

FOSTER Project event, Croatian Ministry of Science, Education & Sports
Zagreb, 10 December 2014

Open Access in Europe: progress and policy

Alma Swan

SPARC Europe

Key Perspectives Ltd

Enabling Open Scholarship



Shape of this presentation

- Some context
- OA benefits for authors, institutions and funders
- The policy picture
- Policy formulation



Some context: progress of Open Access



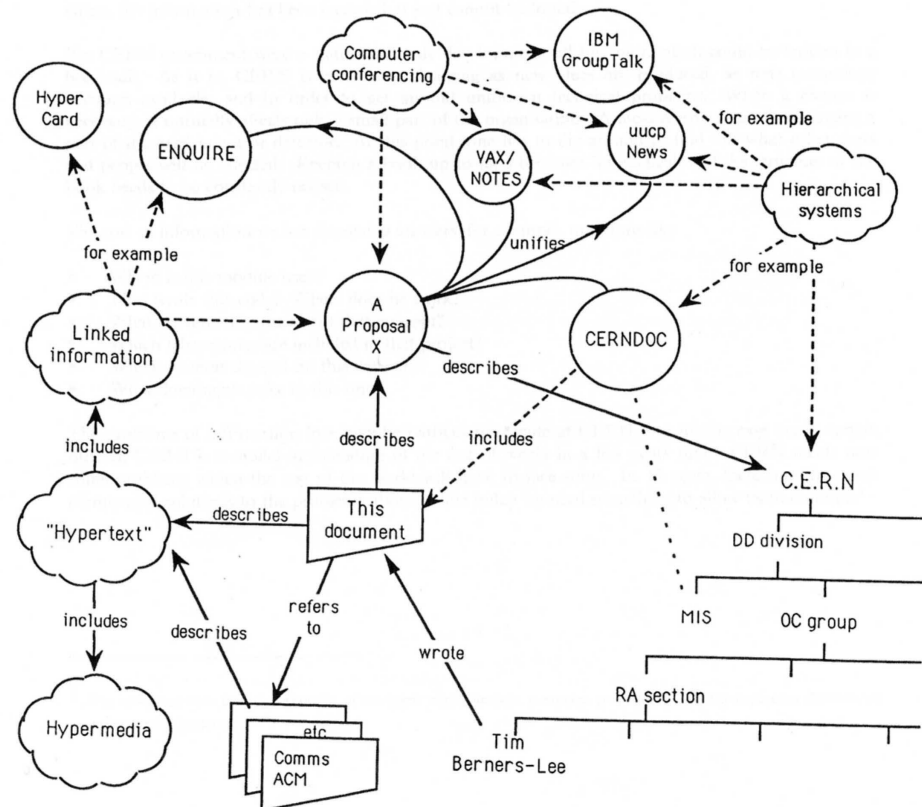
Vague but exciting ...

Information Management: A Proposal

Abstract

This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a solution based on a distributed hypertext system.

Keywords: Hypertext, Computer conferencing, Document retrieval, Information management, Project control



Vague but exciting ...

CERN DD/OC

Tim Berners-Lee, CERN/DD

Information Management: A Proposal

March 1989

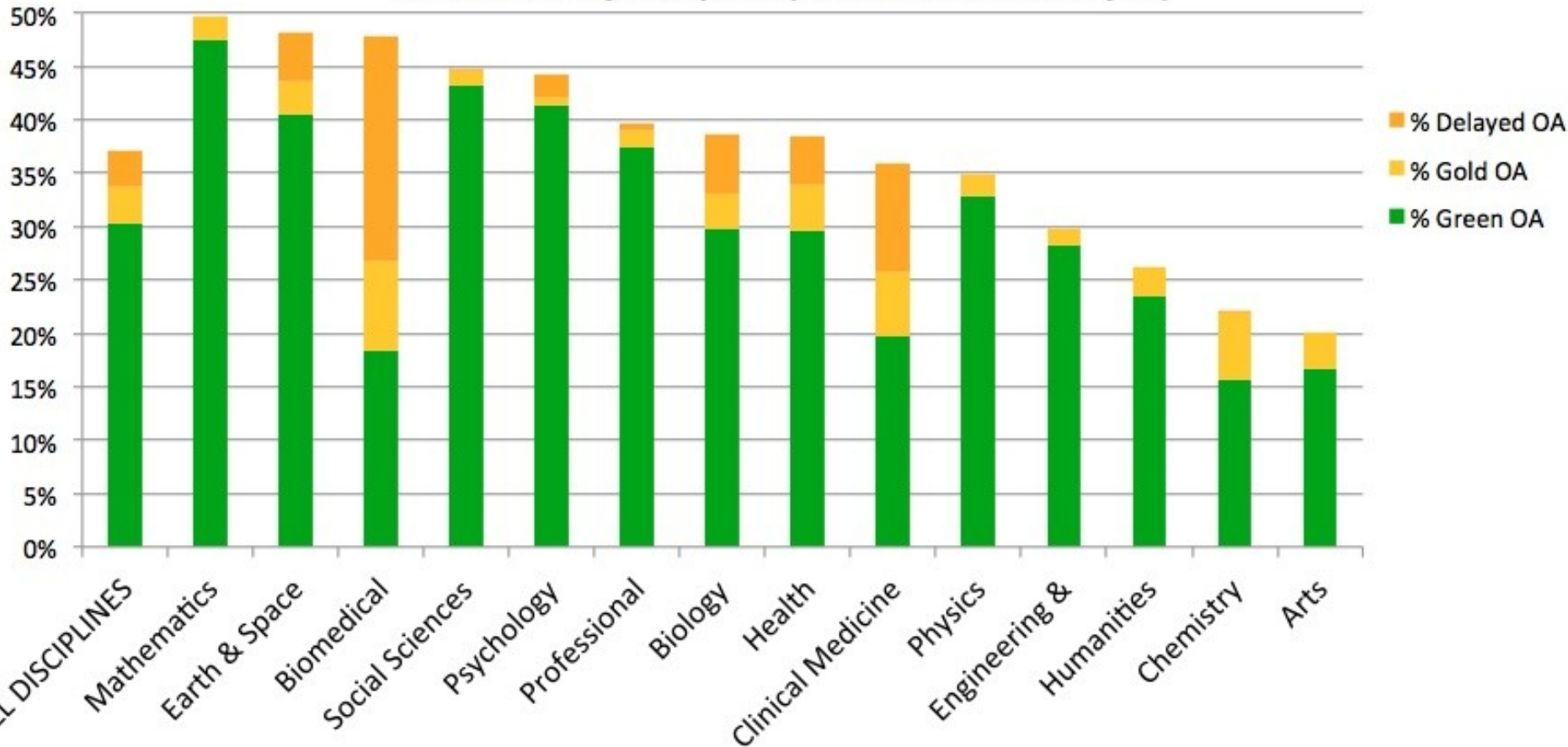
Information Management: A Proposal

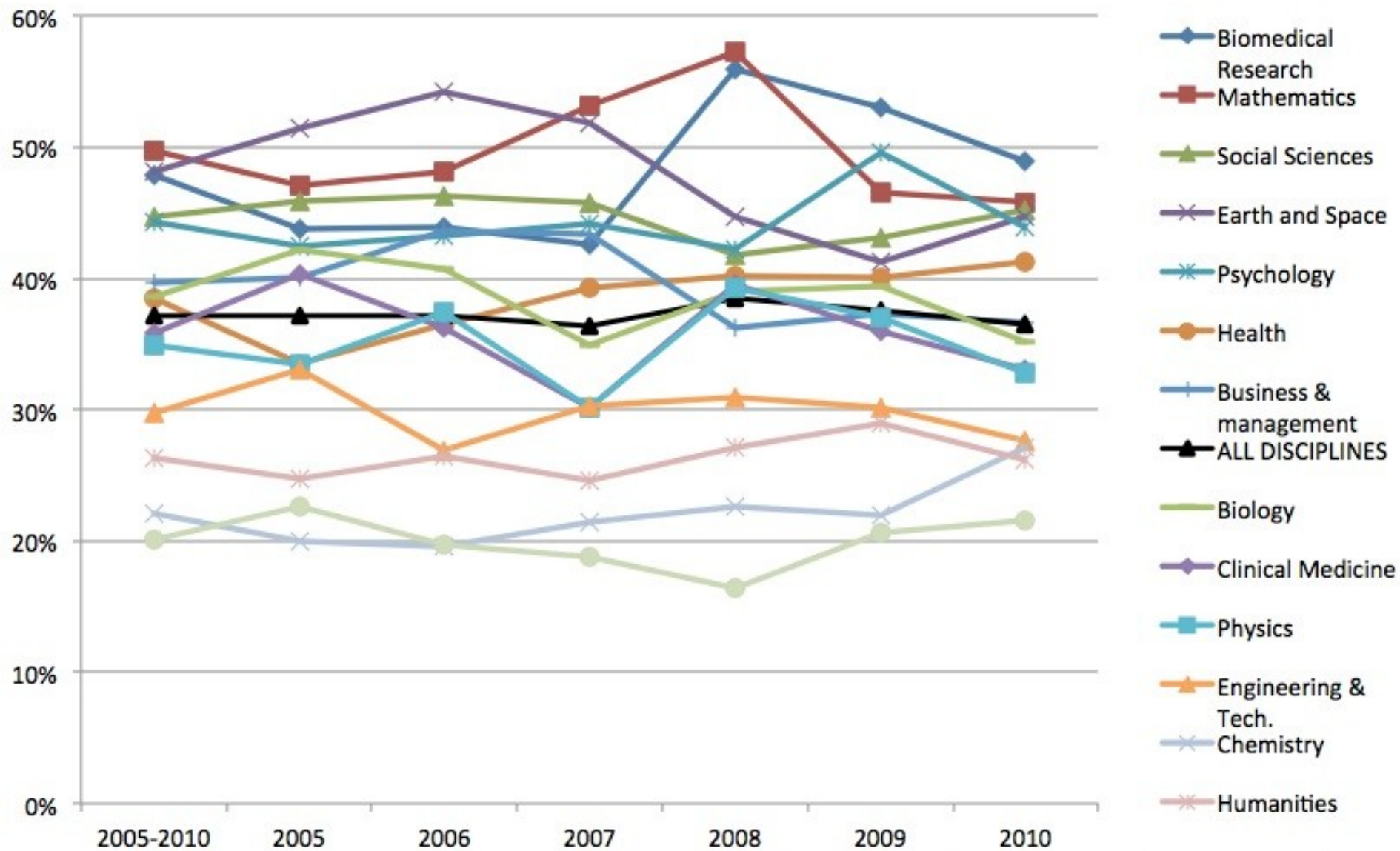
Abstract

This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a



Percent OA by discipline (Green, Gold & Delayed)





Why so low after > 15 years?

