005	2006	2007	2008	2009	2010
13	51	69	90	106	119	137

Table 8.6. Details of Turkish journals in DOAJ

Total number of journals	Indexed in Ulrich's	Open access with full text + abstracts
137	127	132

8.3 THE CURRENT SITUATION OF OPEN ACCESS REPOSITORIES IN TURKEY

With the aim of creating awareness on open access, these initiatives have led to the setting up of institutional archives, especially in universities. These archives were analyzed by consulting the Directory of Open Access Repositories (OpenDOAR) and the Registry of Open Access Repositories (ROAR). In OpenDOAR we have found eight repositories and twelve in ROAR as you can see detailed in annex 11.3. The aim of ROAR is to promote the development of open access by providing timely information about the growth and status of repositories throughout the world. Turkey is registered to open access Repositories with the twelve institutions' open access studies. The institutions use open archive system software, including MITOS and Eprints. Below we will present some comments about the most important Turkish repositories.

Ankara University Open Archive System

Ankara University began its open archiving efforts in 2001 by depositing the full-text electronic versions of printed serials containing the scientific production of academics. These materials can be consulted through a variety of access points, including author name, title, keyword and full-text indexing. Scientific publications included in international indexes and studies that have been published or accepted for publication in national and foreign journals are given priority in the archive. Ankara University's Open Archive, which was designed to comply with the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), is registered at ROAR and OpenDOAR. Ankara University joined the MITOS National Open Archive System in early 2010 and the transfer of the materials in their archive is still continuing.

Ataturk University Open Archive System

Ataturk University Open Archive was accepted as a project in October 2007. Following the purchase and installation of equipment in February 2008 and the necessary adaptations, it became available online in May 2008. Atatürk University's Open Archive includes articles, declarations, unprinted conference abstracts, lecture notes, theses, flyers, books, etc. The Open Archive System is compliant with the OAI standards. Publications archived in the system can be can be searched using local and foreign open archive databases. The archive is registered at ROAR and OpenDOAR.

Atilim University Open Archive System

Atilim University Open Archive began its open archiving efforts in 2006. From 2006 to 2009 the university used its own software system for this archive, but changed to the MITOS Open Archive system in June 2009. The data transformation process has been completed and this archive system is scheduled for implementation in late October. This archive system was developed in compliance with the OAI-PMH. It is registered at ROAR and OpenDOAR. The Open Archive includes articles, lecture notes, theses, declarations, research, technical and statistical reports, technical documents and audio-visual materials.

Gazi University Open Archive System

Gazi University's Open Archive is an initiative based on the decision taken at the senate meeting held on February 16, 2007 aimed at providing free access at

national and international level to the information produced by the academic staff of Gazi University. The Open Archive was developed through the cooperation between the Data Processing Department and the Library and Documentation Department. The archive system was developed in compliance with the OAI-PMH. It is registered at ROAR and OpenDOAR. The Open Archive includes articles of the university's academic staff published in scientific magazines, as well as research projects, conference abstracts, reports, lecture notes and theses.

Sabanci University Open Archive System

The Research Database Application (GNU-Eprints) was launched in September 2007. Only Sabancı University members can log in to the application using their SU-Net account and deposit items. Everyone can search or browse the repository for public items. The choice of the new application and the improvements to the operations was managed by an advisory group including academic/administrative units, with the support of the University Research Council. The archive is registered at ROAR and OpenDOAR.

National Inter-universities Open Archive Initiative - Bahcesehir University Bahçeşehir University's Open Archive Initiative started when it joined the MITOS Open Archive System in early 2010. The transfer of the open access materials is still continuing. It is registered at ROAR and OpenDOAR.

National Inter-Universities Open Archive Initiative - Istanbul Technical University

Istanbul Technical University's Open Archive Initiative started when it joined the MITOS Open Archive System in early 2010. The transfer of the open access materials is still continuing. It is registered at OpenDOAR.

National Inter-Universities Open Archive Initiative - Izmir Institute of Technology

As the newest member of the OpenDOAR, Izmir Institute of Technology joined this community with 702 items, and the transfer process is still continuing.

Turkish Council of Higher Education Thesis Archive

Postgraduate, doctoral, master's and medical theses began to be collected in June 1987. In May 16, 1996 the Council set up a Thesis Centre, and started

presenting the postgraduate theses constituted its entire collection. Thanks to technological developments, theses were made available online as of March 10, 2006. By means of the "Electronic Thesis Archive Project" initiated in 2007, printed theses that are available at the National Thesis Centre were made available online to researchers in full text (pdf). So far, not all theses have been published due to lack of the author's permission, but efforts are continuing to contact authors.

The National Thesis Centre plays a key role for science and research circles, through activities such as carrying out bibliographic control of theses (postgraduate, doctoral, master's and medical theses) at national level, providing related information services, and providing rapid access to information by offering full texts online.

The thesis archive includes 238,707 items from 131 universities, which have been collected since 1987. The distribution of postgraduate, doctoral, master's and medical theses is shown below.

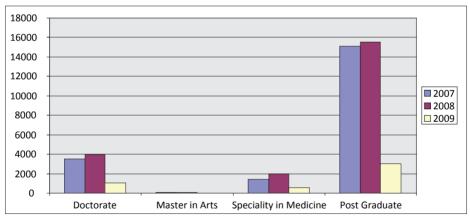


Figure 8.1. Data of the Turkish Council of Higher Education Thesis Archive for the last three years (2007-2009)

Source: http://tez2.yok.gov.tr/

Some of these 139 universities in Turkey have also created their own open thesis archive, but the main centre in Turkey is the Turkish Council of Higher Education Thesis Archive, which includes all the thesis studies.

The Scientific and Technological Research Council of Turkey/Turkish Academic Network and Information Centre (TUBITAK/ULAKBIM) National Databases:

The Scientific and Technological Research Council of Turkey (TUBITAK) provides major support to open access studies in Turkey. Researchers are able to access the open access journals that are published on the ULAKBIM website, and can benefit from these studies. After solving the copyright issues and creating its own open archive infrastructure systems, these major studies of TUBITAK will be fully incorporated in the Open Archive Studies of Turkey.

8.4 The New Turkish open access archive project: The national interuniversity open archive system (MITOS)

This will be a very time-consuming project for university information centre employees, who have worked hard to make the rapidly increasing resources available to the academic units and to obtain the articles and texts from each one, in addition to their normally heavy workloads.

Work had already been done to study the possibility of creating a common open access point in Turkey within the context of ANKOS. It is planned to provide this project with the support of the MİTOS open access System. This system is able to work integrated with international standards such as OAI, OAISTER and DOI, the materials are being recorded by Dublin Core (15 elements), and its modules allow easy updating and changes. This automation system will be constructed at a main centre with one or two servers and the materials posted by the universities will be backed up periodically. The possibility of creating a common open access point in Turkey within the context of ANKOS has been already studied. In the MITOS system, access to the information is password-controlled. Thus, with the distributed data collection system, the information centre employees will only verify or control the process.

Fourteen large universities are currently interested in this subject and eleven universities are at the stage of acquiring this automation system (a common search interface is available from (http://www.mitosweb.com).

Importantly, the software system has been developed entirely using only local resources, and it is upgraded or updated in line with demands from institutions and developments in international standards.



Figure 8.2. MITOS

8.5 Copyright in Turkey

Copyright normally exists when the work of researchers is deposited. In order for an article to be deposited in an open archive, researchers must obtain the right to do so and the form of usage must comply with the copyright conditions. The electronic archiving policy of journal publishers can be checked from the SHERPA/RoMEO list.

There is no need permission for pre-edition if the owner of the copyright is the author. If the author wishes to deposit the definitive edition, the permission of the copyright owner is required. Presently 69% of publishers give permission for electronic archiving. There is no violation of copyright unless the file is copy protected. Journal policies can be seen at (http://romeo.eprints.org/stats.php) and publisher polices at (http://www.sherpa.ac.uk/romeo.php).

The use of Creative Commons, in which the usage rights can be organized for each author, is encouraged. The Creative Commons project advocates "some rights reserved" instead of "all rights reserved", offering four types of licence for usage in education and research.

In Turkey, the copyrights are protected under the Intellectual Property Rights Law of 2001, which was an updating of Law 5,846 of 1951. According to this law:

"Article 23: The right to rent, lend or sell or distribute in any other way a work or its copies belongs exclusively only to the owner of the work. Importing the original copies of works reproduced abroad with the consent of the rightful owner and the right to benefit from this work by distributing it in Turkey belongs exclusively to the owner of the work".

Copyrights are valid for all works that are including in archiving policy and that are published, or in the process of being published, at the time of archiving. The Intellectual Property Rights Law provides for usage in education and research and thus allows electronic archiving of information for this purpose.

"Article 33: (Change: 21/2/200-4630/17) The presentation of a published work in educational and training institutions for the purposes of face-to-face education and with no commercial purpose is unrestricted on condition that the name of the work and its owner be clearly identified".

In the light of this information on the legal regulations, the owner of works has usage rights for them in two situations. Librarians and archivists must obtain permission to archive works in institutional records.

Authors of works can decide which works are to be archived. Therefore, authors will not violate the copyright unless they copy previously published materials in the same form. However, if the author fails to agree with publisher to adopt open access as an institutional archiving policy, the works cannot be archived. Nevertheless, the number of international publishers who support the open access movement is rising. Publisher policies on copyright can be seen at the "SHERPA/RoMEO Publisher Copyright Policies" web site. Therefore, many works that have been published or are in the process of being published can be legally archived at the decision of their authors. This situation must

be declared on the repository's web site. An explanation can also be given on protection of intellectual property rights according to the institutional policy. It is also possible to post a copyright agreement form with the necessary information.

An example of an explanation on copyright:

"Our institution has adopted the 2003 Berlin Declaration and supports open access to academic information. In this situation, archiving electronic copies of academic works at the decision of the authors is legal. All information in the records can be used if the sources are shown. On the other hand, our research authors think their works can be copied without permission and the principle of information can be improved by sharing information".

An example of an agreement form for electronic theses:

"I give permission for all or part of my thesis entitled... to be archived electronically and used and copied, showing the source of the information, provided that the rights of publishing a book or article based on the information in the thesis are reserved for me".

8.6 Conclusions and recommendations

Open access activities have been growing rapidly and will soon be one of the main forms of access to scientific publications for the academic world in Turkey. In 2009, a breakthrough year for open access in Turkey, researchers started publishing their work thanks to the support of the academic institutions through incentives for publication, academic promotion, etc. At the same time, institutional repositories and archives sought the fastest ways to provide online access to academic information.

Institutions in Turkey were informed of open access thanks to the leadership of university libraries within the context of the ANKOS community and have been encouraged to make breakthroughs in this area. Universities are now being supported to create their own open archives and work is being done to unite these archives on a single server. This project is being constructed with MITOS software provided by MikroBeta Corporate, and involves the initial unification

of the open archives of the 11 universities, though 14 universities are currently interested in this project. These archives will be suitable for inclusion in ROAR and OpenDOAR because of the compatibility between MİTOS and OAI-PMH.

The figures also show that scientific journals are slowly moving towards open access. According to Ulrich's Periodicals Directory, 34.01% of the Turkey-based scientific journals are available in open access.

These efforts show that the importance of open access in Turkish science is increasing day by day. By supporting the national projects, it will be realistic to create the Turkish National Academic Archive.

8.7 REFERENCES

- ANKOS open access and Institutional Repositories Study Group. (http://www.ankos.gen.tr/acikerisim). [Accessed: 5/06/2010].
- DOAJ: directory of open access journals. (http://www.doaj.org). [Accessed: 5/06/2010].
- Gazi University Open Archive System. (http://acikarsiv.gazi.edu.tr/). [Accessed: 5/06/2010].
- MikroBeta/MITOS. (www.mitosweb.com). [Accessed: 5/06/2010].
- OpenDOAR. Directory of open access repositories. (http://www.opendoar.org). [Accessed: 5/06/2010].
- Registry of open access Repositories (ROAR). (http://roar.eprints.org/). [Accessed: 5/06/2010].
- Turkish Council of Higher Education Thesis Archive. (http://tez2.yok.gov.tr/). [Accessed: 5/06/2010].
- *Ulrich's periodicals directory.* (http://www.ulrichsweb.com). [Accessed: 5/06/2010].

9 CONCLUSIONS

Ernest Abadal, Lluís Anglada, Remedios Melero

Abadal, Ernest; Anglada, Lluís; Melero, Remedios (2010). "Conclusions". In: *Open access in Southern European countries*. Lluís Anglada, Ernest Abadal (eds). Madrid: FECYT, p. 129-134.

After the presentation of the national reports, we will now offer a comprehensive characterization, highlighting the common features and the differences of each country with regard to open access scientific communication.

The six countries have significant differences in size, population, GDP, political organization, etc., which are also reflected in the quantitative data presented in their respective reports. Nevertheless, they share some common features in the field of scientific communication, such as a significant presence of their own languages in scientific dissemination, the predominance of publications in Social Sciences and Humanities, the low proportion of commercial publishers, and a lack of interest in standardizing publications to increase their quality and visibility. These features are focal points for establishing strategies aimed at promoting open access in the scientific communication system of each country.

In this section we include some general statistical tables to provide an overview of the situation of the six countries with regard to the three elements analyzed in each national report (scientific journals, institutional repositories, and policies for promoting open access).⁴³ The statistics were consulted in early June 2010.

9.1 JOURNALS

With regard to the number of active academic journals, as shown in Table 9.1, the countries of Southern Europe have 7,248 titles (representing approximately 10.5% of world total according to Ulrich's directory).

⁴³ We do not discuss the situation of digital books, because this subject was not included in all the reports.