- Lack of awareness
- Lack of understanding
- Overdose of misunderstandings
- Fear of repercussions
- Reward systems in academia entrench conservative behaviour
- Glacial pace of academic adoption of the Web

What's in it for authors?



Author advantages from Open Access

- Visibility
- Usage
- Impact
- Personal profiling and marketing



Visibility



An author's own testimony on open access visibility

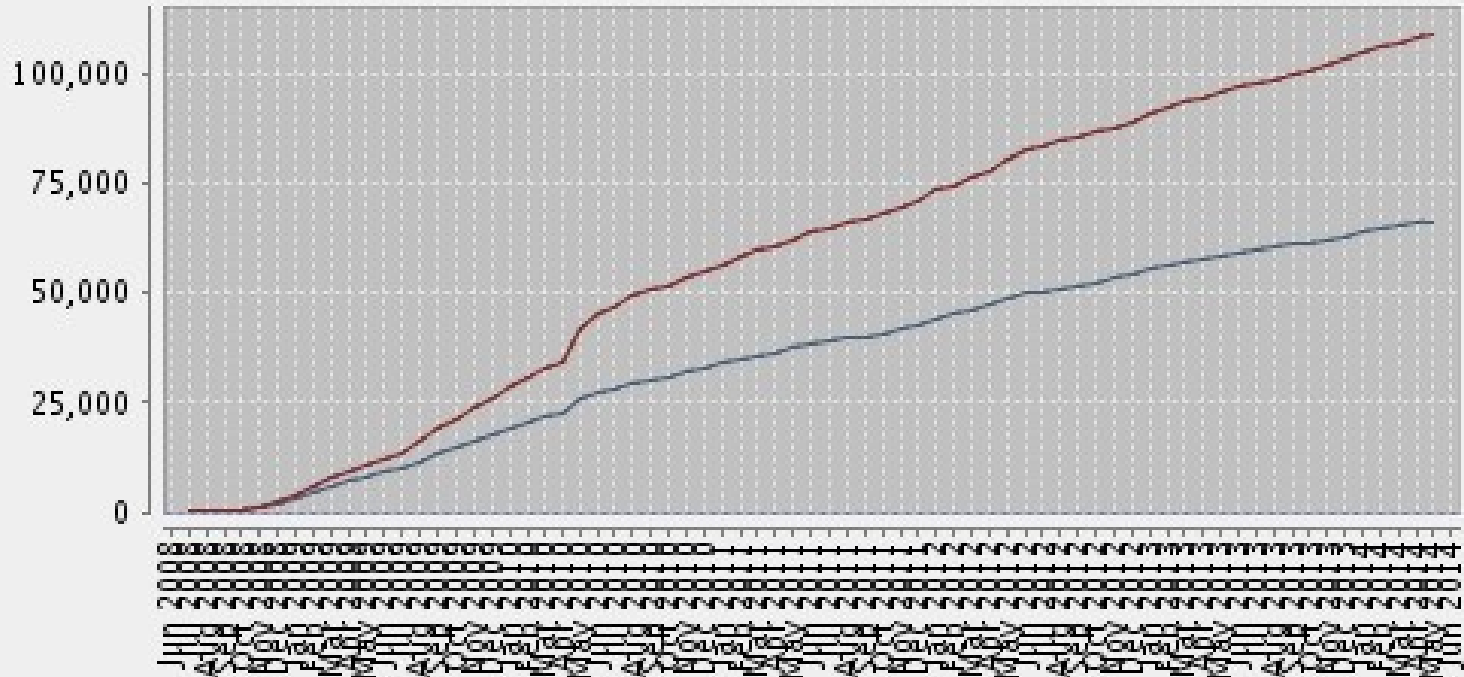
“Self-archiving in the PhilSci Archive has given instant world-wide visibility to my work. As a result, I was invited to submit papers to refereed international conferences/journals and got them accepted.”



Usage

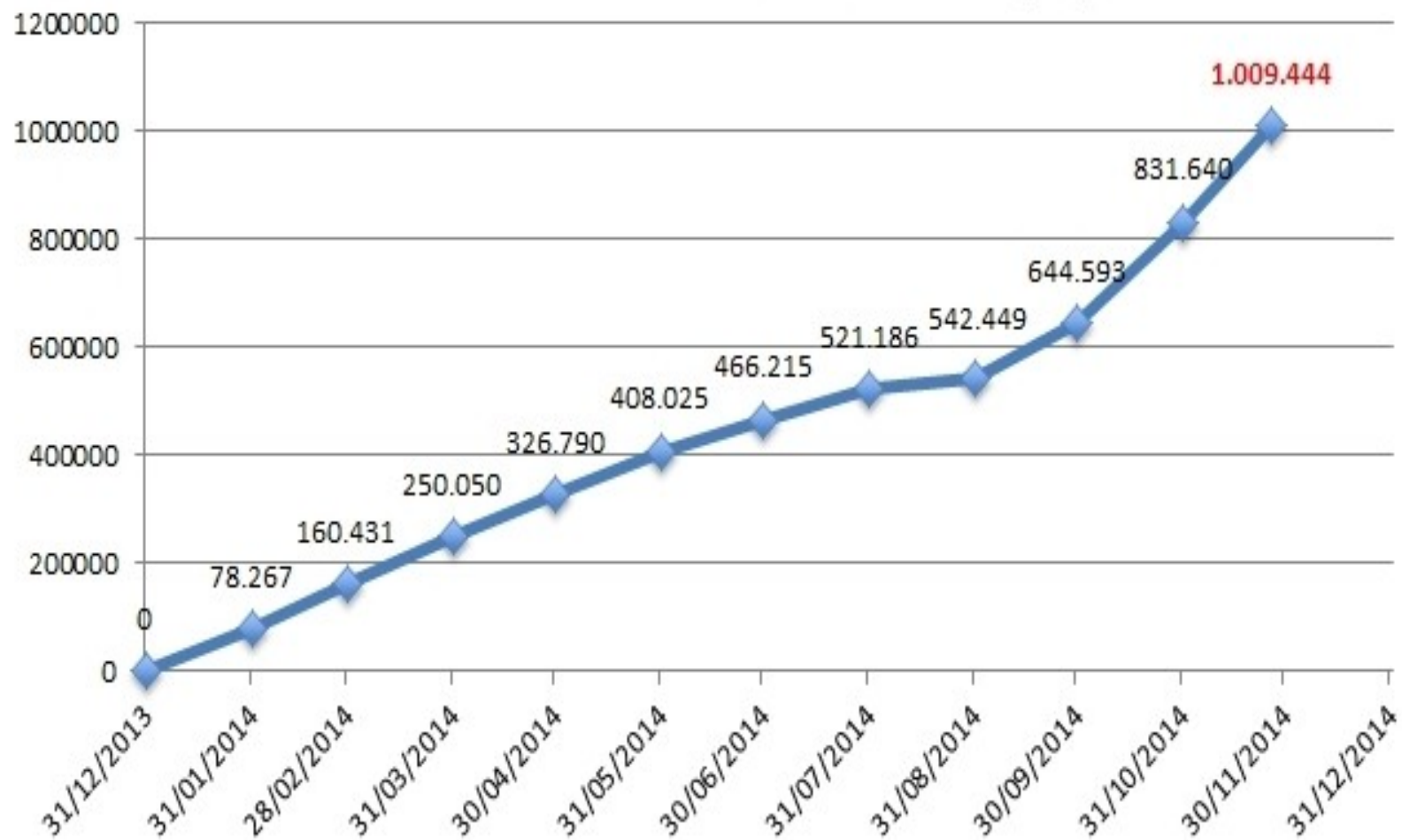


University of Liege repository: authors deposit



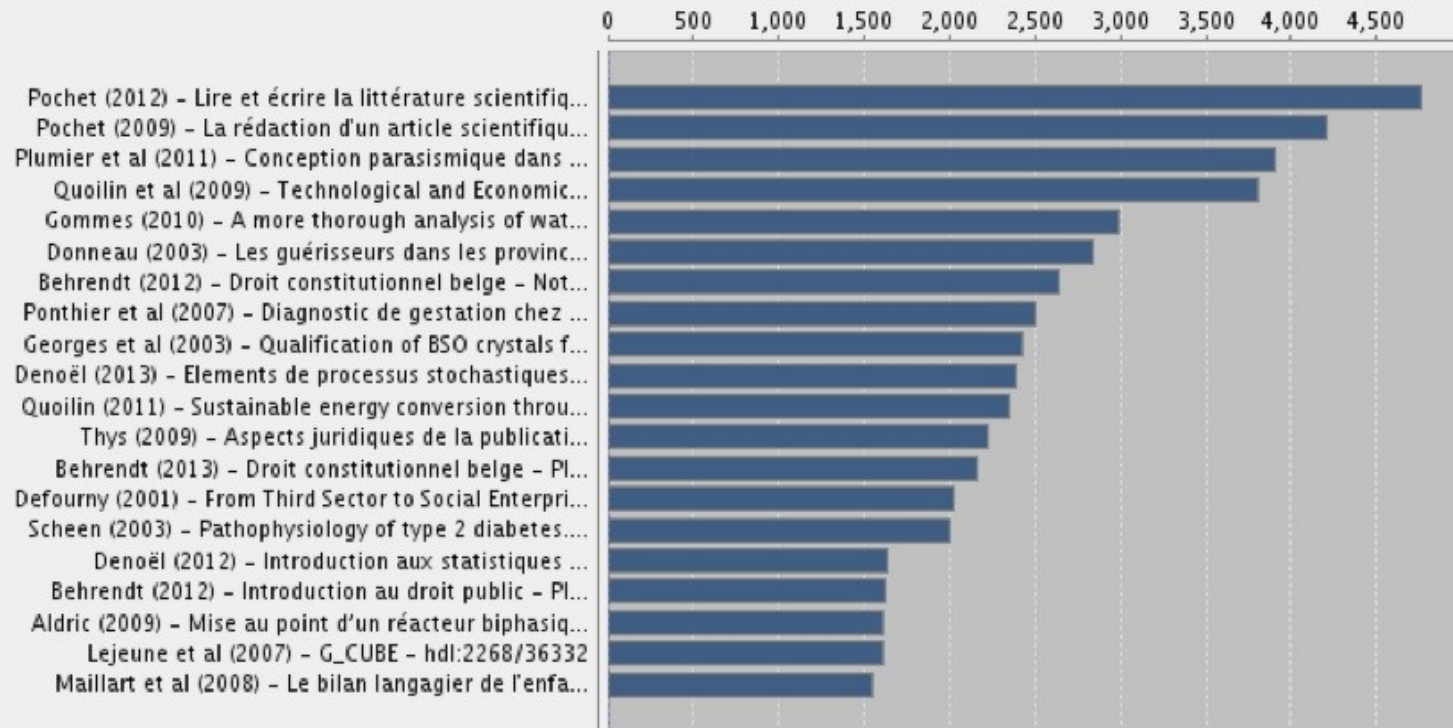
— Number of references --- with extrapolation
— Number of references with full text --- with extrapolation

Total ORBi downloads since January 1, 2014

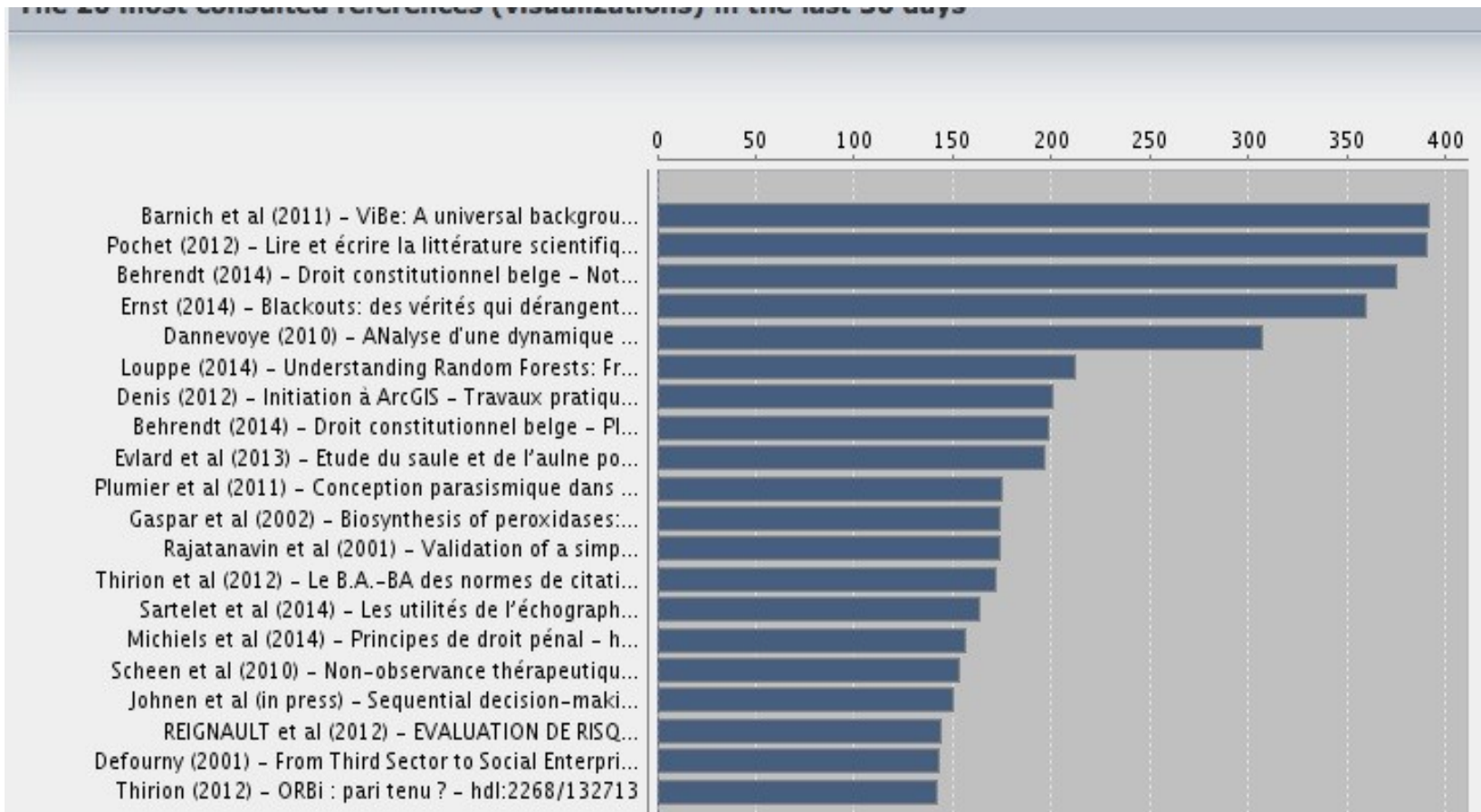


Individual article usage: annual levels

The most consulted references (visualizations)

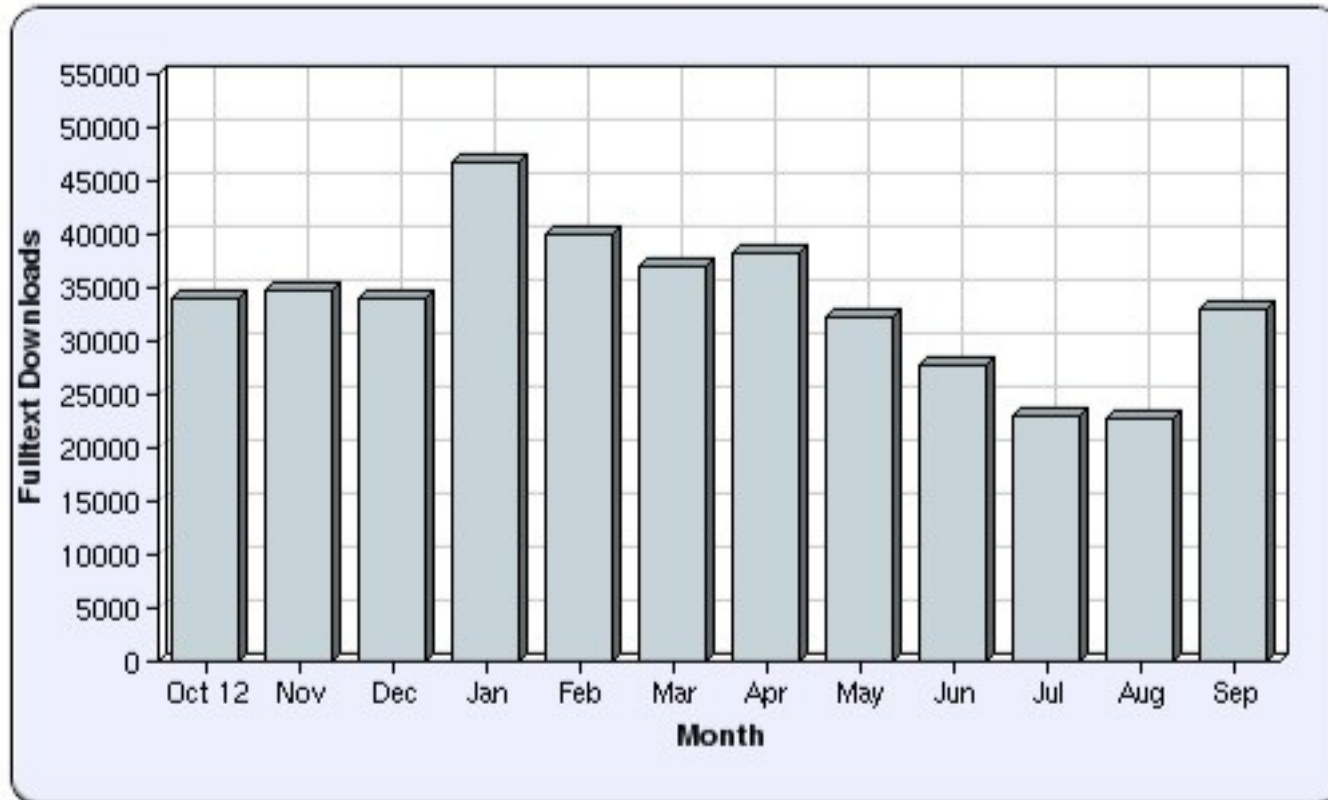


Individual article usage: monthly levels



University of Salford: USIR

c9000 records



Individual authors' usage

QUT ePrints

Search

- Advanced
- QUT Theses
- Affiliation

Browse

- Person
- Subjects
- Year

About

- Contact us
- Copyright matters
- Deposit Guide

Statistics

- Repository Statistics

QUT Users

- Deposit items

Most Popular Authors

All of QUT

Showing 1-20 of 9083

Rank	Author/Creator	Downloads
1	Martin Skitmore	225,857
2	Ray Frost	188,667
3	Mary Courtney	149,247
4	Marilyn Campbell	147,379
5	Brian Fitzgerald	117,042
6	Andrew Worthington	105,082
7	Luis Ferreira	92,390
8	James Watters	88,510