The largest number of journals is found in Italy, followed closely by Spain and France. The three countries together have nearly 90% of the titles.

	France	Greece	Italy	Portugal	Spain	Turkey	Total
Active, academic	1,846	165	2,583	215	2,014	425	7,248
Online	740	52	820	72	842	319	2,845
Open access	88	24	123	44	269	135	683
Open access (DOAJ)	98	25	126	45	289	139	722
Peer-reviewed	513	60	334	33	299	208	1,447
Included in JCR	187	9	97	3	56	12	364
Included in JCR+OA	8	2	3	0	18	8	39
Included in Scopus	412	37	289	15	257	106	1,116
Included in Scopus+OA	13	4	6	3	43	30	99

Table 9.1. Access, format and quality in academic journals

Sources: Ulrich's directory (rows 1-3, 5-7), Scopus (8-9), DOAJ (4)

Online access to journal content represents 39% of all titles of the countries surveyed. Turkey stands out over the rest, with the highest percentage of digital journals (319 titles of 425, i.e. 75%).

The proportion of open access journals is 9.4% (683 titles of a total of 7,248, according to Ulrich's directory). Spain has the highest number of journals in absolute numbers but Turkey and Portugal at 31% and 20.4%, respectively, are well above the average. The figures for France (88 journals out of 1,846) and Italy (123 journals out of 2,583) are surprisingly low, both countries having less than 5% of titles in open access.

With regard to the quality of journals, measured by presence in impact indices, only 364 (5%) are included in the Thomson-Reuters Journal Citation Reports (JCR), although 1,116 (15.4% of total) are included in Elsevier's Scopus. By countries, France has by far the largest number of journals in the JCR (187 titles, 10.1% of its total number of journals) and Scopus (412 titles, 22.2% of the total). If we consider the figures of indexed journals, Turkey and Greece stand out with 25% and 22.4% of their titles in Scopus, respectively, a significantly better result than the rest (with the exception of France). There are therefore significant differences between the coverage of journals of Southern European countries offered by JCR and Scopus.

CONCLUSIONS 131

	France	Greece	Italy	Portugal	Spain	Turkey
Official languages	88.0%	42.5%	75.0%	80.5%	95.0%	67.0%
English	29.0%	75.0%	25.5%	30.0%	21.0%	70.0%

Table 9.2. Language in academic journals

Source: Ulrich's directory

With regard to the language of the journals, in four countries (France, Italy, Portugal and Spain) the majority (over 75%) are published in the official languages and they therefore find it difficult to make the leap towards internationalization. Greece and Turkey, however, publish three quarters of their journals in English.

Finally, the country reports show that most publishers are linked to the public sector (universities, research centres, or the government), whereas only a low percentage are commercial publishers. This is a distinguishing feature in comparison with Anglo-Saxon countries, though it may help to foster open access of scientific journals.

9.2 Repositories

The repository figures provided by the two international directories (ROAR and OpenDOAR) are very similar for the countries studied (223 and 225, respectively). There has been a considerable increase in the number of repositories in recent years, and the figure for Southern European countries is now 200 in the ROAR and OpenDOAR directories.

France Greece Italy Portugal Spain Turkey Total **OpenDOAR** 54 (24.2%) 13 (5.8%) 53 (23.8%) 31 (14.0%) 63 (28.2%) 9 (4.0%) 223 ROAR 48 (21.3%) 18 (8.0%) 49 (21.8%) 33 (14.7%) 65 (29.0%) 12 (5.3%) 225

Table 9.3 Repositories

The largest number of repositories is found in Spain (about 30% of total), followed closely by France or Italy according to the directory consulted.

There are two models for managing repositories: the decentralized model, which gives universities and research centres the initiative in creating and

managing repositories; and the centralized model, which has a single, common infrastructure for the collection and dissemination of national academic content. If France did not follow the centralized model, it would probably be the leader in number of repositories.

One of the main problems in all countries is the low number of articles deposited and the difficulty of establishing quick and agile circuits for archiving documents. So far it has clearly been much easier to create repositories than to fill them with documents, and this is undoubtedly one of the challenges of the future.

All countries have an access service to global scientific production, either by means of repository harvesters or through a centralized system, such as HAL. These are presented in table 9.4, with the number of records they contain and the repositories they harvest. Recolecta is currently the harvester with the highest number of records.

Country	Name	URL	Records	Reposi- tories
France	HAL: Hyper articles en ligne	http://hal.archives- ouvertes.fr/	290,917 (149,001 full- text articles)	
Greece	Greek digital libraries search engine	http://openarchives.gr	362,521	44
Italy	Pleiadi: Portale per la Letteratura scientifica Elettronica italiana su Archivi aperti e Depositi Istituzionali	http://www.openarchives. it/pleiadi/	23,879 (all full text articles)	22
Portugal	RCAAP: Repositorio cientifico de acceso aberto de Portugal	http://www.rcaap.pt/	45,375	28
Spain	Recolecta	http://www.recolecta.net	682,848	57
Turkey	MITOS	http://www.mitosweb.	16,579	10

Table 9.4. Harvesters

9.3 Policies

In this section, there is still a long road ahead. Very few actions have been taken by governments in favour of open access and they generally fail to go

CONCLUSIONS 133

beyond simple declarations of intent. In all countries the actions taken so far have tended to be "bottom-up", i.e., they have been driven by scientists and librarians, especially in a personal capacity and without clear institutional support.

As regards institutional coordination, the Messina Declaration, an agreement signed in 2004 by 71 italian universities (85% of the total), expressed their adhesion to the Berlin Declaration and their support for open access.

	7,8					
	Universities	Research	Other	Total		
France	11	8	2	21		
Greece	3	1	-	4		
Italy	74	6	3	83		
Portugal	6	1	-	7		
Spain	19	2	4	25		
Turkey	_	_	_	0		

Table 9.5. Number of signatory institutions of the Berlin Declaration

The above table shows the number of institutions of the countries surveyed that have signed the Berlin Declaration. Italy is at the head with 81 institutions, and at the other end Turkey has no institutions that have adhered to the Declaration. In most cases, the signatory institutions are universities.

To locate the mandates we used the Juliet, Melibea and RoarMap directories. The first of these includes only policies of research funders, while the other two also include universities. RoarMap includes the obligation to deposit theses, so its results differ greatly from those of the other two directories.

	France	Greece	Italy	Portugal	Spain	Turkey
Juliet	3	_	3	_	3	_
Melibea	2	-	3	3	6	_
RoarMap	10	1	23	4	6	1

Table 9.6. Number of institutions with OA policies (mandates)

In this section, special mention must be made of the University of Minho (Portugal), which has the oldest mandate (2005) of all the countries surveyed.

Although the data from the directories do not coincide, it can be seen that four countries (Spain, Italy, Portugal and France) have institutions that have already established mandates on depositing publications by academics in institutional repositories, while the other two (Greece and Turkey) have no organizations that have established such mandates.⁴⁴

9.4 The future

The writing of this report has served to achieve a good understanding of the reality of each particular country and of Southern Europe in general. Furthermore, these results were shared and discussed in person in Granada. They are reflected in the Alhambra Declaration, which expresses the interest of the participants in continuing to work together to steer scientific communication toward the open access model.

We believe that the coordination of efforts is beneficial to everyone and creates positive synergies. We therefore intend to devote some of our actions to this goal in the future.

⁴⁴ The policies recorded in RoarMap for Greece and Turkey refer only to doctoral theses.

10 ALHAMBRA DECLARATION ON OPEN ACCESS

Policies for the development of OA in Southern European countries (Granada, 13th-14th May 2010)

Gathered in Granada on 13th and 14th May 2010, a representative group of open access stakeholders from the Southern European countries declare that:

- We recognize the great potentialities of open access for increasing the accessibility and visibility of the scientific production of Southern European countries, whose main languages are different from English.
- We are aware that the feasibility of open access is strongly related to the progressive evolution towards a new paradigm of scholarly and scientific communication.
- We consider that there exist difficulties for the development of open access in a moment of transition from the print era to the digital world.

We recommend:

- 1. Implementing policies for fostering open access to scientific information.
- 2. Enhancing advocacy initiatives to promote open access among researchers, policy makers, etc.
- 3. Building sustainable alternative business models for publishing.
- 4. Assuring quality of open access publications.
- 5. Fostering repositories.

We are committed to:

 exploring new forms of coordination and networking between European open access stakeholders; • making a sustained effort to implement the attached action plan to develop open access in Southern European countries.

10.1 Implementing policies for fostering open access to scientific information

We recommend:

Institutional policies from research and academic institutions:

- mandatory depositing in OA repositories;
- supporting publication in OA journals and facilitating the transition to OA journals;
- establishing rewards and incentives for compliance with OA policies;
- considering repository-deposited material for evaluation processes and research assessment.

Institutional policies from research funders:

- mandatory depositing in open access repositories;
- reimbursing authors for publication fees, if necessary.

National policies from governments:

establishing and developing open access initiatives, projects and infrastructures that foster coordination and cooperation.

SELL and library consortia:

• negotiating, lobbying and facilitating the establishment of new research output dissemination rights that foster open access.

10.2 Enhancing advocacy initiatives to promote open access

Being aware that open access is not only a concern of librarians, we recommend, apart from the traditional advocacy tools that have so far appeared to be successful:

- advocacy by facts and evidence of the benefits, mainly aimed at researchers and focusing on visibility, technology and usage, among other issues;
- targeted advocacy for specific stakeholders by creating a brand focusing on the message that open access is the main road to future sustainable science, and as a means for attracting other stakeholders besides librarians.

10.3 Building sustainable alternative business models for publishing

We recommend:

 Launching a survey on current business models to document practices and economies in scholarly publishing in order to support future planning and actions.

10.4 Assuring quality of open access journals and repositories

We recommend:

Journals

- guaranteeing the quality of open access journals' content through peer review procedures (as in any other scholarly journal) and guaranteeing the editorial quality through compliance with international guidelines and standards (taking into account different disciplines);
- eliminating embargo policies.

Repositories

- advancing in repository validation and certification;
- advancing in the definition of clear policies (copyright, preservation, work-flows, what is deposited and by whom);
- improving interoperability.

10.5 Fostering repositories

We recommend:

- promoting long term preservation strategies, policies and programs based on a common approach;
- adopting guidelines with references to interoperability standards among repositories and other research and e-science management systems. This guidelines should cover aspects such as data and object exchange, advanced searchability options, integration with other e-science systems, and persistent author and document identifiers;
- progressing towards end-user-friendly repositories with new and value added services such as automatic ingestion and dissemination of content, metrics and statistics.

ACTION PLAN TO DEVELOP OPEN ACCESS IN SOUTHERN EUROPE

We are committed to implementing this action plan:

Diffusion

- Disseminating the "Alhambra Declaration".
- Publishing the national reports in a single document with recommendations.
- Translation of the "Alhambra Declaration" and the seminar documentation.

Task forces and national plans

- Creating national task forces for open access (based on seminar national delegations and including representatives of all the agents).
- International coordination of the national task forces in harmony with European related projects.
- Creating national plans and road maps for the next three years.

Specific actions

• Identifying scientific journals at national level and supporting them in

the process (inclusion in DOAJ, funding, and delegating first monitoring steps at the national level).

- Building a website to house our documents and outcomes, such as mandates, recommendations, best practices and incentives).
- Following best practices in the repositories.
- Working towards obtaining the signature of national political authorities.

11 ANNEXES

11.1 France

11.1.1 List of French open access journals

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
@ctivités	Psychology	Association Recherches et pratiques sur les activités	French, English	2004	Scientific society
Abstracta Iranica	Languages and Literature	Institut français de recherches en Iran	French, English	2000	Revues.org
Actes de colloques du musée du quai Branly	Anthropology, History	Musée du Quai Branly	French	2009	Public institu-
Adansonia. Sér. 3 *	Botany	Museum nati- onal d'histoire naturelle	English, French	2000	Public institu-
African journal of neurological science	Neurology	Pan African association of neurological science	English, French	2002	Scientific society
Alizés: Revue angliciste de la réunion	Languages and Literature	Université de la Réunion	English, French	1996	Public institu-
ALSIC - Apprentissage des langues et systèmes d'information et de communication	Linguistics, Education	Université Marc Bloch	French	1998	Revues.org
Amerika	Languages and Literature	LIRA	French, Spanish	2010	Revues.org
Amérique latine: histoire et mé- moire	Migration, History	Université de Paris VIII	French, Spanish, portuguese, English	2000	Revues.org

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
Amnis	Anthropology	Université de Bretagne occi- dentale	English, French, Spanish	2001	Public institu-
Annales de toxicologie analy- tique	Public Health	EDP Sciences	French, English	2000	Private publisher
Annuaire de l'EPHE, section des sciences historiques et philologiques	History	ЕРНЕ	French	2008	Revues.org
Annuaire de l'EPHE, section des sciences religieuses	Ethnology	ЕРНЕ	French	2006	Revues.org
Anthropology of food	Nutrition and Food Science	Anthropology of food	English, French	2001	Revues.org
Apparences	NR	IRHIS-Septen- trion	French	2007	Revues.org
Argumentation et analyse du discours	Languages and Literature	ADARR	French	2008	Revues.org
Articulo - revue de sciences hu- maines	Multidiscipli- nary, Social Sciences	CEPS/INSTE- AD	French, English	2005	Revues.org
Astérion	Philosophy	Ecole normale supérieure - LSH	French	2003	Revues.org
Atalaya	Languages and Literature	ENS LSH	French, Spanish	1998	Revues.org
Atelier du centre de recherches historiques	History	Centre de recherches historiques	French	2008	Revues.org
Ateliers du LESC	Ethnology	Laboratoire d'ethnologie et de sociologie comparative	French	2005	Revues.org
Atlas of Genetics and Cytogenetics in Oncology and Haematology	Biology, Health Sciences	Association pour la Recherche sur les Maladies génétiques et le Handicap Mental	English	2010	I-Revues
Balkanologie	Multidiscipli- nary, Social Sciences	Association Française d'Etude sur les Balkans	French, English	1997	Revues.org