All time

Individual authors' usage

QUT ePrints

Search

- Advanced
- QUT Theses
- Affiliation

Browse

- Person
- Subjects
- Year

About

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Statistics


- Repository Statistics

QUT Users

- Deposit items

Most Popular Authors

All of QUT

 Last 28 days

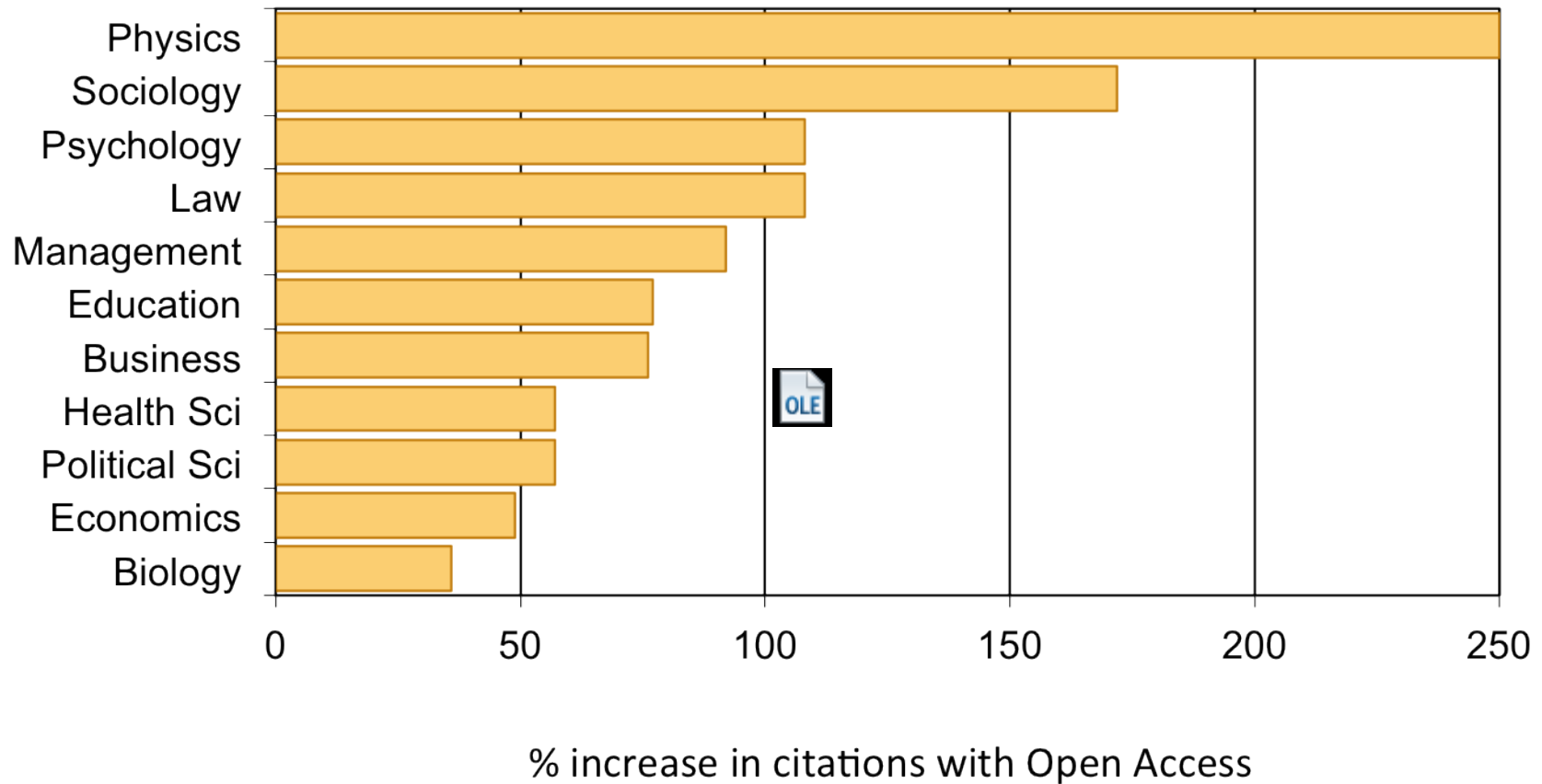
Showing 1-20 of 7603

Rank	Author/Creator	Downloads
1	Martin Skitmore	4,858
2	Ray Frost	3,809
3	Marilyn Campbell	2,881
4	Brian Fitzgerald	2,841
5	Mary Courtney	2,139
6	Per Davidsson	1,988
7	Guy Gable	1,899
8	Katherine White	1,727

Impact



Citation impact



Range = 36%-200%

(Data: Stevan Harnad and co-workers)

What OA means for a researcher's citation impact

QUT Queensland University of Technology
Brisbane Australia

QUT Home Digital Repository Home QUT ePrints Home Search Browse About

QUT ePrints

Search
 Advanced
 Affiliation

Browse
 Person
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 Year

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Statistics
 By Author
 Top 50 Authors
 Top 50 Papers

QUT Users
 Deposit items

Browse By Person: Frost, Ray

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Group by: [Item Type](#) | [Date](#)

Jump to: [Book Chapter](#) | [Conference Paper](#) | [Journal Article](#)

Number of items: **501**.

Book Chapter

Frost, Ray L. and Kloprogge, J. Theo (2007) [Heating stage spectroscopy: infrared, raman, energy dispersive x-ray and x-ray photoelectron spectroscopy](#). In: Gallagher, Patrick and Brown, Michael, (eds.) Handbook of Thermal Analysis and Calorimetry. Elsevier, Amsterdam, pp. 171-208.

Frost, Ray L. and Kristof, Janos (2004) [Raman and infrared spectroscopic studies of kaolinite surfaces modified by intercalation](#). In: Wypych, Fernando and Satanarayana, Kestur Gundappa, (eds.) Clay surfaces: fundamental and applications. Elsevier, The Netherlands, Amsterdam, pp. 184-215.

Frost, Ray L. and Kloprogge, J. Theo (2002) [Infrared emission spectroscopy of clay and related minerals](#). In: Somasundaran, P and Hubbard, A, (eds.) Encyclopedia of Surface and Colloid Science. Marcel Dekker (Routledge), United States of America, New York, New York, pp. 2490-2513.

Frost, Ray L. and Kloprogge, J. Theo and Kristof, Janos (2002) [Raman and infrared spectroscopic study of modification of kaolinite surfaces by intercalation organic molecules](#). In: Somasundaran, P and Hubbard, A, (eds.) Encyclopedia of surface and colloid science. Marcel Dekker (Routledge), United States of America, New York, New York, pp. 4438-4452.

Kloprogge, J.Theo and Frost, Ray L. (2001) [Infrared and raman spectroscopic studies of layered double hydroxides\(LDHs\)](#). In: Rives, Vicente, (ed) Layered double hydroxides: Present and future. Nova Science Publishers, Inc, New York, pp. 139-192.

Conference Paper

He, Hongping and Zhu, Jianxi and Yuan, Peng and Zhou, Qin and Ma, Yuehong and Frost, Ray L. (2008) [Pore structure of surfactant modified montmorillonites](#). In: ICAM 2008 - Ninth International Congress for Applied Mineralogy, 8-10 September 2008, Brisbane.



Top authors (by download)

Top 50 Authors

Ordered by total downloads. Yearly total includes downloads from 2009-10-06

Rank	Author	<u>Year</u>	<u>Total</u>
1	<u>Frost, Ray</u>	<u>22398</u>	<u>204141</u>
2	<u>Skitmore, Martin</u>	<u>26879</u>	<u>204034</u>

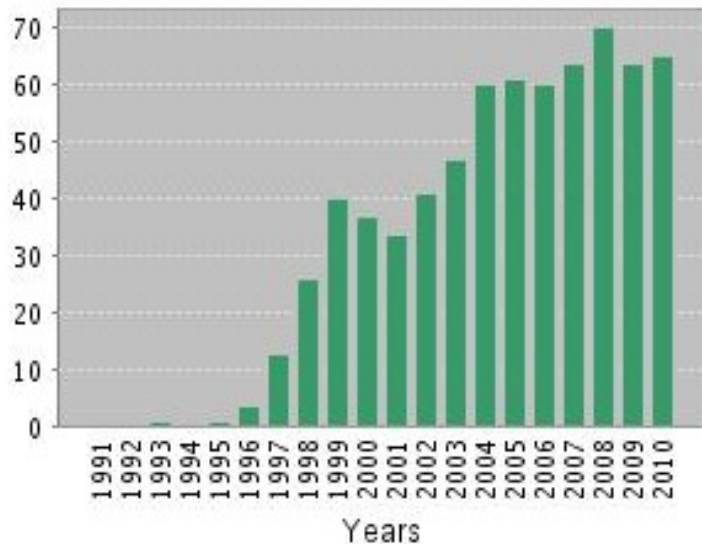
Ray Frost's impact

Citation Report Author=(frost r*) AND Address=(brisbane)

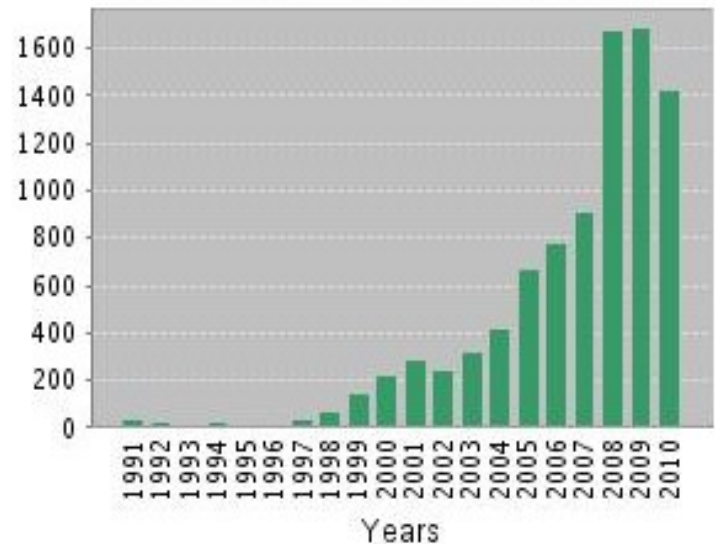
Timespan=All Years. Databases=SCI-EXPANDED, SSCI, A&HCI, CPCI-S.

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Published Items in Each Year



Citations in Each Year



Top authors (by download)

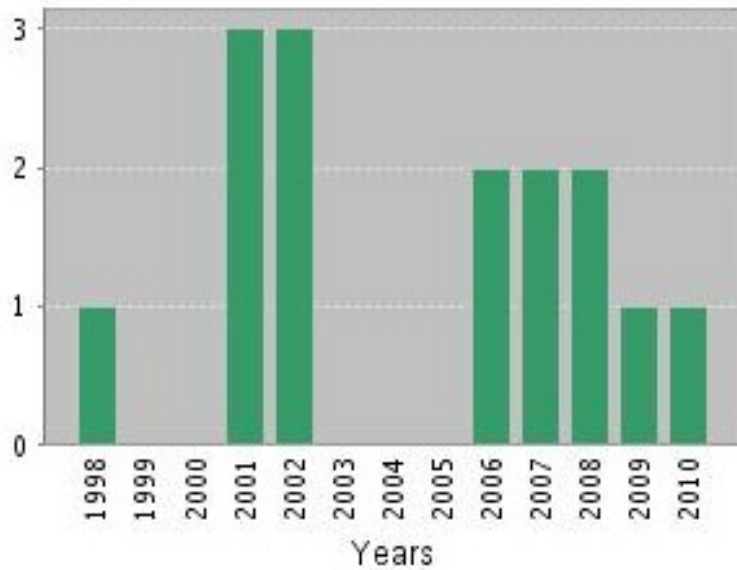
Top 50 Authors

Ordered by total downloads. Yearly total includes downloads from 2009-10-06

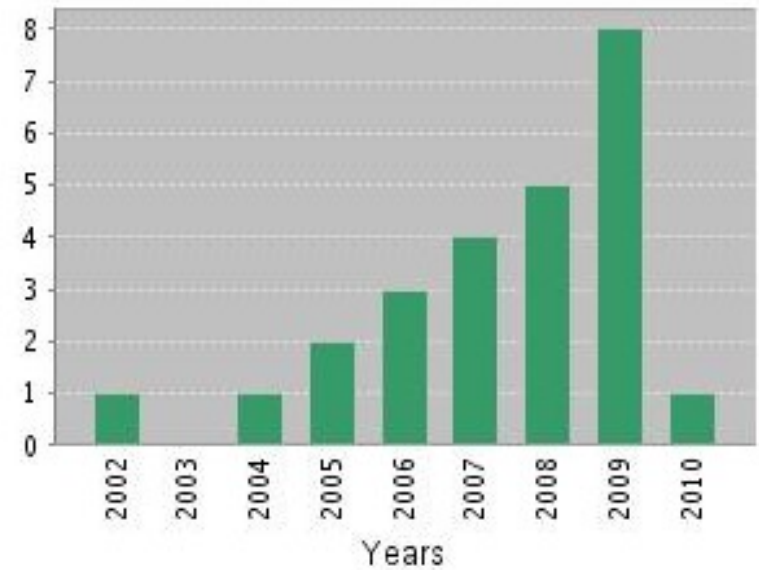
Rank	Author	<u>Year</u>	<u>Total</u>
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Martin Skitmore (Urban Design)