ANNEXES 143

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
Boletin de la asociación para el Fomento de los Estudios Históri- cos en Centroa- mérica	History	Asociación para el Fomento de los Estudios Históricos en Centroamérica	Spanish	1998	Scientific society
Bulletin Amades	Anthropology	Association Anthropologie Médicale Appliquée au Déve- loppement et à la Santé	French, English	2001	Revues.org
Bulletin de l'Aca- démie Lorraine des Sciences	Multidiscipli- nary	Académie Lorraine des Sciences	French	2010	I-Revues
Bulletin de l'Aca- démie Nationale de Metz	Multidiscipli- nary	Académie Nati- onale de Metz	French	2010	I-Revues
Bulletin des bibliothèques de France	Library and information Science	French School of Librarianship and Information Science	French	1985	Public institu-
Bulletin du centre d'études médiévales d'Auxerre	History	Centre d'études médiévales d'Auxerre	French	2003	Revues.org
Bulletin du cen- tre de recherches du Château de Versailles	History	Centre de recherches du Château de Versailles	French	2002	Revues.org
Bulletin du centre de recher- ches français de Jérusalem	NR	Centre de re- cherches français de Jérusalem	French	1997	Revues.org
Cahiers d'Asie centrale	Social Sciences	Institut Français d'Etudes sur l'Asie Centrale	French, English	2001	Revues.org
Cahiers de civili- sation espagnole contemporaine	History	Revues.org	French, English, Spanish	2007	Revues.org
Cahiers de l'URMIS	Ethnology	URMIS-UMR 7032	French	1995	Revues.org
Cahiers de narra- tologie	Languages and Literature	CIRCES	French	2004	Public institu- tion
Cahiers mondes anciens	History	ANHIMA- UMR 8210	French	2010	Revues.org
Carnets de géologie	Earth Science, Geology	Carnets de géologie	English, French, italian, Spanish, German	2002	I-Revues

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
CeROArt	Multidiscipli- nary, Arts	Association CeROArt	French	2007	Revues.org
Champ pénal	Social and Public Welfare	Champ pénal	French, English	2004	Revues.org
Chrétiens et société	History	Religions, Soci- étés et accultu- rations	French	1994	Revues.org
Chroniques yéménites	NR	Centre français d'archéologie et de sciences sociales de Sanaa	French	1994	Revues.org
Clefs CEA	Physics	EDP Sciences	French	2008	Private publisher
Cognitextes	Linguistics	Association française de linguistique cognitive	French	2007	Revues.org
Colloques sur le Traitement du Signal et des Images - GRETSI	Physics	GRETSI	French, English	2009	I-Revues
Communica- ting astronomy with the public journal	Astronomy	International astronomical union	English	2007	Scientific society
Confins	Geography	Revues.org	portuguese, English, French, Spanish	2007	Revues.org
Conserveries mémorielles	History	IHTP	French	2006	Revues.org
ConTEXTES	Sociology	ConTEXTES	French	2007	Revues.org
CORELA	Linguistics	Cercle linguistique du centre et de l'ouest (CER-LICO)	French, English	2003	Scientific society
Creolica	Linguistics	Groupe euro- péen de recher- ches en langues créoles	portuguese, English, French, Spanish	2003	Public institu-
Cultures et conflits	Political Science	L'Harmattan	French	1990	Private publisher
Current psycholo- gy letters	Psychology	Centre PsyCLE	French	2003	Revues.org
Cybergeo: Euro- pean journal of geography	Social Sciences	Université de Paris, Institut de Géographie	English, French	1996	Revues.org

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
Déméter	Music, Arts in general	University of Lille	French	2002	Public institu- tion
Développement durable et terri- toires	Environmental Sciences	Réseau dévelop- pement durable et territoires fragiles	French	2002	Revues.org
Diotime - l'Agora	Philosophy	Editions Alcofribas Nasier & CRDP Montpellier	French, English, Spanish	1999	Public institu- tion
Discours	Linguistics	Laboratoire LaTTice	French	2007	Revues.org
Discrete mat- hematics and the- oretical computer science*	Computer Science, Mathematics	Discrete mathematics and theoretical computer science	English	1997	Scientific society
DTIP conferences	Physics, Electro- nics, Enginee- ring Sciences	EDA Publishing Association	English, French	2008	I-Revues
EARSeL eProce- edings	Physics, Earth Sciences, Geolo- gy-Environmen- tal Science	European association of remote sensing laboratories	English	2001	Scientific society
Echo Geo	Geography	CNRS UMR 8586	French	2007	Revues.org
Economie pu- blique	Economics	Institut d'écono- mie publique	French, English	1998	Revues.org
Electronic Design Automation	Physics, Electro- nics, Enginee- ring Sciences	EDA Publishing Association	English, French	2008	I-Revues
Electronic journ@ls for history of pro- bability and statistics	Statistics	EHESS	English, French	2005	Public institu-
E-Mémoires de l'Académie nationale de chirurgie	Surgery	Académie natio- nale de chirurgie / BIUM	French	2002	Public institu-
ENS conferences	Physics, Electro- nics, Enginee- ring Sciences	EDA Publishing Association	English, French	2008	I-Revues
EPJ Web of conference	Physics	EDP Sciences	English	2009	Private publisher

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
E-Polymers*	Chemical Engi- neering	European po- lymer federation	French	2001	Scientific society
ERCES: Online quarterly review	Social Scien- ces, Social and Public Welfare	The European and internati- onal research group on crime, ethics and social philosophy	English	2004	Scientific society
E-rea	History, Political Science	LERMA	French	2003	Revues.org
ESAIM Proce- edings	Applied mathe- matics	EDP Sciences	English	1996	Private publisher
Espaces temps.net	Philosophy	Revues.org	French, English, Spanish, Ger- man, italian	2002	Scientific society
E-Spania	History	Séminaire d'étu- des médiévales hispaniques de Paris-Sorbonne	French, Spanish, English, italian	2006	Revues.org
Ethnographiques. org	Ethnology	Ethnographi- ques.org	French	2002	Scientific society
Etudes caribéen- nes	NR	Université des Antilles et de la Guyane	French	2005	Revues.org
Etudes episteme	Languages and Liter.	Ecole docto- rale des études anglophones	French, English	2002	Public institu-
Etudes photo- graphiques	Multidiscipli- nary, Arts	Societé française de photographie	French	1996	Revues.org
European journal of American Studies	NR	European Association for American Studies	English	2006	Revues.org
European Jour- nal of Turkish Studies	Social Sciences	Association pour la recherche sur le Moyen Orient	English, French, German, Tur- kish	2004	Revues.org
Europhysics News	Physics	EDP Sciences	English	2000	Private publisher
Field actions science reports	Environmental Sciences	Institut Veolia Environnement	English	2008	Revues.org
Flaubert	Languages and Literature	ITEM	French	2009	Revues.org
Genre et histoire	Sociology	Association Ménmosyne	French	2007	Revues.org
Genre, sexualité et société	Sociology	IRIS-EHESS	French	2009	Revues.org

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
Geodiversitas*	Earth Science, Geology	Museum nati- onal d'histoire naturelle	English, French	2004	Public institu-
Histoire @ politique	History, Political Science	Centre d'histoire de Sciences-Po	French, English	2007	Public institu-
Hydroécologie appliquée	Aquatic ecology	EDP Sciences	French, English	1989	Private publisher
ILCEA	Linguistics, Languages and Literature	Institut des Langues et des Cultures d'Eu- rope et d'Amé- rique	French, English	2009	Revues.org
Images re-vues	Anthropology, History, Visual Arts	EHESS, INHA	French	2005	Public institu-
Impressions d'Ex- trême-Orient	Linguistics, Languages and Literature	Université de Provence - Aix- Marseille 1	French, English	2010	Revues.org
Information sci- ences for decision making	Media and Comminicati- on, Computer Science	Université du Sud Toulon Var	French, English	1997	Public institu-
Information, interaction, inte- lligence journal	Computer Science	CEPADUES	French, English	2001	Private publisher
International journal of multi-cultural societies	Social Sciences	UNESCO	English, French	1999	Public institu-
Journal of electri- cal systems	Electrical and nuclear Engine- ering	ESRGroup	English	2005	Scientific society
Journal of language contact: Evolution of languages, contacts and discourses	Linguistics, Education, Me- dia and Commi- nication	Chaire IUF Dynamique du langage et contact des langues	English, French	2007	Public institu-
Journal of physical mathematics	Mathematics	Ashdin publis- hing	English	2009	Private publisher
Journées de la Société Française de Sénologie et Pathologie Mam- maire	Medicine, Pha- marcology	Société française de sénologie	French	2009	I-Revues

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
Knowledge and management of aquatic ecosystems	Aquaculture and fisheries	EDP Sciences	English, French	1928	Private publisher
La revolution française	History	institut d'his- toire de la révo- lution française	French	2009	Public institu-
La revue de l'IRES	Social Sciences	IRES	French	1998	Scientific society
La revue des lettres modernes: Gustave Flaubert	Languages and Literature	Centre Flaubert	French	2001	Public institu-
La revue du MODULAD	Statistics	MODULAD	French, English	1988	Scientific society
La revue LISA	Sociology, Anthropology	Maison de la Recherche en Sciences Hu- maines	English, French	2003	Revues.org
Lapurdum	Linguistics	Centre de Re- cherches IKER- CNRS	French, Basque	2008	Revues.org
Les Cahiers de Psychologie Politique	Social Sciences	Association Française de Psychologie Politique	French, Spanish	2010	I-Revues
Les Cahiers du CEDIMES	Social Sciences	CEDIMES	French, English	2010	I-Revues
Les dossiers du Grihl	Languages and Literature	EHESS	French	2007	Revues.org
L'espace politique	Geopolitics	Université de Reims Champa- gne Ardennes	French	2007	Revues.org
Lexicometria	Linguistics	André Salem, Serge Fleury	French, English	1997	Scientific society
Lianes	Sociology	Lianes association	French, English	2005	Scientific society
Linguistica occitana	Linguistics	Association lin- guistica occitana	Occitan, Ca- talan, English, French	2004	Scientific society
Loxias	Languages and Literature	Centre trandis- ciplinaire d'épis- témologie de la littérature	French	2003	Public institu-
M@nagement	Business and Management	DMSP Research center	English, Spa- nish, French	1998	Scientific society

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
M@ppemonde	Geography	Maison de la géographie	French	2004	Revues.org
Mandenkan: Bulletin semes- triel d'études linguistiques Mandé	Linguistics	Langage, langues et cultures d'Afrique noire (Le Llacan)	French, English	2005	Public institu-
Mathématiques et sciences hu- maines	Mathematics	Centre d'analyse et de mathéma- tiques sociales de l'EHESS	French, English	2000	Revues.org
Médiamorphoses	Communi- cation, Social Sciences	Institut National de l'Audiovisuel	French	2009	I-Revues
Mélanges CRA- PEL	Education, Linguistics	CRAPEL, Université de Nancy II	French, English	1970	Public institu-
Methodos: savoirs et textes	Philosophy	Savoirs et textes, UMR 8519	French	2001	Revues.org
Métropoles	Architecture	Revues.org	English, French	2007	Revues.org
Nuevo mundo - mundos nuevos	Anthropology, History	CERMA	French, Spanish, portuguese, English	2001	Revues.org
NOVATECH	Environnemen- tal Sciences	GRAIE - Grou- pe de Recherche Rhône-Alpes sur les Infrastruc- tures et l'Eau (Lyon, France)	French, English	2010	I-Revues
Oil & gas science and technology*	Chemical Tech- nology	Institut français du pétrole	English, French	1997	Private publisher
Oliviana	History	Groupe d'an- thropologie scolastique (EHESS- CNRS)	French	2003	Revues.org
Paléo	Archeology	SAMRA	French, English	2000	Revues.org
Perspectives interdisciplinaires sur le travail et la santé	Internal Medi- cine	PISTES	French	1999	Public institu-
Physio-Géo	Geography	Claude Martin	French	2007	Revues.org
Pratiques et organisation des soins	Public Health	Société française de santé publi- que	French	2006	Public institu-

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
Préhistoires médi- terranéennes	History	Université d'Aix en Provence	French	2002	Public institu- tion
Recherches en psychanalyse	Psychology	Université Paris VII Diderot	French	2009	Revues.org
Revue archéologi- que du centre de la France	Archaeology	Fédération pour l'édition de la revue archéolo- gique du centre de la France	French	2004	Revues.org
Revue de géo- graphie alpine	Geography	Association de géographie alpine	French	2007	Revues.org
Revue de la régu- lation: capitalis- me, institutions, pouvoirs	Economics	Revues.org	French, English	2007	Revues.org
Revue de recher- che en civilisa- tion américaine	Sociology	Université Bordeaux IV	French	2009	Revues.org
Revue d'études tibétaines	Anthropology	CNRS	French, English, Spanish, italian	2002	Public institu-
Revue géographi- que de l'Est	Geography	Université de Nancy 2	French, English	2004	Revues.org
Revue historique des armées	History	Service his- torique de la défense	French	2006	Revues.org
Revue internatio- nale de pédagogie de l'enseignement supérieur	Education	Association internationale de pédagogie universitaire	French	2009	Revues.org
Rursus	Linguistics	Revel	French	2006	Public institu- tion
Saint Jacques Info	Social Sciences, Religion	Association Ferpel and LAMOP (Laboratoire de Médiévistique Occidentale de Paris CNRS Paris I - Sorbonne)	French	2010	I-Revues
S.A.P.I.E.N.S.	Environmental Sciences	Institut Veolia Environnement	English	2008	Revues.org
Science et devenir de l'homme	Social Sciences	Association MURS	French	2009	I-Revues