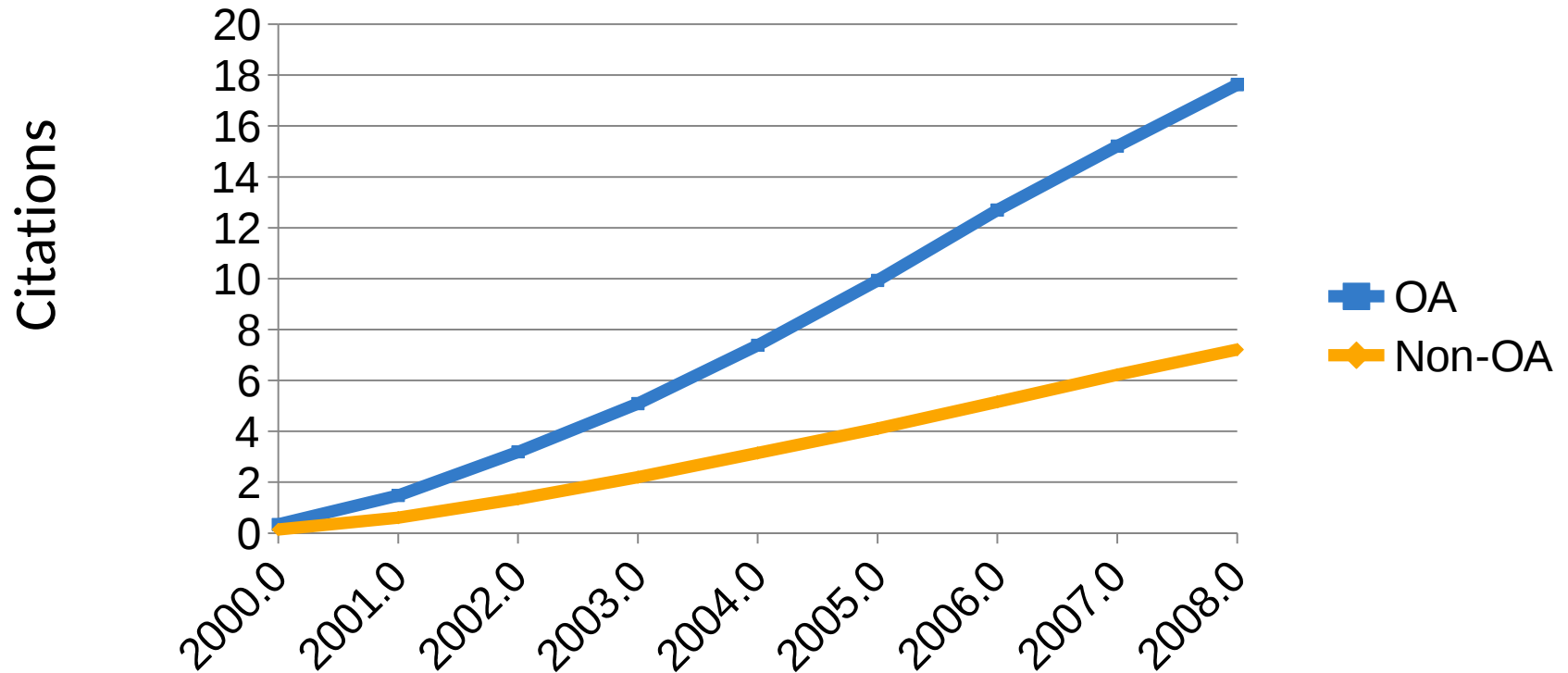
Published Items in Each Year



Citations in Each Year

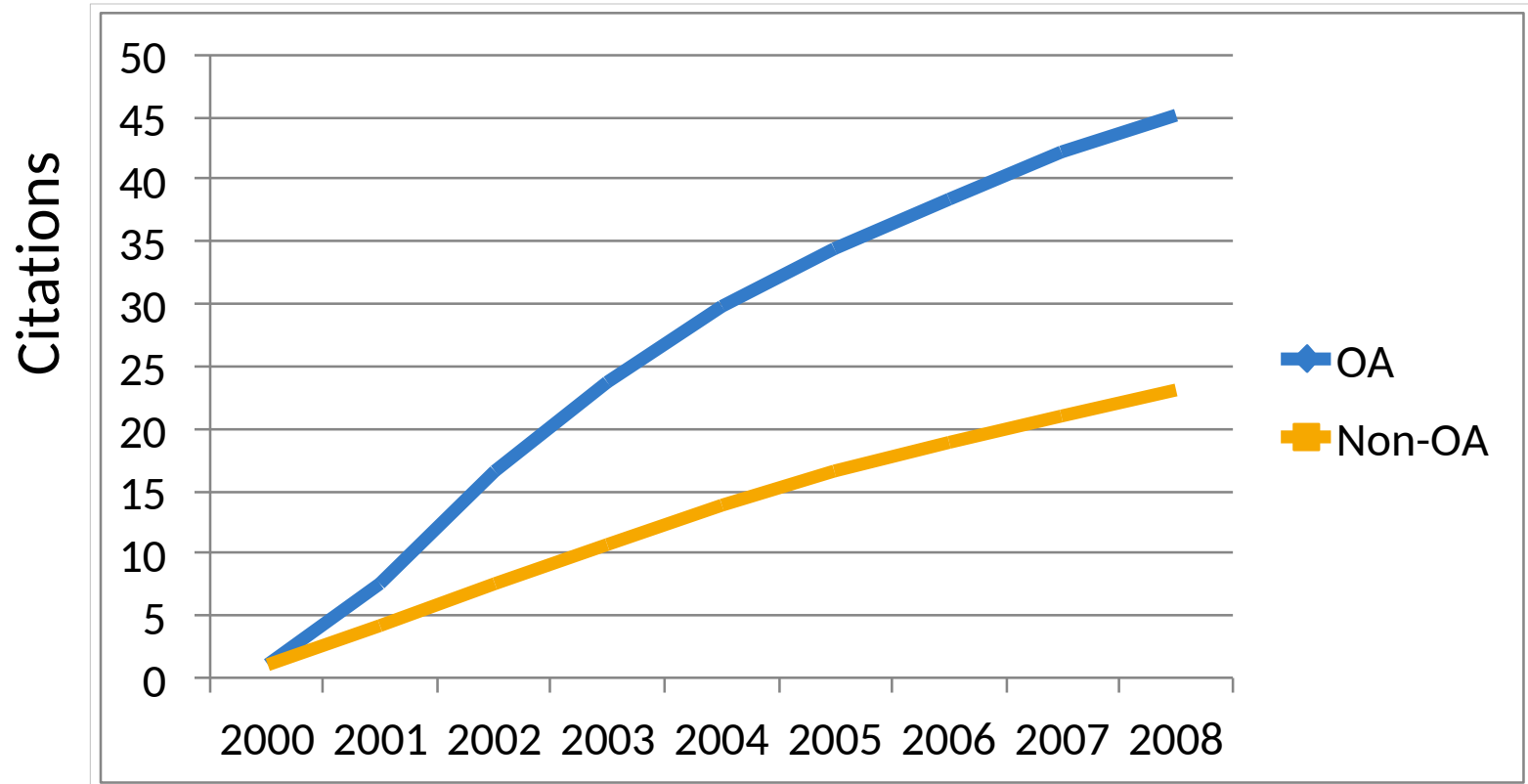


Engineering



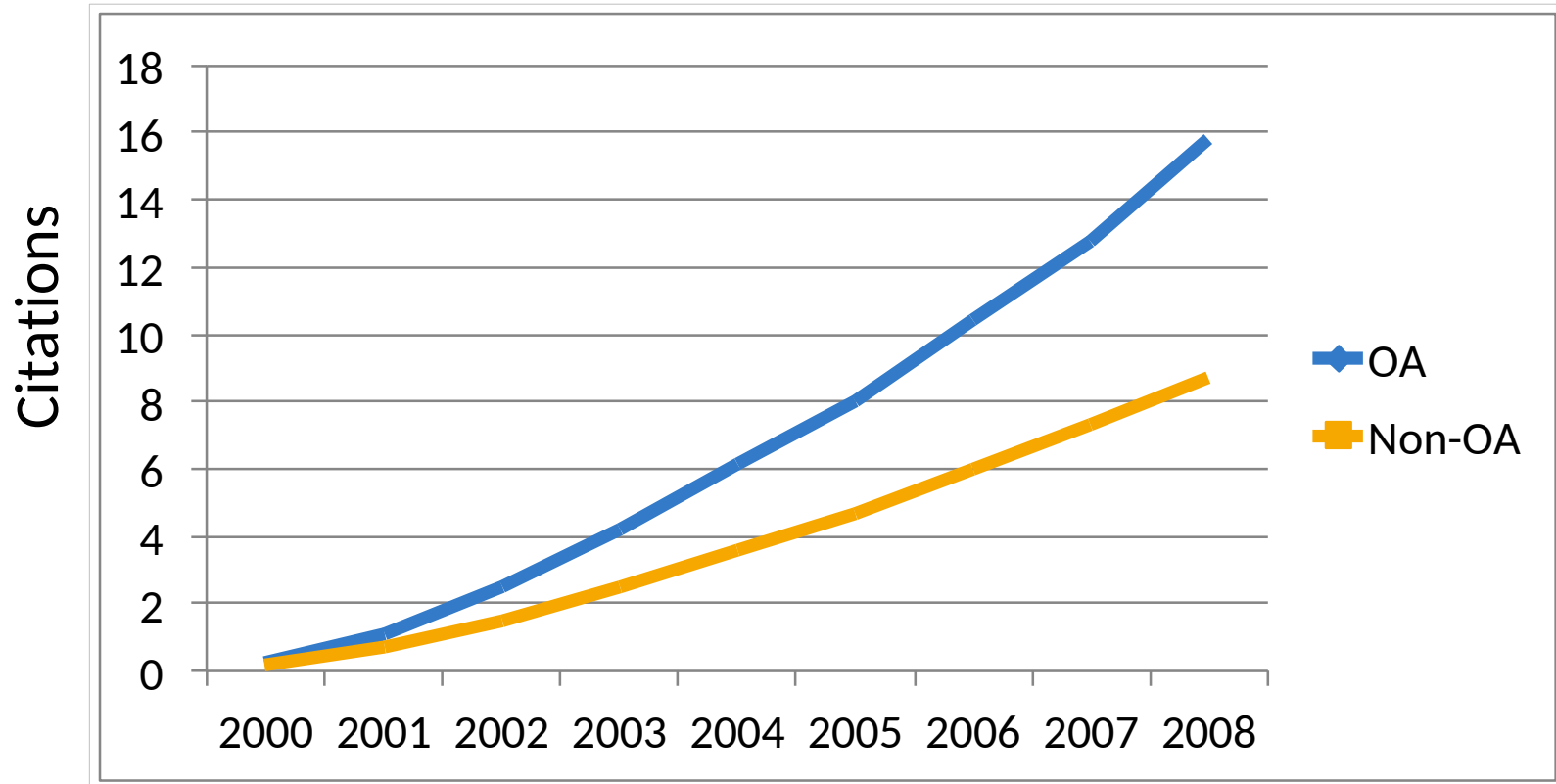
Data: Gargouri & Harnad, 2010

Clinical medicine



Data: Gargouri & Harnad, 2010

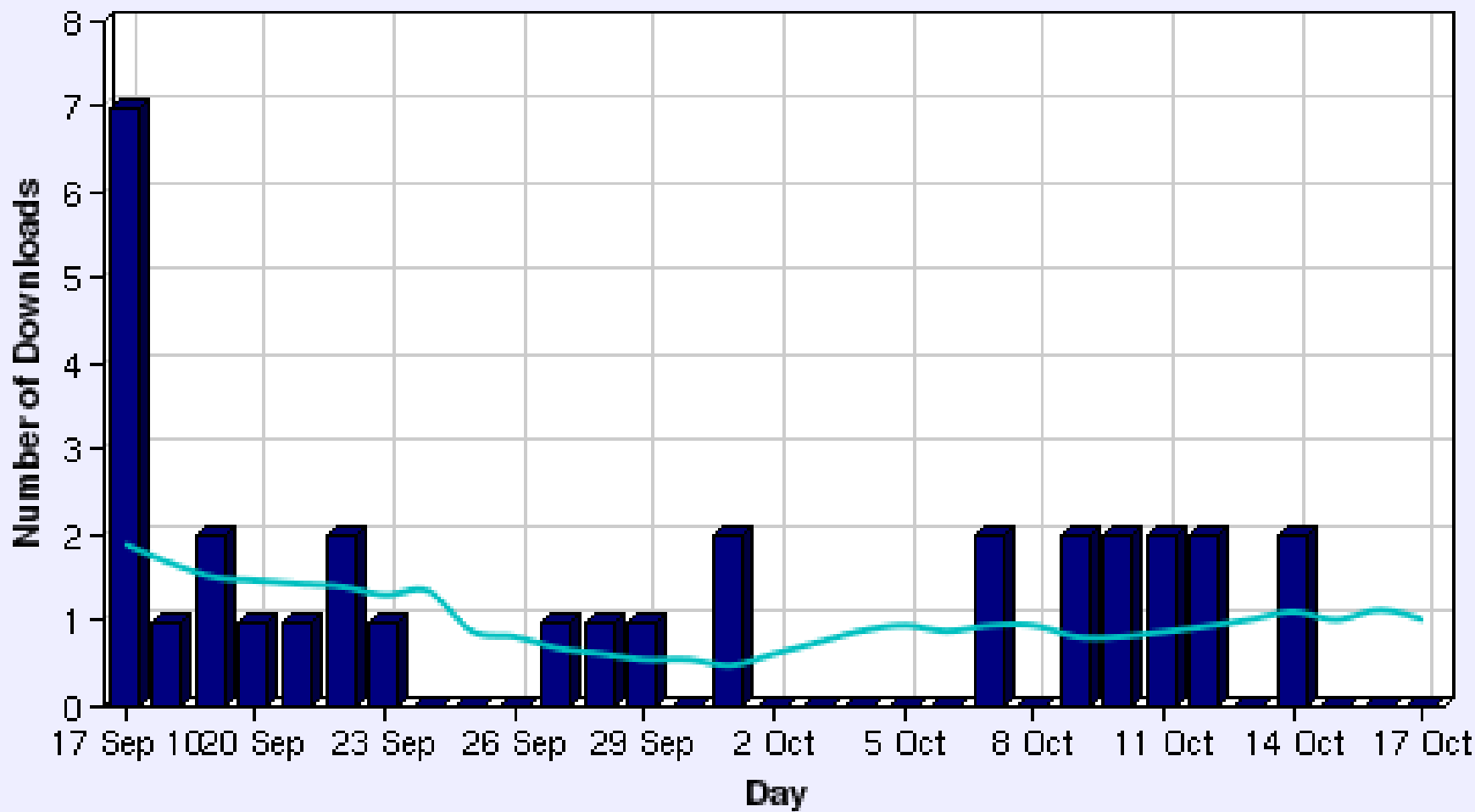
Social science

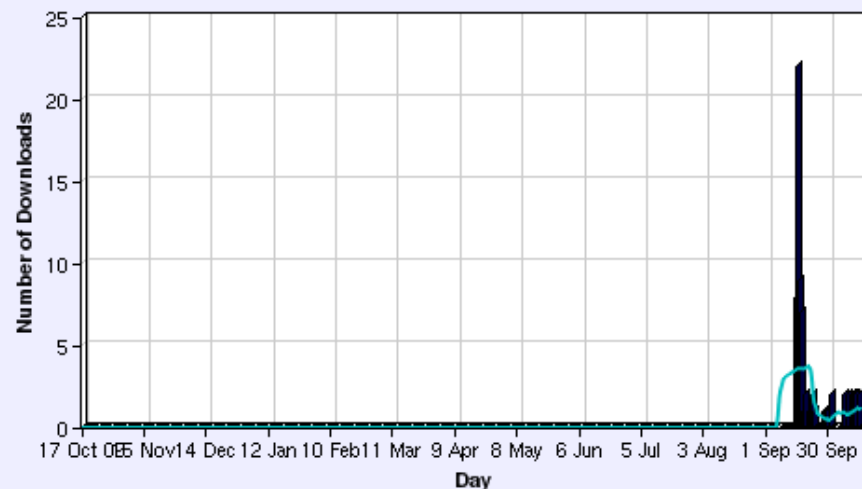
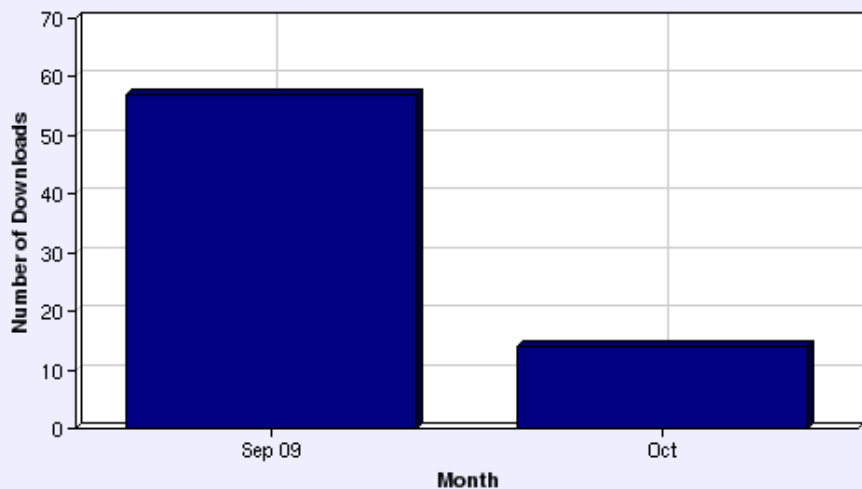