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
Semen	Linguistics, Languages and Literature	Presses univer- sitaires de Fran- che-Comté	French	1993	Revues.org
Séminaire lot- haringien de combinatoire	Mathematics	Université Louis Pasteur	English	1981	Public institu-
Sociétés et jeunes- ses en difficulté	Sociology	Ecole nationale de protection judiciaire de la jeunesse	French	2006	Revues.org
SociologieS	Sociology	Association internationale des sociologues de langue fran- çaise	French	2006	Revues.org
Socio-logos: revue publiée par l'asso- ciation française de sociologie	Sociology	Association française de sociologie	French	2006	Revues.org
South Asia multidisciplinary academic journal	Social Sciences	Centre d'études de l'Inde et de l'Asie du Sud	English	2007	Revues.org
STICEF	Education, Computer Science	ATIEF	French	2003	Scientific society
Tabularia, sources écrites de la Normandie médiévale	History	Université de Caen	English, French	2000	Public institu-
Télédétection	Geography	Editions scienti- fiques GB	French	1999	Scientific society
Temporalités	NR	ADR Tempo- ralités	French	2004	Revues.org
Texto! Textes et cultures	Linguistics	Equipe sémantique des textes	French, Spanish, English	1996	Scientific society
The Arkeotek journal	Archaeology	Editions la Maison des sciences de l'Homme, éditions Epis- tèmes	French, English	2007	Public institu-
The journal of power institution in post-soviet societies	Political Science	Centre d'études et de recherche sur les sociétés et les institutions post-soviétiques	French, English, Russian, Ger- man	2004	Revues.org
THERMINIC conferences	Physics, Electronics	EDA Publishing Association	English, French	2008	I-Revues

Journal name	Scientific field	Publisher	Language	First OA issue	Publisher type
Tic & Société	Education, Computer Science	Tic & Société	& Société French 2007		Revues.org
Trace	Languages and Literature	Centre d'études mexicaines et centroaméri- caines	French, Spanish	2007	Revues.org
Traitement automatique des langues	Linguistics	Association pour le traitement automatique des langues (ATALA)	French, English	nglish 2006 Scientific	
Trajectoires	NR	Centre inter- disciplinaire d'études et de recherches sur l'Allemagne	French	2007	Revues.org
Transatlantica: Revue d'études américaines	Social Sciences	Association française d'étu- des américaines	French, English	2001	Revues.org
Transtextes et transcultures	NR	Institut d'Etudes Transtextuelles et Transcultu- relles	French, English	2006	Revues.org
Travail et forma- tion en éducation	NR	NR	French	2008	Revues.org
Trivium	NR	FMSH Editions	Allemande	2008	Revues.org
VertigO	Environmental Sciences	VertigO	French	2000	Revues.org
Water alterna- tives	Political Science, Environmental Science	Water alternatives association	English	2008	Scientific society
Zoosystema*	Zoology	Museum nati- onal d'histoire naturelle	English, French	2004	Public institu-

11.1.2 List of French open repositories

Repository	Institution	Subject field	Software	Lan- guage	Full text	Refs		
Sch	Scholarly publications (mainly articles) - Central or thematic repositories							
ArchiveSIC	CNRS/CCSD	Library and Infor- mation Science	HAL	French, English	1,127	NR		
Archives EduTice	Fondation de la maison des sciences de l'Homme	Computers and IT, Library and Infor- mation Science	HAL	French, English	1,721	NR		
Artxiker	CNRS/CCSD	Language and Lite- rature	HAL	French, Basque	298	NR		
Hyper articles en ligne (HAL) 45	CNRS/CCSD	Multidisciplinary	HAL	French, English	138,866	268,509		
HAL-SDE	CNRS/CCSD	Ecology	HAL	French, English	4,593	11,608		
HAL-SHS	CNRS/CCSD	Arts and Humanites	HAL	French	23,265	NR		
	Scholarly publications (mainly articles) - Instit	tutional rep	ositories				
Productions scienti- fiques de l'AFSSA	Agence française de sécurité sanitaire des aliments	Life Sciences	HAL	English, French	51	109		
CemOA	CEMAGREF	Environmental Sciences, Engineering	Cadic Integral	English, French	1,081	21,710		
Archive ouverte CIRAD	CIRAD	Environmental Sciences, Engineering	HAL	English, French	883	NR		
Articles scientifiques du CEA en libre accès	Commissariat à l'énergie atomique	Chemical Sciences, Engineering Science	HAL	English, French	2,973	10,117		
Publication de l'IRSN	Institut de radiopro- tection et de sûreté nucléaire	Sciences of the Universe, Life Sciences	HAL	English, French	69	NR		
Archive ouverte HAL-IRD	Institut de recherche pour le développe- ment	Multidisciplinary	HAL	English, French	1,662	NR		
IRD Horizon - Plein Texte	Institut de recherche pour le développe- ment	Multidisciplinary		French	42,000	72,000		
ArchiMer	IFREMER	Biology, Ecology, Geography	NR	French, English	6,057	NR		

⁴⁵ The figure 138,866 in the "Full text" column is the total amount of full text documents available in the HAL open archive, including all subject-based or institutional portals (respectively like HAL-SHS or HAL-INRIA). Among them are 16,596 electronic theses (on March 28, 2010), 41,973 articles transferred from the *Journal de Physique* and 7,464 INRIA research reports. This is why the number of scholarly publications amounts to 72,833 items.

Repository	Institution	Subject field	Software	Lan- guage	Full text	Refs
Institut Jean Nicod	Institut Jean Nicod	Humanities and Social Sciences	HAL	French, English	674	NR
HAL-INSERM	Institut national de la santé et de la recher- che médicale	Life Sciences, Health	HAL	English, French	2,781	2,409
HAL-INERIS	Inst. nat. de l'envi- ronnement industriel et des risques	Engineering Sciences, Life Sciences	HAL	English, French	71	NR
HAL-IN2P3	Institut national de physique nucléaire et de physique des particules	Physics, Chemical Sciences	HAL	English, French	4,307	5,366
ProdINRA	Institut national de recherche agrono- mique	Agriculture, Food and Veterinary	Prod- INRA	English, French	4,729	123,515
HAL-INRIA	Institut national de recherche en informatique et automatique	Computer Science, Mathematics	HAL	English, French	16,016	9,422
INSEP archive ouverte	Institut national du sport et de l'édu- cation physique (INSEP)	Biology and Bioche- mistry, Education	Arc- himedes	French	477	NR
HAL-INSU	Institut national des sciences de l'univers	Environmental Sciences, Chemical Sciences	HAL	English, French	12,790	17,530
HAL-Pasteur	Institut Pasteur	Chemical Sciences, Life Sciences	HAL	English, French	267	1,216
HAL-MétéoFrance	Météo France	Sciences of the Universe, Environ- mental Sciences,	HAL	English, French	170	263
HAL-MNHN	Museum national d'histoire naturelle	Life Sciences	HAL	English, French	380	NR
Archive de l'Observatoire de Paris	Observatoire de Paris	Sciences of the Universe, Physics	HAL	English, French	484	NR
HAL-RIIP	Réseau international des instituts Pasteur	Life Sciences	HAL	English, French	20	80
Archive ouverte du SSA	Service de santé des armées	Life Sciences	HAL	English, French	35	NR
Ecole nationale supérieure des Mines de Saint Etienne	Ecole Nationale Supérieure des Mines de Saint-Etienne	Environmental Sciences, Engineering	HAL	English, French	240	1,106
Ecole Normale Supérieure de Paris	Ecole Normale Supérieure de Paris	Multidisciplinary	HAL	English, French	3,007	5,049

Repository	Institution	Subject field	Software	Lan- guage	Full text	Refs
Publications de la Recherche Univer- sitaire de l'ENS de Lyon (PRUNEL)	Ecole Normale Supérieure de Lyon	Multidisciplinary	HAL	English, French	1,479	NR
Grenoble Ecole de Management	Grenoble école de management	Humanities and Social Sciences	HAL	French, English	90	30
HAL-HEC	НЕС	Political Science, Economics	HAL	French, English	23	NR
HAL-Institut télécom	Institut Télécom	Computer Science, Mathematics	HAL	English, French	457	1,516
Archives ouvertes Mines ParisTech	Mines ParisTech	Engineering, Physics	HAL	English, French	856	2,742
Paris Tech archive ouverte 46	PRES Paris Tech	Multidisciplinary	HAL	English, French	3,969	7,711
Ecole polytechnique- Archive Ouverte	Polytechnique	Multidisciplinary	HAL	English, French	1,922	5,805
Spire	Sciences Po	Political Science, Economics	Spire	English, French	2,740	NR
SUPELEC	Supélec	Engineering Sciences	HAL	English, French	939	NR
HAL-Artois	Université d'Artois	Multidisciplinary	HAL	English, French	119	326
HAL-Université de Brest	Université de Brest	Multidisciplinary	HAL	English, French	515	3,360
Iris (mainly ETDs)	Université de Lille 1	Sciences	Dspace	French	940	NR
HAL-Université de Limoges	Université de Li- moges	Multidisciplinary	HAL	English, French	275	3,338
HAL - Université Lumière Lyon 2	Université Lumière - Lyon 2	Humanities and Social Sciences	HAL	English, French	2,155	7,772
HAL-Université Jean Moulin - Lyon III	Université Lyon III	Humanities and Social Sciences	HAL	English, French	531	982
HAL-Université de Nantes	Université de Nantes	Multidisciplinary	HAL	English, French	1,843	6,982
HAL-Université de Nice Sophia-Anti- polis	Université de Nice	Multidisciplinary	HAL	English, French	2,063	NR
HAL-Université Panthéon-Sorbonne - Paris I	Université Paris I	Humanities and Social Sciences	HAL	English, French	2,397	5,790
HAL-Université Descartes - Paris V	Université Paris V	Multidisciplinary	HAL	English, French	801	NR

⁴⁶ The Paris Tech open archive gives access, on one portal, to research publications from the 12 grandes écoles pooled into the Paris Tech PRES. Some of its members institutions (HEC, Ecole Polytechnique and Ecole des Mines) also have an institutional portal in HAL.

Repository	Institution	Subject field	Software	Lan- guage	Full text	Refs
Base de publications de l'université Paris Dauphine	Université Paris Dauphine	Mathematics, Economics, Social Sciences, Manage- ment	Dspace	English, French	1,466	3,722
HAL-Université de Rennes 2	Université de Haute Bretagne - Rennes 2	Multidisciplinary	HAL	English, French	329	1,333
HAL-Université de Savoie	Université de Savoie	Multidisciplinary	HAL	English, French	1,555	6,052
HAL-Université Saint-Etienne	Université Jean Mon- net - Saint Etienne	Multidisciplinary	HAL	English, French	569	NR
HAL-Université Paul Sabatier Toulouse III	Université Paul Saba- tier - Toulouse III	Science, Technology, Medicine	HAL	English, French	2,677	NR
Open Archive Tou- louse Archive Ou- verte (OATAO)	INP Toulouse, ISAE and ENVT	Multidisciplinary	Eprints	French, English	2,760	NR
Artur-FC	Université de Franche-Comté	Multidisciplinary	NR	French	264	NR
HAL-université Paris 13	Université Paris 13	Multidisciplinary	HAL	French, English	888	1,229
	Electron	nic theses and dissertati	ions			
Thèses en ligne (TEL)		Multidisciplinary	HAL	French, English	16,596	NR
Bibliothèque numé- rique de l'ENSSIB	ENSSIB	Library and Infor- mation Science	NR	French	14,200	NR
Consultation en texte intégral des thèses en réseau (CITHER)	Centre de documentation scientifique Doc'INSA, Institut national des sciences appliquées de Lyon	Multidisciplinary	NR	French	694	NR
ParisTech service de thèses en ligne (PASTEL thèses)	ParisTech	Science, Technology, Management	Eprints	French, English	2,331	NR
Thèses de l'ULP	Université de Strasbourg	Multidisciplinary	Eprints	French, English	965	NR
Thesesups	Université de Tou- louse III	Multidisciplinary	Eprints	French, English	564	NR
Les mémoires en ligne de l'institut d'IEP de Lyon	Institut d'IEP de Lyon	Geography, History	NR	French	966	NR
Les thèses électro- niques	Université Lumière Lyon 2	Multidisciplinary	NR	French	1,336	NR
INP de Toulouse Theses	INP Toulouse	Science, Technology, Medicine	Eprints	English, French	584	NR

Repository	Institution	Subject field	Software	Lan- guage	Full text	Refs
	Books and monographs					
Les livres en ligne des PUL	Université Lumière Lyon 2	Multidisciplinary	NR	French	21	NR
		Research reports				
Libre accès aux rap- ports scientifiques et techniques (LARA)	INIST-CNRS	Multidisciplinary	Dspace	French, English	1,032	NR
OpenSigle	INIST-CNRS	Multidisciplinary	Dspace	English, French	NR	NR

Updated May, 2010

11.1.3 Memorandum of understanding for a coordinated approach on a national level to open archiving of scientific output⁴⁷

In 2006, French research institutions, universities and prestigious higher education establishments have signed a Memorandum of understanding for the joint development and management of a shared platform for scientific outputs. You will find below the English version produced by INIST-CNRS.

Whereas

- During the past few years, networks of disciplinary archives and institutional repositories for scientific findings and scholarly publications have been developing across the globe on an open archive basis.
- ArXiv in the field of physics and PubMed Central in the field of life sciences are two representative examples of disciplinary archives; also a number of European academic institutional archives (Lund, Southampton, Bielefeld, etc.) are good international examples and worthy of consideration.
- At the institutional level, the open access movement is spreading across the
 continents and research institutions are looking for long-term preservation
 of their scientific output and for maximum visibility within international
 communities.

⁴⁷ In: "Libre accès à l'information scientifique et technique: Actualités, problémati-ques et perspectives" (http://openaccess.inist.fr/spip.php?article59).

- Various French research institutions, such as CNRS (Centre National de la Recherche Scientifique),⁴⁸ INRA (Institut National de la Recherche Agronomique),⁴⁹ INRIA (Institut National de Recherche en Informatique et en Automatique),⁵⁰ INSERM (Institut National de la Santé et de la Recherche Médicale)⁵¹ and IRD (Institut de Recherche pour le Développement),⁵² have undertaken to adopt such an institutional approach to archiving after signing the milestone Berlin Declaration on open access to knowledge in the sciences and humanities on 22nd October 2003, and have encouraged their researchers to post their scientific findings in open archives.
- French universities support the open access movement and some have developed local archives or are in the process of doing so.
- Access to scientific information is a major factor of development for emerging and developing countries.
- On 5th July 2005, the French Academy of Sciences expressed its support for direct scientific communication.
- The CNRS Center for Direct Scientific Communication (Centre pour la Communication Scientifique Directe CCSD) introduced in 2001 the HAL server, a storage and dissemination tool for the self-archiving of scientific findings. The data in this shared repository can be uploaded directly, or via a special interface such as Hal-INRIA, or indirectly with the institution's own system, after smooth interfacing with HAL, whose recent developments, in partnership with INRIA, might lead to making it an open source software.
- Organisation of the French public research system combines the main operators through joint units and joint projects.
- The signatories of this Memorandum of understanding, CEMAGREF,⁵³ CIRAD (Centre de coopération internationale en recherche agronomique pour le développement),⁵⁴ CNRS, CPU (Conférence des présidents d'université),⁵⁵ INRA, INRIA, INSERM, Institut Pasteur,⁵⁶ IRD, and CGE

⁴⁸ National Centre for Scientific Research.

⁴⁹ National Institute for Agricultural Research.

⁵⁰ National Institute for Research in Computer Science and Control.

⁵¹ National Institute for Medical and Health Research.

⁵² Research Institute for Development.

⁵³ Research Institute for Agricultural Engineering and the Environment.

⁵⁴ International Cooperation Centre for Agronomic Research for Development.

⁵⁵ Conference of University Presidents.

⁵⁶ A non-profit private foundation which contributes to the prevention and treatment of disease, primarily infectious diseases, through research, education, and public health activities.

(Conférence des Grandes Ecoles),⁵⁷ (hereinafter "the Partners"), wish to acquire the necessary means to identify, disseminate, develop, promote and monitor the scientific output of their faculty members and researchers, within their research units and laboratories and, where applicable, of affiliated research teams. In order to maximise the chances of success of the project, the partners have decided to join forces to acquire a common platform for archiving scientific findings which is interoperable with other open archives that meet the criteria for open access to scientific findings. The platform will allow researchers to communicate their findings directly to the international community via open archives; it will enable research institutions (universities, public scientific and technical institutions (EPSTs)) and specialised higher education establishments (Grandes Ecoles)⁵⁸ to collect, publish, develop, promote and preserve their scientific findings, therefore improving the visibility of French research in general within the international scientific community.

• The partners wish to be joined by other research institutions and other players in the scientific research field.

The partners have decided to sign the following Memorandum of understanding:

Article 1: Purpose

The purpose of the Memorandum of understanding is to define the terms and conditions of a coordinated open archiving approach, particularly through the joint development and management of a shared platform for posting preprints and postprints.

The data can be uploaded to the platform directly, via a special interface, or indirectly with the institution's own system which allows data transfer to the joint platform and complying with the platform's data model. The joint platform must be as open as possible to other research and higher education establishments.

⁵⁷ A non-profit organisation consisting of "Grande Ecole" higher education establishments, foreign universities and other higher education institutions and organisations.

⁵⁸ Prestigious French specialised higher education establishment with a highly selective admission process.

The partnership will be based on actions decided upon and monitored by the Strategic Committee as defined in Article 2 of this Memorandum of understanding and implemented by a Scientific and Technical Committee defined in Article 3 of the Memorandum.

Throughout the agreement, the joint operating and interchange procedures between the shared platform and local self-archiving systems will be studied through pilot sites whose feedback will be used to validate the data archiving and interchange conditions.

At the end of the Memorandum of understanding' duration, the above actions must enable the most appropriate framework to be defined for perpetuating the platform shared by the signatory partners and any new partners.

Article 2: Strategic Committee

2-1 Tasks

A Strategic Committee will be responsible for defining and monitoring the strategic objectives, defining a work plan for the actions to be undertaken and defining, at the end of the Memorandum, the most appropriate framework for perpetuating the shared platform. It will appoint the members of the Scientific and Technical Committee defined in Article 3.

2-2 Members

The Strategic Committee will comprise representatives of the Ministry in charge of higher education and research, and representatives of the following partners:

For the Ministry in charge of higher education and research:

- The director of higher education or his/her representative.
- The director of research or his/her representative.
- The director of technology or his/her representative.

For CPU:

- The first vice-president of CPU or his/her representative.
- The president in charge of scientific and technical information at CPU.
- The president of the Couperin⁵⁹ consortium or his/her representative.

⁵⁹ University Library Consortium in France.

• The president of the Agency for the Mutualization of Higher Education Institutions (Agence de Mutualisation des Universités et des Etablissements de l'enseignement supérieur - AMUE)⁶⁰ or his/her representative.

For CNRS:

- The Director General or his/her representative.
- The chair of the open archive steering committee (Comité de pilotage des archives ouvertes CPAO) at CNRS.

For INRA:

 The Chair and Managing Director represented by the person in charge of innovation and IT systems.

For INRIA:

 The Chair and Managing Director represented by the person in charge of scientific information and communication.

For INSERM:

• The Director General represented by the person in charge of information and communication.

For IRD:

• The Director General represented by the director of the information and communication delegation.

The Strategic Committee will meet at least once every quarter and a revolving presidency system will be used.

The coordinator of the Scientific and Technical Committee (see below) will attend the meetings of the Strategic Committee without voting rights and will take the minutes of the meeting.

Article 3: Scientific and Technical Committee

The Scientific and Technical Committee, consisting of scientific and technical representatives of the organisations involved in the actions to be carried out,

⁶⁰ Organisation responsible for coordinating cooperation among French universities.

will be responsible for implementing and carrying out the actions according to a work plan defined by the Strategic Committee. Some of the actions are given in the appendix, by way of indication and without being exhaustive.

The Scientific and Technical Committee will choose a coordinator from among its members to sit on the Strategic Committee, and give every three months a progress report on current actions.

The Committee can create working groups and appoint experts to help it to carry out its task.

Article 4: Terms and conditions of actions

The actions defined in Article 1 (Purpose) may be the subject of specific agreements between the partners (hereinafter called "specific agreements") which shall include, as applicable, the proposed budget, the human resources allocated and the infrastructure and equipment to be used for each of the partners.

The partners hereby agree that the resources provided by each of them may vary according to their particular administrative and/or budgetary constraints. However, they shall use their best efforts to maintain and increase the above resources whenever possible.

The specific agreements may, under special circumstances, take the form of an exchange of letters between the partners' representatives, provided said letters explicitly refer to this Memorandum.

The said actions may be the subject of specific agreements designed to welcome new partners after approval by the Strategic Committee.

The said actions shall not interfere in any way with bilateral protocols between the signatories of this Memorandum.

The partners shall develop a joint strategy and communication, in order to attract researchers.

The partners shall each work in their particular field to encourage a maximum number of research and higher education organisations to join the project.

Article 5: Term

This Memorandum of understanding is concluded for a period of two (2) years. Any amendment or renewal of the Memorandum shall be subject to an amendment signed by all the partners.

Signed in Paris on the sixth day of July 2006.

For CEMAGREF, the Director General.

For CIRAD, the Director General.

For CNRS, the Director General.

For CPU, the First Vice-President.

For INRA, the Chair and Managing Director.

For INRIA, the Chair and Managing Director.

For INSERM, the Director General.

For Institut PASTEUR, the Director General.

For IRD, the Director General.

For Conférence des Grandes Ecoles, the President.

Appendix to the Memorandum of understanding

By way of indication, and without being exhaustive, the following actions may be undertaken:

- Campaign to raise awareness among the scientific community.
- Naming of institutions and their component parts.
- Nomenclature of disciplines.
- Definition of core metadata.
- Coordination of local systems (including local archives)/shared platform and data interchange.
- Long-term archiving with definition of collaboration with CINES (Centre Informatique National de l'Enseignement Supérieur)⁶¹ and ABES (Agence bibliographique de l'enseignement supérieur)⁶² in this respect.
- Definition of work procedures and complementarity of skills, particularly within establishments.
- Definition of requirements in terms of assistance to researchers depositing in archives, particularly legal expertise.

⁶¹ French national IT centre for higher education establishments.

⁶² Higher Education Bibliographic Agency, organisation responsible for management and development of the bibliographic catalogue for higher education establishments.

11.2 **G**REECE

11.2.1 E-books market in Greece

No	Title	URL	Type of provider	Business model
1	Compupress: e- Alexandria	http://www.e-alexandria.gr/	Retailer	OA
2	eBookShop platform	http://www.e-bookshop.gr/	Retailer	Commercial
3	Empiria Publications	through retailer (Publisher's site: http://www.brainfood.gr/empiria.php)	Publisher	Commercial
4	e-na	http://www.e-na.com/	Retailer	Commercial
5	Entos Publications	through retailer (Publisher's site: http://www.defacto.gr/)	Publisher	Commercial
6	Govostis Publications	through retailer (Publisher's site: http://www.govostis.gr)	Publisher	Commercial
7	Iolkos Publications	http://www.iolcos.gr/component/ option,com_virtuemart/page,shop. browse/category_id,12/Itemid,53/	Publisher	Commercial
8	Kastaniotis Publications	http://www.kastaniotis.com/ multimedia/ebooks/	Publisher	Commercial
9	Kedros Publications	http://www.kedros.gr/main. php?cPath=773	Publisher	Combined
10	Livanis Publishing	http://www.livanisatschool.gr/	Publisher	Commercial
11	MyEBooks	http://www.myebooks.gr/	Retailer	Commercial
12	Оху	through retailer (Publisher's site: http://www.brainfood.gr/oxy.php/)	Publisher	Commercial
13	Papadopoulos Publications	http://www.picturebooks.gr/el/list_online.asp	Publisher	Commercial
14	Psichogios Publications	http://www.psichogios.gr/ebooks.asp	Publisher	Commercial
15	Sakkoulas Publications	http://www.poinikachronika.gr/	Publisher	Commercial
16	Sideris Publications	through retailer (Publisher's site: http://www.isideris.gr)	Publisher	Commercial

11.2.2 Greek OA e-journals in DOAJ 63

No	Journal title	Publishing body	URL
1	Biology of Exercise	University of Pelopponisos	http://www.biologyofexercise. com/
2	Cancer Therapy	Cancer Therapy	http://www.cancer-therapy.
3	e-Journal of Science & Technolo- gy, (e-JST)	Technological Educational Institute of Athens	http://e-jst.teiath.gr/
4	e-Perimetron	Editorial Board	http://www.e-perimetron.org/
5	Gastric & Breast Cancer	University of Ioannina	http://www.gastricbreastcancer. com/
6	Hellenic Open University Jour- nal of Informatics	Hellenic Open University	http://nefeli.dsmc.eap.gr/ojs- 2.1.1/index.php/HOUJOI/ index
7	Intellectum	Editorial Board	http://www.intellectum.org/
8	Journal of Biological Research (JBR)	Aristotle University of Thessalonica	http://web.auth.gr/jbr/
9	Journal of Engineering Science and Technology Review	Technological Educational Institute of Kavala	http://www.jestr.org/
10	Mediterranean Marine Science Journal	Hellenic Marine Research Center	http://www.medit-mar-sc.net/
11	Tourismos	Aegean Unviversity	http://www.chios.aegean. gr/tourism/journal.htm
12	Inquiries in Sport & Physical Education	Hellenic Academy of Physical Education	http://www.hape.gr/emag_ g.asp
13	Archives of hellenic medicine	Athens Medical Society	http://www.mednet.gr/archives
14	Hellenic journal of cardiology	Hellenic Cardiological Society	http://www.hellenicjcardiol.
15	Hellenic Orthodontic review	Greek Orthodontic Society	http://www.grortho.gr/hor
16	Byzantina Symmeikta	Institute for Byzantine Research	http://www.byzsym.org/
17	Tekmeria	Institute of Greek and Roman Antiquity	http://www.tekmeria.org/
18	To Vima tou Asklipiou	Technological Educational Institute of Athens	http://www.vima-asklipiou.gr/
19	Choregia	University of Pelopponisos	http://www.choregia.org/
20	International Journal of Eco- nomic Sciences and Applied Research	Technological Educational Institute of Kavala	http://www.ijesar.org/
21	Journal of Musculoskeletal and Neuronal Interactions	International Society of Mus- culoskeletal and Neuronal Interactions	http://www.ismni.org/jmni/in-dex.htm