Data: Gargouri & Harnad, 2010

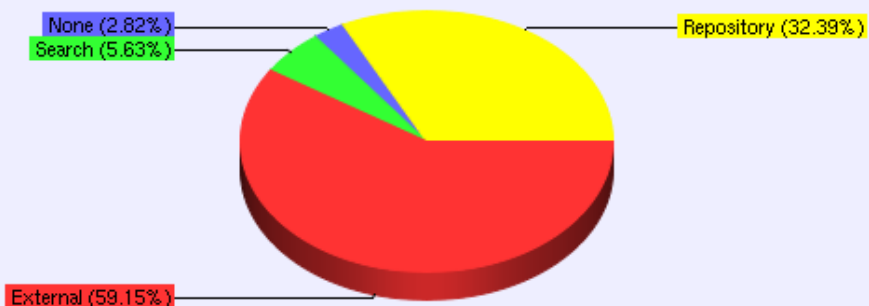
Profiling and marketing







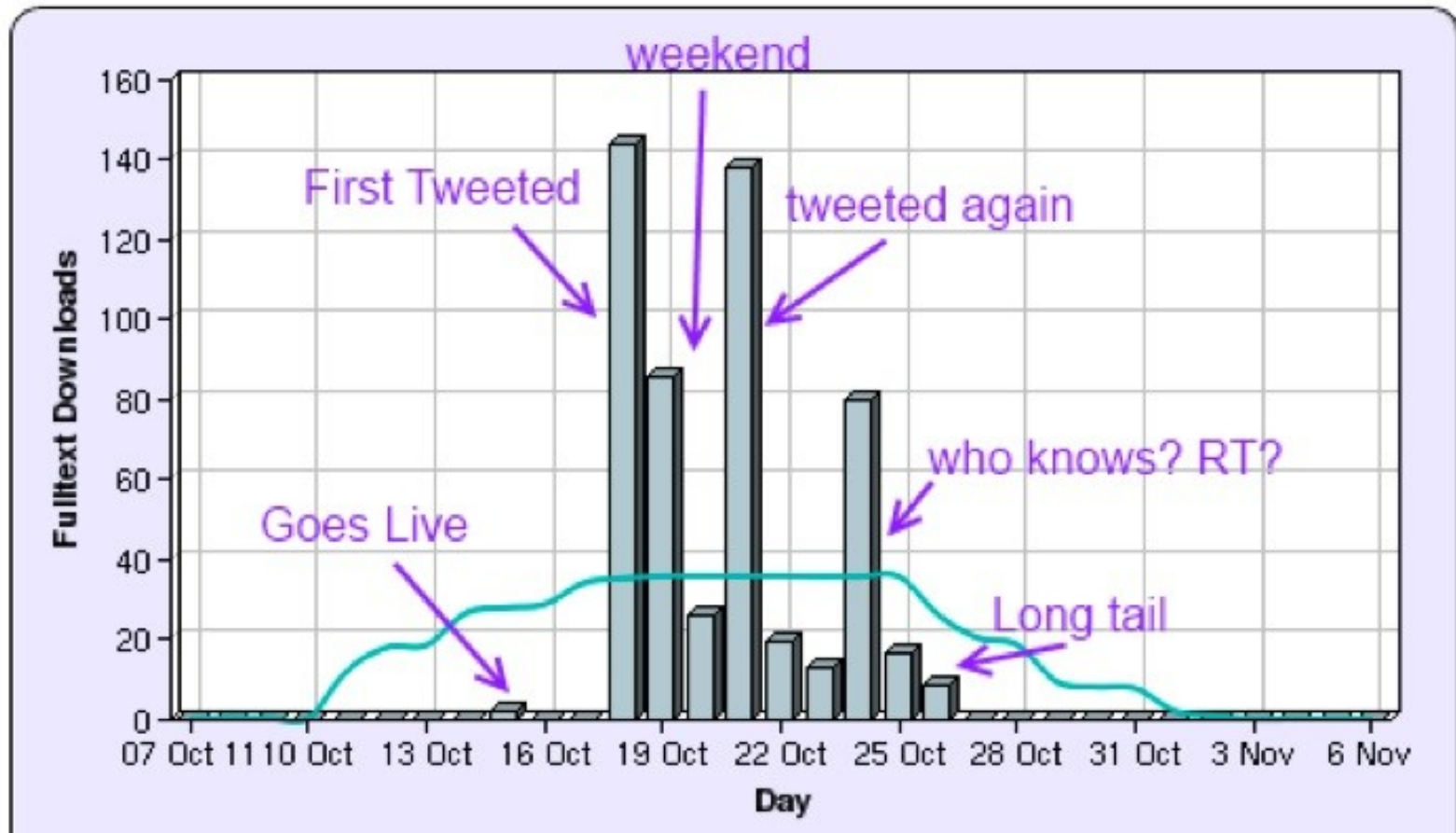
ReferrerGraph



TopTenAcademies

Domain Tail	Downloads
nottingham.ac.uk	2
salford.ac.uk	2
cf.ac.uk	1
yale.edu	1
une.edu.au	1
sihe.ac.uk	1
mdp.edu.ar	1
univie.ac.at	1

Melissa Terras



To summarise ...

- More views
- More downloads
- More tweets
- More citations (see SPARC Europe site for list of studies and summary of findings)



For institutions?



“The case for Open Access within a university is not simply political or economic or professional.

It needs to rest in the notion of what a university is and what it should be It is central to the university’s position in the public space”

Professor Martin Hall, Vice Chancellor of the University of Salford, UK



Institutional and funder advantages from Open Access

- Visibility, usage
- Impact
- Profiling and marketing
- Outreach to the public: demonstrating social return
- Economic benefits
- Institutional management information



“I am asked how many articles my researchers publish each year, and I have to say ‘I have no idea!’.

It is like being the manager of a car factory and not knowing what models of car, and how many cars, my factory produces.”

Professor Bernard Rentier, Rector, University of Liege, Belgium, explaining one of the reasons why he has built an institutional Open Access repository and introduced a mandatory policy on Open Access



Outreach: the public

- Independent researchers
- Education sector
- Professional community
- Practitioner community
- Interested 'lay' public
- Business sector, including innovative SMEs



PubMed Central

- 2 million full-text articles
- c500,000 unique users per day:
 - 25% universities
 - 18% government and others
 - 40% citizens
 - 17% companies



Economic implications in Denmark

- Access to research articles is very/extremely important: 48%
- 79% have access difficulties
- Difficulties in searching/accessing articles: €73m per year to researchers in Danish firms
- Average delay to product or process development without access to academic research: 2.2 years
- For new products: €4.8 million per company

Houghton, Swan & Brown, 2011



EU CIS studies

Community Innovation Statistics

Weak link between innovative enterprises and
public research institutes/universities

This report puts the spotlight on two different facets of innovation among those screened by the Fourth Community Innovation Survey (CIS 4): the sources of information that are highly important for innovation, and the types of partners with which innovative enterprises cooperate.

The outcome for both aspects is similar: the link between publicly financed science and innovative industry is rather weak. Institutional sources are less frequently consulted than internal or market sources; and innovative enterprises find cooperation partners more easily among suppliers or customers than in universities or public research institutes.

Statistics

in focus

SCIENCE AND
TECHNOLOGY

81/2007



Author
Sergiu-Valentin PARVAN

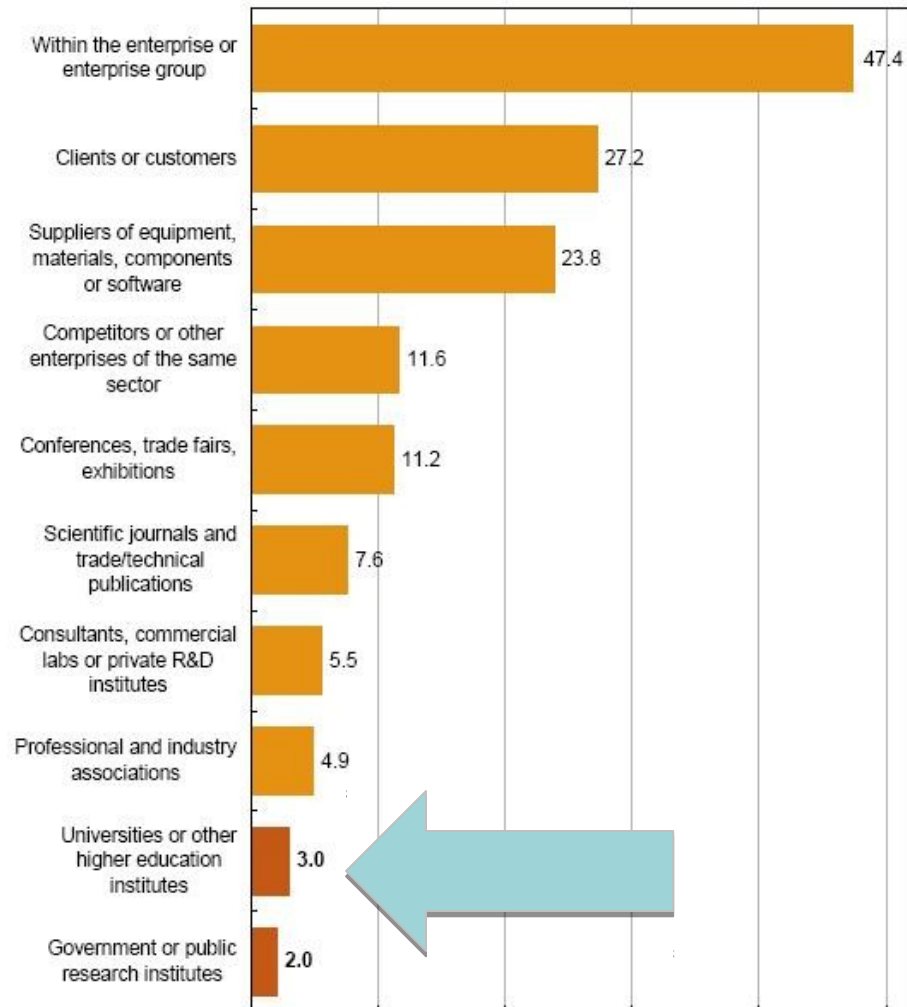
Contents

Highly important sources of information for innovation during 2002-2004..... 2

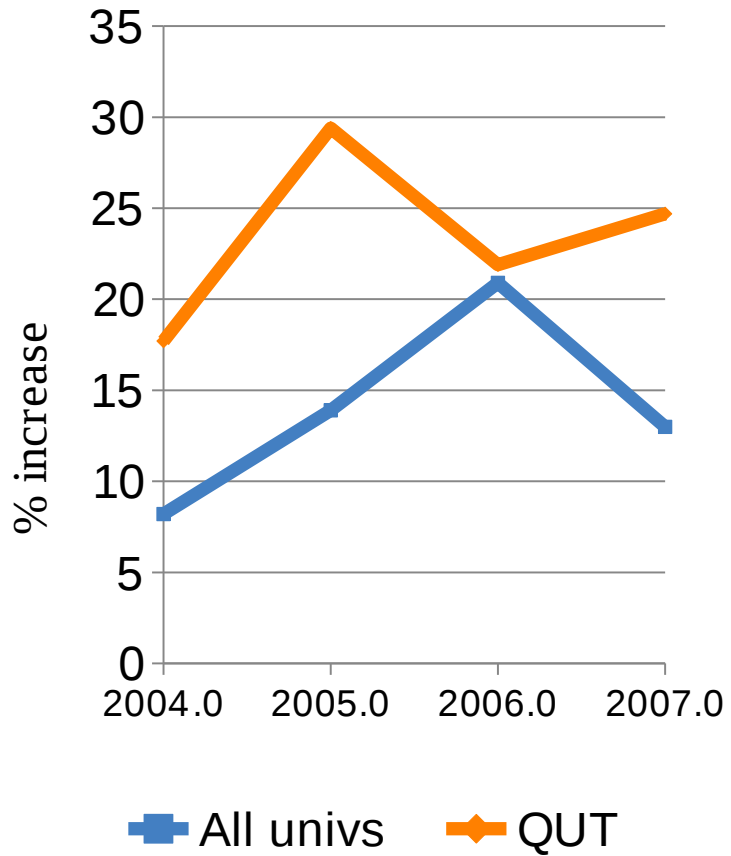
Link between science and industry..... 4



Figure 1: Sources of information identified by enterprises as highly important for the enterprise's innovation activities, as a percentage of innovative enterprises, EU-27 average



Total Research Income: QUT and sector



% increase



Data: Tom Cochrane, Deputy Vice-Chancellor, QUT



Senior Lecturer, Design, QUT

“Just last week, the General Manager of Sustainable Development from an Australian rural industry called me – based on reading one of my research papers in ePrints.

He loved what he read and we are now in discussion about how we can help them measure their industry’s social impacts.”



For research funders?