⁶³ All peer review titles

11.2.3 OA digital collections with books

No	Collection title	Publishing body
1	Agioritiki Mnimi	Holly Monastery of Simonos Petras, Agio Oros
2	ATHENA - Proceedings of the Academy of Athens	National Documentation Center
3	Anacharsis	University of Crete
4	Greek Revolution Archives 1821-1832	Greek Parliament
5	Athens School of Fine Arts - Digital Library	Athens School of Fine Arts
6	National Archive of PhD Theses	National Documentation Center
7	Greek Digitla Bibliography 15th-20th	University of Crete
8	Ellinomnimon	University of Athens
9	Greek Language Thesaurus	Greek Language Thesaurus
10	National Technical University of Athens - Hstorical Library	National Technical University of Athens
11	Historical Archive of the University of Athens	University of Athens
12	Catalogues of Manuscript Codes	National Library of Greece
13	Marcos Mousouros	University of Crete
14	Neoellinistis	University of Crete
15	Digital Collections of the Holly Metropolis of Thessalinica	Holly Metropolis of Thessalonica
16	Collections of the Foundation for Aimos Peninsula Studies	Foundation for Aimos Peninsula Studies
17	Ioannis Trikoglou Collection	Aristotle University of Thessaloniki
18	Rare Books Collection of the History & Documentation Center of Volos	Rare Books Collection of the History & Documentation Center of Volos
19	Digital Library of Greek Mathematical Society	Library of Greek Mathematical Society
20	Digital Library of the Research Laboratory of Greek Philosophy	University of Ioannina
21	Rare Books Collection of the University of Ioannina	University of Ioannina
22	Digital Archive of the Holly Metrpolis of Arta	Holly Metropolis of Arta
23	Digital Archive of the Holly Metropolis of Ioannina	Holly Metropolis of Ioannina
24	Digital Library of Leimonos Monastery	Leimonos Monastery
	D: (C D:: D (A : 2010)	•

Source: Directory of Greek Digital Resources (April 2010)

11.2.4 Greek institutional repositories

Greek institutional repositories No	Title	Organization	Content	Software	Items ⁶⁶
1	Bibliotheca	Technological Educational Ins- titute of Crete	Grey Literature	-	3,000
2	E-Locus	University of Crete	Grey Literature, Archives	Keystone	3,409
3	EPRINTS server of the Computa- tional Systems & Software Engine- ering Laboratory	University of Macedonia	Grey Literature	Eprints	45
4	Anaktisi	Technological Educational Ins- titute of Western Macedonia	Grey Literature	Eprints	114
5	Grey Literature of the Aegean University	Aegean University	Grey Literature	Custom/ Commercial	67
6	AUTH Digital Collections	Aristotle University of Thessaloniki	Grey Literature, Archives, Special Collections	CDS Invenio	113,627
7	Estia - Digital Repository of Harokopio Unversity	Harokopio University of Athens	Grey Literature	Dspace	950
8	Eureka!	Technological Educational Institute of Thessaloniki	Grey Literature, Archives, Journals Articles	Dspace	1,540
9	Helios: Repository of the National Hellenic Research Foundation	National Hellenic Research Foundation	Grey Literature, Archives, Journals Articles, Books	Dspace	3,903
10	Psepheda	University of Macedonia	Grey Literature, Archives, Journals Articles,Special Collections	Dspace	11,889

Greek institutional repositories No	Title	Organization	Content	Software	Items ⁶⁴
11	DSpace at NTUA	National Techni- cal University of Athens	Grey Literature, Archives, Journals Articles, Special Collections	Dspace	2,729
12	Dpt of Electrical & Computer Engineering: Repository	Aristotle University of Thessaloniki	Grey Literature	Eprints	392
13	Digital Repository of Agricultural University of Athens	Agricultural University of Athens	Grey Literature	Dspace	56
14	Ktisis - Institutional Repository	Technological University of Cyprus	Grey Literature	Dspace	2,153
15	Nemertes - Institutional Repository	University of Patras	Grey Literature	Dspace	2,528
16	Pandemos	Panteion University of Athens	Grey Literature, Archives, Journals Articles	Dspace	3,205
17	Grey Literature of Democritus University of Thrace	Democritus University of Thrace	Grey Literature	Dienst	65
18	Grey Literature of Technical Uni- versity of Crete	Technical University of Crete	Grey Literature	Dienst	65
19	Digital Library of the University of Piraeus	University of Piraeus	Grey Literature, Archives, Journals Articles	Dspace	3,708
20	Digital Library of the University of Ioannina	University of Ioannina	Grey Literature, Archives, Journals Articles	Dspace	3,902
21	Pergamos Digital Library	University of Athens	Grey Literature, Archives, Special Collections	Fedora / Pergamos	117,528
		Total Items			274,678

Source: Directory of Greek Digital Resources (April 2010)

⁶⁴ Statistics Source: openarchives.gr (April 2010)

⁶⁵ Not possible to gather data on time for the purposes of this report - Not OAI-PMH sources

11.2.5 OAI-PMH compliant digital collections

No	Title	Organization	Content	Software	Items ⁶⁸
1	Anemi Digital Library of Modern Greek Stu- dies	University of Crete	Digital Collec- tions	Keystone	15,061
2	Annals of Gastroenterology	Hellenic Society of Gastroenterology	E-Journal	OJS	240
3	Archives of the American Farm School of Thessaloniki	American Farm School of Thessaloniki	Archives	Dspace	100
4	Argolikos Archival Library of History and Culture	Argolikos Archival Library of History and Culture	Archives	WordPress	1,061
5	Byzantina Symmeikta	Institute for Byzantine Research	E-Journal	OJS	271
6	Daniilida	University of Patras	Bibliographies, Archives, Books, Journal Articles	OJS	2,951
7	Dexameni	University of Patras	Journals Archive	OJS	488
8	Digital Library of Lei- monos Monastery	Leimonos Monastery	Archives	Custom	133
9	DIGMA - Digital Greek Music Archive	Music Library of Gre- ece "Lilian Voudouri"	Archives, Digital Collections	Custom	2,796
10	Hellenic Open Univer- sity Journal of Infor- matics	Hellenic Open University	E-Journal	OJS	11
11	Historical Review, The	Institute for Neohellenic Research	E-Journal	OJS	69
12	Journals Articles Index	Technological Educatio- nal Institute of Serres	Database	OJS	2,302
13	Kosmopolis	University of Patras	Journals Archive	OJS	50,576
14	Lyceum Club of Greek Women Digital Co- llection	Lyceum Club of Greek Women	Digital Collections	Custom	4,100
15	Pandektis: Digital The- saurus of Primary Sour- ces for Greeek History & Culture	National Hellenic Research Foundation	Archives	Dspace	35,228
16	Pleias	University of Patras	Journals Archive	OJS	66,346

No	Title	Organization	Content	Software	Items ⁶⁶
17	Research Notebooks	Institute for Neohellenic Research	E-Journal	OJS	69
18	Review of Economic Sciences	Technological Educatio- nal Institute of Epirus	Journal Archive	Dspace	130
19	SCHERIA Digital Library	Technical Chamber of Greece-Corfu Dpt.	Repository	Dspace	92
20	Spoudai	University of Pireaus	Journal Archive	Dspace	630
21	Tekmeria	Institute of Greek and Roman Antiquity	E-Journal	OJS	107
22	Theofrastos Digital Library	Aristotle University of Thessaloniki	Journals Archive	OJS	3,333
Total	items			-	186,094

Source: Directory of Greek Digital Resources (April 2010)

11.2.6 Non OAI-PMH digital collections

No	Title	Organization
1	e-Alexandria	Compupress S.A.
2	e-phemeris: Newspapers and Magazines	National Library of Greece
3	STUDIO - parallel circuit: Digital Colelctions	STUDIO - parallel circuit
4	Athos Memory	Holy Monastery of Simonos Petras
5	ATHENA - Proceedings of the Academy of Athens	National Documentation Center
6	Anna Komnene	European Center of Byzantine and Post-Byzantine Monuments
7	Archives of Anatomic Pathology	Hellenic Society of Anatomic Pathology
8	Archives of the Greek Revolunation	Greek Parliament
9	Rare Books Collection of the History & Documentation Center of Volos	Rare Books Collection of the History & Documentation Center of Volos
10	Kavafis Archive	Center for Neo-Hellenic Studies
11	Council of Historical Memory of the Liberation Struggle of EOKA 1955-1959 (SIMAE)	University of Cyprus
12	Digital Library of Athens School of Fine Arts	Athens School of Fine Arts

⁶⁶ Statistics Source: openarchives.gr (April 2010)

No	Title	Organization
13	ikelea Municipal Library	Bikelea Municipal Library
14	National Gallery of Greece	National Gallery of Greece
15	Hellenic Ph.D. Dissertations Thesis	National Documentation Center
16	Ellinomnimon	University of Athens
17	Proceedings of the Philosophical Schools of the University of Athens and the University of Thessaloniki 1925-1997	National Library of Greece
18	Digital Library of the John S. Latsis Public Benefit Foundation	John S. Latsis Public Benefit Foundation
19	Greek Language Thesaurus	Greek Language Thesaurus
20	Thrace, the land of Orpheus	Democritus University Of Thrace
21	The Historical and Palaeographical Archive	Cultural Foundation of the National Bank of Greece
22	Catalogues of Manuscript Codes	National Library of Greece
23	Refugees' Ark	Cultural Center of Thrace
24	Koitida	Municipal of Nafplion
25	Critics of Theatre & Music	Society of Greek Theatre and Music Critics
26	Press Museum of Patras	Association of Peloponnisos, Epirus and Ionian Islands Newspaper Editors
27	Audiovisual Archive of the Greek Radio-Television	Greek Radio-Television (ERT)
28	Proceedings of the Hellenic Academic Libraries Conferences	University of Cyprus
29	Gallery of Athens School of Fine Arts	Athens School of Fine Arts
30	E. Averof Gallery	E. Averof-Tositsa Foundation
31	Digital Collections of the Holly Metropolis of Thessaloniki	Holly Metropolis of Thessaloniki
32	Culrtural Deposit of the State Conservatory of Thessaloniki	State Conservatory of Thessaloniki
33	Collections of the Foundation for Aimos Peninsula Studies	Foundation for Aimos Peninsula Studies
34	Digital Collections of Center for Greek Theater Research and Studies	Center for Greek Theater Research and Studies
35	Digital Collections of State Museum of Modern Art	State Museum of Modern Art
36	Digital Collection of Macedonian Museum of Modern Art	Macedonian Museum of Modern Art
37	Collection of Museum of Cycladic Art	Museum of Cycladic Art

No	Title	Organization
38	Collections of Benaki Museum	Benaki Museum
39	Collections of Museum of the City of Athens	Museum of the City of Athens
40	Collection of Giannis Tsarouxis Foundation	Giannis Tsarouxis Foundation
41	Collection of Arts Life -ELIA	Hellenic Literature & Historical Archive (ELIA)
42	Card Postal Collection - ELIA	Hellenic Literature & Historical Archive (ELIA)
43	Press Collection - ELIA	Hellenic Literature & Historical Archive (ELIA)
44	Photographic Archive - ELIA	Hellenic Literature & Historical Archive (ELIA)
45	Photographic Archive of ASKI	Archives of Temporary Social History (ASKI)
46	Digital Library of the Greek Mathematical Society	Greek Mathematical Society
47	Digital Library of the Research Laboratory of Greek Philosophy	University of Ioannina
48	Historical Manuscripts Digital Library	Vikelea Municipal Library of Herakleion
49	Digital Library of the Technical Chambers of Greece Library	Technical Chambers of Greece
50	Digital Crete: Archaeological Atlas of Crete	Foundation for Research and Technology
51	Digital Crete: Venecian Period - Sculpture A	Foundation for Research and Technology (ITE)
52	Digital Crete: Venecian Period - Sculpture B	Foundation for Research and Technology (ITE)
53	Digital Library of Glinos Institution	Glinos Institution
54	Digital Collection of Photography Museum of Thessaloniki	Photography Museum of Thessaloniki
55	Digital Maps	University of the Aegean
56	Digital Deposit of the Greek Cinemateque and Cinema Museum	Greek Film Archive Foundation
57	Digital Archive of the Greek democratic Army: the Greek Civil War (1946-1949)	Archives of Temporary Social History (ASKI)
58	Digital Archive of National Opera of Greece	National Opera of Greece
59	Eleftherios Venizelos Digital Archive	National Research Center Eleftherios Venizelos
60	Digital Archive of the Holly Metrpolis of Arta	Holly Metropolis of Arta
61	Digital Archive of the Holly Metropolis of Ioannina	Holly Metropolis of Ioannina
62	Digital Archive of Michalis Papagiannakis	Archives of Temporary Social History (ASKI)
63	Digital Archives of ASKI	Archives of Temporary Social History (ASKI)
64	Digital Archive of Greek Music	Association of "Friends of Music"
65	Digital Byzantine Music - Konstantinos Prigos Archive	Church of Greece

Source: Directory of Greek Digital Resources (April 2010)

11.3 **I**TALY

11.3.1 Open access italian journals

No	Journal title	Publishing body
1	Acta Herpetologica	Firenze University Press (FUP)
2	Acta Otorihnolaryngologica Italica	Pacini editore
3	Aestimum	Firenze University Press
4	The African Physical Review	The Abdus Salam International Center
5	AIDAInformazioni	Associazione italiana per la Documentazione Avanzata
6	Altre Modernità	University of Milan
7	Altreitalie	Edizioni della Fondazione Giovanni Agnelli
8	Amnesia Vivace	Cultural Association Amnesia Vivace
9	Anestesia Pediatrica e Neonatale	Dario Galante
10	Annali del Dipartimento di Filosofia dell'Università di Firenze	Firenze University Press
11	Annali dell'Istituto Superiore di Sanità	ISS
12	Annali di Storia di Firenze	Firenze University Press
13	Annals of geophysics	Istituto Nazionale di Geofisica e Vulcanologia
14	Antrocom: Online Journal of Anthropology	Antrocom Onlus
15	Archeologia e Calcolatori	Italian National Research Council
16	Artifara	University of Turin
17	Atti dell'Accademia Peloritana dei Pericolanti	Accademia Peloritana dei Pericolanti
18	Basic and Applied Myology	Unipress Padova
19	Biblica	Pontifical Biblical Institute
20	Bibliotime	University of Bologna
21	Bollettino del CILEA	CILEA
22	Bollettino telematico di Filosofia Politica	University of Pisa
23	Brainfactor	BrainFactor
24	Capsula Eburnea	Segretariato italiano Medici e Specializzandi
25	Comunicazione filosofica	Società Filosofica italiana
26	Confluenze: rivista di studi iberoamericani	University of Bologna
27	Conservation Science in Cultural Heritage	University of Bologna, Department of Histories and Methodologies for the Preservation of the Cultural Heritage

No	Journal title	Publishing body	
28	Cromhos	Florence University Press	
29	Crossroads	ASA	
30	DEP, deportate, esuli, profughe	University of Venice, Cà Foscari	
31	Dermatology reports	PAGEPress publications	
32	Doctor Virtualis	University of Milan	
33	Electronic journal of applied statistical analysis	Coordinamento SIBA, Università di Lecce	
34	Enhtymema	University of Milan	
35	Erasmus Law & Economics Review	Erasmus Law and economic students society	
36	eSamizdat	Alessandro Catalano Simone Guagnelli	
37	Ethnorema	Ethnorema Association	
38	Etica & politica / Ethics & Politics	University of Trieste, Department of Philosophy	
39	European Diversity and Autonomy papers	European Academy in Bolzano	
40	The European Journal of Comparative Economics	European Association for comparative economics studies and University Carlo Cattaneo	
41	European Journal of Histochemistry	PAGEPress Publications	
42	European Journal of legal Studies	European University Institute	
43	European Journal of Pragmatism and American Philosophy	Associazione Pragma	
44	European Papers on the New Welfare	The Risk Institute	
45	Forest@	Italian Society of Silviculture and Forest Ecology	
46	Frattura ed Integrità Strutturale	Gruppo italiano Frattura	
47	Gastroenterlogy insights	PAGEPress Publications	
48	Giornale di Psicologia	Psicotecnica	
49	Haematologica	Ferrata Storti Foundation and European Hematology Association	
50	Heart International	Wichtig editore, Milan	
51	Hematology Reviews	PAGEPress Publications	
52	HSR proceedings in intensive Care and cardiovascular Anesthesia	EDIMES edizioni internazionali	
53	Idee	University of Lecce	
54	iForest: biogeosciences and forestry	Italian Society of Silviculture and Forest Ecology	
55	Ignaziana	Centro Ignaziano di spiritualità	
56	Imparare	LED edizioni	

No	Journal title	Publishing body	
57	Infectious Desease Reports	PAGEPress Publications	
58	Informacion Philosophica	IF Press	
59	Inkoj/	University of Milan	
60	International Journal of Plant Biology	PAGEPress Publications	
61	International Journal of Spatial Data Infrastructures Research	European Commission Joint Research Center	
62	International Journal of Speleology	Società Speleologica italiana	
63	InTRAlinea	University of Bologna	
64	Invertebrate Survival Journal	ISJ	
65	Italian Journal of Animal Science	Scientific Association of animal Production	
66	Italian Journal of Engineering Geology and Environment	Casa Editrice La Sapienza	
67	Italian Journal of Pediatrics	Italian Pediatric Society	
68	Italian Journal of Public Health	Prex Spa	
69	Italian Labour Law e-journal	University of Bologna	
70	Italiano LinguaDue	University of Milan	
71	JCOM: journal of science communication	SISSA	
72	Je-LKS: Journal of e-learning and Knowledge Society	Italian e-learning Association	
73	JLIS.it	University of Florence	
74	JOP: journal of pancreas	Burioni Ricerche bibliografiche; University of Bologna	
75	Journal of Formalized Reasoning	CIB, University of Bologna	
76	The Journal of Infection in Developing Countries	Open Learning on Enteric Pathogens	
77	Journal of Nucleic Acids Investigation	PAGEPress Publications	
78	Journal of Orthopaedics and Traumatology	Springer	
79	Laboratorio dell'ISPF	Italian National Research Council	
80	Lanx	University of Milan	
81	Lecturae Tropatorum	University of Naples, Federico II	
82	Life span and disability	Città aperta edizioni s.r.l.	
83	Linguae & rivista di lingue e culture moderne	LED edizioni	
84	M@gm@	Osservatorio processi comunicativi	
85	Macramè	Firenze University Press	
86	Le matematiche	University of Catania	
87	MediAzioni: rivista online di studi interdisciplinari su lingue e culture	University of Bologna, sede di Forlì	

No	Journal title	Publishing body	
88	Mediterranea: ricerche storiche	Associazione no-profit Mediterranea and University of Palermo	
89	Mediterranean Journal of Hematology and infectious Diseases	Catholic University	
90	Mental Illness	PAGEPress Publications	
91	Montesquieu.it	University of Bologna	
92	Museologia scientifica e naturalistica	University of Ferrara	
93	Music & Anthropology	International Council for Traditional Music	
94	Musica / Tecnologia	Firenze University Press	
95	Nephrology reviews	PAGEpress Publications	
96	Neurology International	PAGEpress Publications	
97	Neuropsychological Trends	LED edizioni	
98	Note di matematica	University of Lecce, Coordinamento SIBA	
99	Officina della storia	University of Tuscia	
100	Orthopedic reviews	PAGEpress publications	
101	Pediatric Reports	PAGEpress publications	
102	Philomusica on-line	Pavia University Press	
103	PoS: proceedings of science	SISSA	
104	PsychNology Journal	PsychNology Journal	
105	Psychofenia: ricerca ed analisi psicologica	University of Lecce, Coordinamento SIBA	
106	Quaderni della Ri-vista	Firenze University Press	
107	Quest: issues in contemporary Jewish history	Fondazione Centro di Documentazione Ebraica Contemporanea CDEC	
108	Rare Tumors	PAGEpress publications	
109	Reti Medievali	Firenze University Press	
110	Review of Economics and Institutions	University of Perugia	
111	Rheumatology reports	PAGEpress publications	
112	Ri-vista: ricerche per la progettazione del paesaggio	Firenze University Press	
113	Ricerche di pedagogia e didattica	University of Bologna	
114	Rivista di Criminologia, Vittimologia e Sicurezza	Società italiana di Vittimologia	
115	Rivista di diritto dell'economia, dei trasporti, dell'ambiente	University of Palermo	
116	S&F: scienzaefilosofia.it	S&F: scienzaefilosofia.it	
117	Scrineum Rivista	Firenze University Press	
118	Segni e comprensione	University of Lecce, Coordinamento SIBA	

No	Journal title	Publishing body	
119	Snippets	LED edizioni	
120	Storia delle donne	Firenze University Press	
121	Storia e Futuro	University of Bologna, Department of History	
122	Storicamente	University of Bologna	
123	Studi linguistici e filologici on-line	University of Pisa	
124	Studi Slavistici	Firenze University Press	
125	TeMA: territorio, mobilità e ambiente	University of Naples, Federico II	
126	Thalassia salentina	University of Lecce, Coordinamento SIBA	
127	Transitional waters Bullettin	University of Lecce, Coordinamento SIBA	
128	Transitional waters Monographs	University of Lecce, Coordinamento SIBA	
129	Trends in evolutionary Biology	PAGEPress Publications	
130	VEGA	University of Perugia, Dipartimento Scienze umane e formazione	
131	Veterinaria italiana	Istituto Zooprofilattico sperimentale dell'Abruzzo e del Molise	

Source: DOAJ

11.3.2. Italian repositories

No	Repository	Organization	
1	Alma@DL: Biblioteca digitale dell'università di Bologna	University of Bologna	
2	Almae Matris Studiorum Acta (AMS Acta)	University of Bologna	
3	Almae Matris Studiorum Campus (AMS Campus)	University of Bologna	
4	Almae Matris Studiorum Miscellanea (AMS Miscellanea)	University of Bologna	
5	AMS Tesi di Dottorato (Alm @ DL)	University of Bologna	
6	AMS Tesi di Laurea	University of Bologna	
7	ArcAdiA (Archivio Aperto di Ateneo)	University of Roma Tre	
8	Archivio Giuliano Marini	Facoltà di Scienze Politiche, University of Pisa	
9	Archivio Istituzionale (AperTO)	University of Turin	
10	AIR (Archivio Istituzionale della Ricerca)	University of Milan	
11	Archivio Istituzionale Università di Bergamo (Aisberg)	University of Bergamo	

No	Repository	Organization	
12	E-ms (Archivio aperto di documenti per la medicina sociale)	Istituto Italiano per la Medicina Sociale	
13	ARMIDA@UniMi	University of Milan	
14	AUR Studies working paper series	American University of Rome	
15	AUR working paper series	American University of Rome	
16	Biodiversity international publications	Biodiversity International	
17	BOA Bicocca Open Archive	University of Bicocca	
18	C.A.B. University of Messina	University of Messina	
19	CamEprints	University of Camerino	
20	CNR Bologna Research Library	Consiglio Nazionale delle Ricerche (CNR)	
21	Doctoral Theses Archive (DocTA)	Università Cattolica del sacro Cuore	
22	DSpace @ Tor Vergata	University of Rome - Tor Vergata	
23	DSpace a Parma	University of Parma	
24	Cadmus (DSpace at the EUI)	European University Institute	
25	E-LIS	AePIC, CILEA	
26	EPrints Archive	University of Florence	
27	EPrints at the Dipartimento di Fisica e Astronomia		
28	Earth-prints repository	Istituto Nazionale di Geofisica e Vulcanologia (INGV)	
29	Electronics Thesis and Dissertations Archive	University of Pisa	
30	FAOBIB	FAO	
31	Gruppo Italiano Frattura	IGF Gruppo Italiano Frattura	
32	ICTP Open Access Archive	Abdus Salam International Centre for Theoretical Physics	
33	Istituto Superiore di Sanità Digital Repository (DSpace at ISS)	Istituto Superiore di Sanità	
34	JIIA EPrints Repository	Journal of Intercultural and Interdisciplinary Archaeology	
35	Lear (Linguistics Electronic Archive)	University Cà Foscari in Venice	
36	LUISSearch	Libera Università Internazionale degli Studi Sociali Guido Carli	
37	Messanae Studiorum	University of Messina	
38	OPAR (Open Archive dell'Orientale)	Università degli Studi di Napoli l'Orientale	
39	Open Archive for conferences held by the Department of Mathematics	Department of Mathematics, Politecnico di Milano	

No	Repository	Organization	
40	Open Archive Siena (OASi)	University of Siena	
41	OpenStarTs	University of Trieste	
42	Padua@research	University of Padua	
43	Padua@Thesis	University of Padua	
44	Proceedings of Science (PoS)	SISSA, Trieste	
45	Pubblicazioni Aperte Digitali Interateneo della Sapienza (PADIS)	University of Rome La Sapienza	
46	SOLAR (Scientific Open Access Literature Archive and Repository)	Consiglio Nanzionale delle Ricerche	
47	SISSA Digital Library	SISSA	
48	SSPAL.doc	Scuola Superiore della Pubblica Amministrazione Locale	
49	STOà EPrints	Istituto di Studi per la Direzione e la Gestione di Impresa (STOà)	
50	UniCa eprints	University of Cagliari	
51	UnipiEprints	University of Pisa	
52	UnissResearch	University of Sassari	
53	Unitn-eprints PhD	University of Trento	
54	UniTus DSpace	Tuscia University	
55	Università degli Studi di Napoli Federico II Open Archive (FedOA)	University of Naples	
56	Università degli Studi di Trento Eprints	University of Trento	

11.4 **S**PAIN

11.4.1 Spanish repositories

Repository	URL	Organization
ARCA. Archive of Ancient Catalan Journals	http://www.bnc.cat/digital/arca/index.html	Biblioteca de Catalunya
Institutional Open Archive of the Rey Juan Carlos University.	http://eciencia.urjc.es/dspace	Universidad Rey Juan Carlos I
UPM Digital Archive	http://oa.upm.es/	Universidad Politécnica de Madrid
Virtual Library of Bibliographic Heritage	http://bvpb.mcu.es/	Ministerio de Cultura
Virtual Library of Press History	http://prensahistorica.mcu.es/	Ministerio de Cultura
Biblos-e: Institutional Repository of the UAM	http://digitool-uam.greendata.	Universidad Autónoma de Madrid
Dadun. Digital Academic Deposit of the University of Navarre	http://dspace.unav.es/	Universidad de Navarra
DDD. Digital Deposit of Documents of the Universitat Autònoma de Barcelona.	http://ddd.uab.es/	Universitat Autònoma de Barcelona
DIALNET	http://dialnet.unirioja.es/	Universidad de la Rioja
Digital.CSIC	http://digital.csic.es/	CSIC
Digitum: Digital Deposit of the University of Murcia	http://digitum.um.es/dspace	Universidad de Murcia
Digital Deposit of the UB	http://diposit.ub.edu/	Universitat de Barcelona
DUGiDocs - University of Girona	http://dugi-doc.udg.edu/	Universitat de Girona
DUGimedia - University of Girona	http://diobma.udg.edu/	Universitat de Girona
E-Archivo, Institutional Repository of the Carlos III University.	http://e-archivo.uc3m.es:8080/ dspace	Universidad Carlos III
eBuah - Digital Library of the University of Alcalá	http://dspace.uah.es/dspace/	Universidad de Alcalá
e-Espacio UNED	http://e-spacio.uned.es/fez/index. php	UNED
E-Prints Complutense University of Madrid	http://eprints.ucm.es/	Universidad Complutense Madrid

ANNEXES 181

Repository	URL	Organization	
MDC. Digital Memory of Catalonia	http://www.cbuc.cat/mdc	CBUC	
Digital Memory of the Canary Islands (mdC)	http://bdigital.ulpgc.es/mdc	Universidad de las Palmas de Gran Canaria	
PADICAT. Digital Heritage of Catalonia	http://www.padicat.cat	Biblioteca de Catalunya	
RACO	http://www.raco.cat/	CBUC	
RECERCAT. Research Deposit of Catalonia	http://www.recercat.net/	CBUC	
Repository of Doctoral Theses of the University of Burgos	http://dspace.ubu.es:8080/tesis/	Universidad de Burgos	
Institutional Repository of the University of Granada	http://www.ugr.es/%7Ebiblio/ biblioteca_electronica/proyecto_ digibug/index.html	Universidad de Granada	
Institutional Repository of the University of Las Palmas de Gran Canaria	http://contentdm.ulpgc.es/ portal/repositorio/?id=2	Universidad de Las Palmas de Gran Canaria	
Institutional Repository of the Universidad Politécnica de Cartagena	http://repositorio.bib.upct. es/dspace/	Universidad Politécnica de Cartagena	
RiuNet. Institutional Repository of the Universidad Politécnica de Valencia	http://dspace.upv.es/manakin	Universidad Politécnica de Valencia	
RuA. Institutional Repository of the University of Alicante	http://rua.ua.es	Universidad de Alicante	
Tesis Doctorals en Xarxa (TDX)	http://www.tesisenxarxa.net/	CBUC	
UDCDspace. Universidade da Coruña	http://dspace.udc.es/	Universidade da Coruña	
UPCommons - Graphic Archive of the ETSAB	http://eprints.upc.es/ adminbustia/bid210/	Universitat Politècnica de Catalunya	
UPCommons - E-prints UPC	https://e-prints.upc.edu/	Universitat Politècnica de Catalunya	
UPCommons - UPC Journals and Congresses	https://e-revistes.upc.edu/	Universitat Politècnica de Catalunya	
UPCommons - UPC Academic Papers	http://bibliotecnica.upc.es/pfc	Universitat Politècnica de Catalunya	
UPCommons - UPC Digital Video Archive	http://bibliotecnica.upc.edu/ video	Universitat Politècnica de Catalunya	
Arias Montano: Institutional Repository of the University of Huelva	http://rabida.uhu.es/dspace/	Universidad de Huelva	

Repository	URL	Organization	
UZaguán: Digital Repository of the University of Zaragoza	http://zaguan.unizar.es	Universidad de Zaragoza	
Gredos	http://gredos.usal.es/	Universidad de Salamanca	
Helvia: Institutional Repository of the University of Cordoba	http://helvia.uco.es	Universidad de Córdoba	
Institutional Repository of Asturias (RIA)	http://ria.asturias.es	Gobierno del Principado de Asturias y Universidad de Oviedo	
EMD. Euskal Memoria Digitala - Basque Digital Memory	http://www.memoriadigitalvasca.	Fundación Sancho el Sabio	
Jable. Archive of digital press	http://biblioteca.ulpgc. es/?q=jable	Universidad de Las Palmas de Gran Canaria	
OPLex: collection of road and rail regulations	http://infodigital.opandalucia. es/oplex/	Centro de Estudios de Obras Publicas de Andalucia	
e-Repositori: Digital Repository of the Pompeu Fabra University	http://repositori.upf.edu/	Universitat Pompeu Fabra	
Hedatuz	http://hedatuz.euskomedia.org/	Fundación Euskomedia	
Repository of the Jaume I University	http://repodoc.uji.es/jspui	Universitat Jaume I	
Portal of Complutense Scientific Journals	http://revistas.ucm.es/portal	Universidad Complutense de Madrid	
Repository of the Spanish Neuropsychiatry Association	http://documentacion.aen.es/	Asociación Española de Neuropsiquiatría	
UVaDOC. Document Repository of the University of Valladolid	http://uvadoc.uva.es/	Universidad de Valladolid	

Source: BuscaRepositorios

ANNEXES 183

11.5 Turkey

11.5.1 Turkish institutions included in OpenDOAR

Institution	Related subjects	Software	Records added
Ankara University Archive System	Multidisciplinary Mitos		5,288
Atatürk Üniversitesi Open Archive	Multidisciplinary	ciplinary Mitos	
Atılım University Open Archive System	Multidisciplinary	Mitos	262
Gazi University Archive System	Multidisciplinary	Own software	2,956
Sabancı Üniversitesi Archive System	Multidisciplinary	EPrints	10,415
National Interuniversities Open Archive Initiative - Bahcesehir University	Multidisciplinary	MITOS	1,887
National Interuniversities Open Archive Initiative - İstanbul Technical University	Multidisciplinary	MITOS	9
National Interuniversities Open Archive Initiative - Izmir Institute of Technology	Multidisciplinary	MITOS	702

Updated in 25/03/2010

11.5.2 Turkish institutions included in ROAR

Institution	Related subjects	Software	Records added
Sabanci University Research Database	Multidisciplinary	EPrints	3,486
Ankara Üniversitesi Açık Aşivi	Multidisciplinary	Mitos	3,441
Middle East Technical University Library E-Thesis OAI Data Provider	Multidisciplinary	Other Softwares	2,247
Suleyman Demirel University Elektronik Dergi Sistemi	Multidisciplinary	Open Journal System	2,534
Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Açık Arşivi	Social Sciences	EPrints	737
Trakya Universitesi Açık Erişim Bilgi Kaynakları Otomasyonu	Multidisciplinary	Other Softwares	652
Atılım Açık Erişim Sistemi	Multidisciplinary	Mitos	254
Atatürk Üniversitesi Açık Arşivi	Multidisciplinary	Other Softwares	104
TED Ankara College	Multidisciplinary	EPrints	57

Institution	Related subjects	Software	Records added
Ulusal Üniversitelerarası Açık Erişim Sistemi - Bahçeşehir Üniversitesi	Multidisciplinary	Mitos	9
Gazi Üniversitesi Açıkarşiv	Multidisciplinary	Other Softwares	Updating
Turkish Online Journal of Distance Education	Multidisciplinary	Other Softwares	Updating

Updated in 25/03/2010

12 ABOUT THE AUTHORS

Francisca Abad-García

Medical doctor and professor of the Library and Information Area of the University of Valencia. Technical director of the Virtual Medical Library, Medical College of Valencia.

abad@uv.es

ERNEST ABADAL

Senior Lecturer of the Faculty of Library and Information Science of the University of Barcelona. Author of several books and papers on digital publications. Director of the academic journal "BiD: textos universitaris de biblioteconomia i documentació". Personal webpage: http://bd.ub.es/pub/abadal.

abadal@ub.edu

Francis André

CNRS research engineer involved for more than 20 years in the development of automated services allowing researchers to access and manage scientific information at the national and European level. Currently acting as an OA expert at the scientific and technical information and libraries network, unit of the French Ministry of Higher Education and Research.

francis.andre@recherche.gouv.fr

Lluís Anglada

Director of the Consortium of Academic Libraries of Catalonia (CBUC). Previously he was director of libraries at the Polytechnic University of Catalonia (1989-1997) and senior lecturer in the Faculty of Library and Information Science. He is active in various professional associations at Catalan, Spanish and international levels, including the scientific committees

of professional conferences in Catalonia and Spain, European meetings of ICOLC and Library Advisory Boards of Academic Press, Blackwell Publishing, Nature PG and Springer.

langlada@cbuc.cat

Anne-Marie Badolato

Currently in charge of the current awareness unit at INIST-CNRS, she also works for the INIST Open Access website. Previously, she was responsible for partnerships with STM publishers like BioMed Central and took part in the DRIVER EU project.

anne-marie.badolato@inist.fr

EMILIE BARTHET

Coordinator of the Department for Prospective Studies at the Couperin Consortium.

emilie.barthet@univ-paris5.fr

MARIA CASSELLA

Librarian coordinator at the University of Turin. Author of manifold papers published in Italian and in English on digital libraries. Her current research interests are in the fields of digital libraries, open access, scholarly communication, statistics and evaluation, mobile applications. Member of the working group of the Wiki OA Italia, the IFLA Standing Committee on Statistics and Evaluation, the editorial board of the Italian Journal of Library and Information Science and the editorial team of two Italian enewsletters.

maria.cassella@unito.it

RACHEL CREPPY

Member of the scientific and technical information and library networks unit of the French Ministry of Higher Education and Research. rachel.creppy@univ-paris1.fr

Paola Gargiulo

Electronic information resources specialist and open access projects manager in CASPUR (Italian interuniversity Supercomputing consortium). Author

ABOUT THE AUTHORS 187

and speaker on library consortia issues, electronic resources and user services, scholarly communication, and OA. Member of the Board of SPARC Europe, the Italian OA-CRUI working group, the OA-Wiki working group, INFER (the Italian National Forum on Electronic Resources), SELL and ICOLC. paola.gargiulo@caspur.it

Panos Georgiou

Information specialist and team leader for libraries electronic services, OA publishing and projects management at the Library & Information Center of the University of Patras, Greece.

panos@lis.upatras.gr

GULTEKIN GURDAL

Chairman of the Izmir Institute of Technology Library and Documentation and the Anatolian University Libraries Consortium (ANKOS). Previously he has worked as the Specialist on Electronic Resources and Library Automation Systems in TUBITAK Marmara Research Center, Bilkent University and Sabanci University libraries. He is the Founder-Director of TOBB-ETU University Library. He has done national and international scientific studies.

gultekingurdal@iyte.edu.tr

Jean-François Lutz

Head of the Digital Library at Université Henri Poincaré –Nancy 1 and member of the Professional Board of the Couperin Consortium. He is also a board member of SPARC Europe.

jean-francois.lutz@scd.uhp-nancy.fr

Remedios Melero

Researcher at the Institute of Agrochemistry and Food Technology, which belongs to the Spanish High Research Council (CSIC). Editor of the scientific journal "Food Science and Technology International". Vice-president of the European Association of Science Editors (EASE). Her research focus is on electronic publications, peer review processes and, particularly, open access to scientific publications.

rmelero@iata.csic.es

AYNUR MORAL

Ankara University Library Officer. She worked previously for MikroBeta Software Corp. on the library automation systems and as the supporter and trainer staff for open access software (2008-2009), for Gebze Institute of Technology Library as the Database Responsible (2009-2010). Member of Anatolian University Libraries Consortium Open Access and Institutional Archives Study Group.

amoral@gyte.edu.tr

Mariette Naud

Coordinator for Information negotiations at the Couperin Consortium. mariette.naud@u-bordeaux1.fr

Jean-François Nominé

CNRS Research Engineer, head of the Translation Unit at INIST-CNRS, France. He wrote for INIST's Open Access website that he created in 2003 in his former position as head of the Institute's web design unit. He represents INIST in the WorldWide Science Consortium.

jean-francois.nomine@inist.fr

FIORI PAPADATOU

Information specialist and member of the OA publishing team at the Library & Information Center of the University of Patras, Greece.

2wfiori@lis.upatras.gr

ELOY RODRIGUES

Director of the University of Minho Documentation Services. Director and founder of the RepositoriUM (University of Minho institutional repository). Specialist in the development of digital libraries and the study of the scholarly communication system. He coordinates the team at Minho University that has been developing the RCAAP (Repositório Científico de Acesso Aberto de Portugal = Portugal Open Access Science Repository) project. Member of the EUA (European University Association) Working Group on Open Access. He participates in various FP7 funded projects related to open access and repositories, such as NECOBELAC and OPENAIRE.

eloy@sdum.uminho.pt

Josep-Manuel Rodríguez-Gairín

Senior Lecturer at the Faculty of Library and Information Science at the University of Barcelona. He has participated in the technical management and coordination of several directories and online databases such as Interlibrary loan directory, EXIT, Temaria, MIAR, E-LIS. Founder of the company Kronosdoc, dedicated to consulting and software development for library services.

rodriguez.gairin@ub.edu

RICARDO SARAIVA

He works for the Documentation Services of the University of Minho and is the repository manager of the RepositoriUM (University of Minho institutional repository). Since 2004, he has been involved in the promotion, communication and user support of various open access related activities. Another main focus of his current activity has been the advocacy and promotion of open access and institutional repositories integrated in projects such as RCAAP, DRIVER, NECOBELAC and OPENAIRE.

rsaraiva@sdum.uminho.pt

Miquel Termens

Senior Lecturer of the Faculty of Library and Information Science at the University of Barcelona. His research focuses on digital preservation, the use of digital documents and digital library management.

termens@ub.edu

Ata Turkfidani

He is the Yasar University Information Center Officer and has been responsible for Technical Services and Electronic Resources since 2005. Member of the Anatolian University Libraries Consortium Open Access and Institutional Archives Study Group and as the database contact person. He has done national and international scientific studies.

ata.turkfidani@yasar.edu.tr

CHRISTINE WEIL-MIKO

CNRS research engineer involved with national negotiations. Deputy Manager of Information portals, Services and Acquisition Department

at the Institute for Scientific and Technical Information (INIST-CNRS), France.

christine.weil-miko@inist.fr