Funder benefits

- Better science
- More efficient research process
- Research impact, monitoring, management
- Outreach to new users
- Economic benefits



The Open Access policy picture



Policies: worldwide numbers



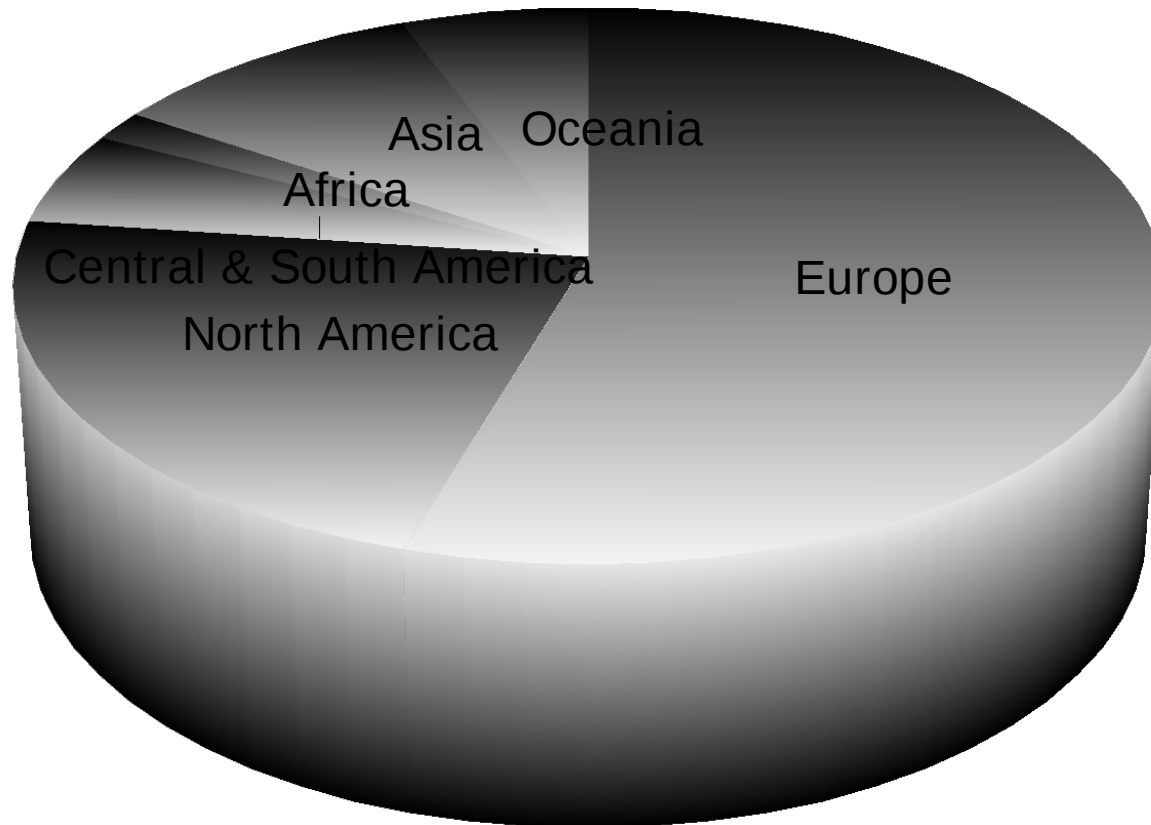
Current global picture: Open Access policies

Region	Policies
Europe	356
North America	146
Central & South America	35
Africa	11
Asia	65
Oceania	38
Total	651

Data: ROARMAP (Registry of Open Access Policies and Mandates)
<http://roarmap.eprints.org/>



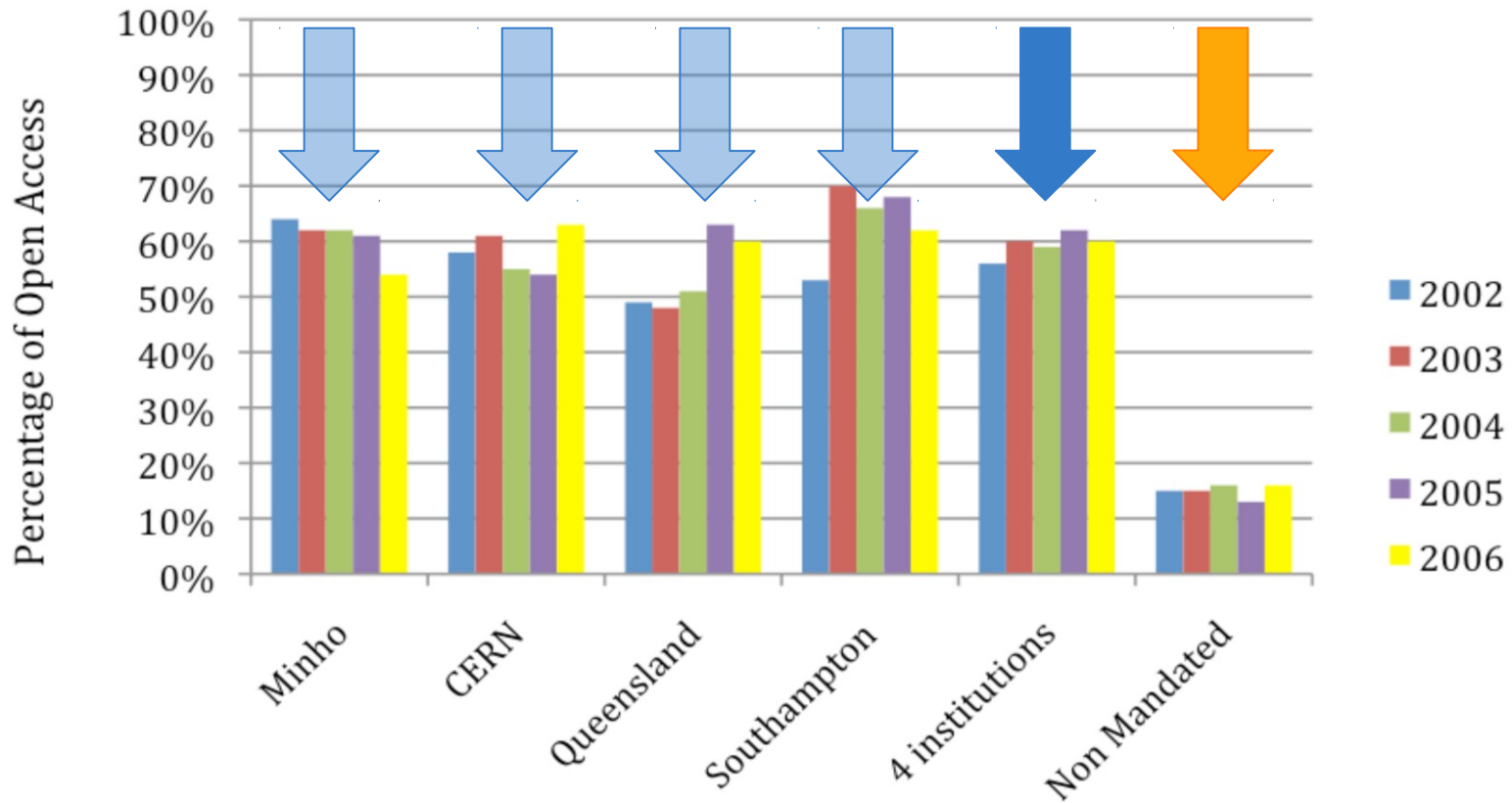
Open Access policies worldwide



Policy formulation

- Several essential elements
- Mandatory
- Deposit immediately (at acceptance for publication)
- Deposit required, but OA itself may come later
- Connect deposit with research assessment

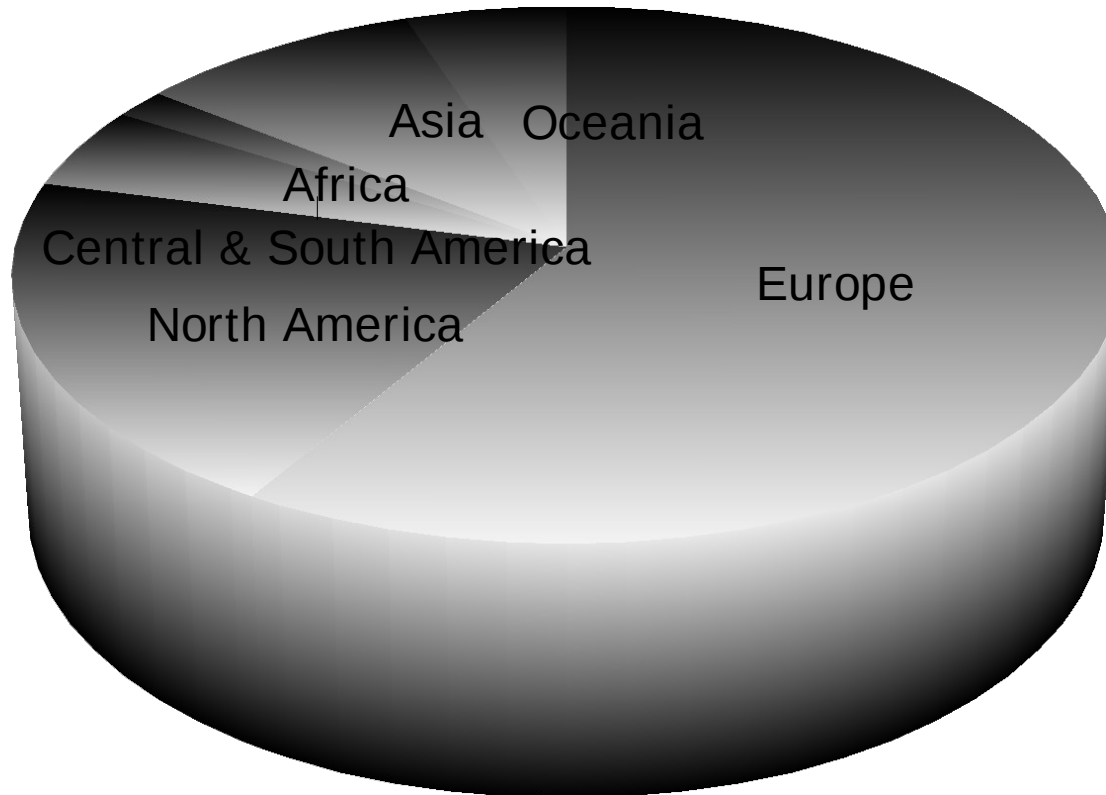
The effect of a mandatory policy



Current global picture: Open Access mandates

Region	Mandates
Europe	203
North America	70
Central & South America	17
Africa	6
Asia	32
Oceania	18
Total	346

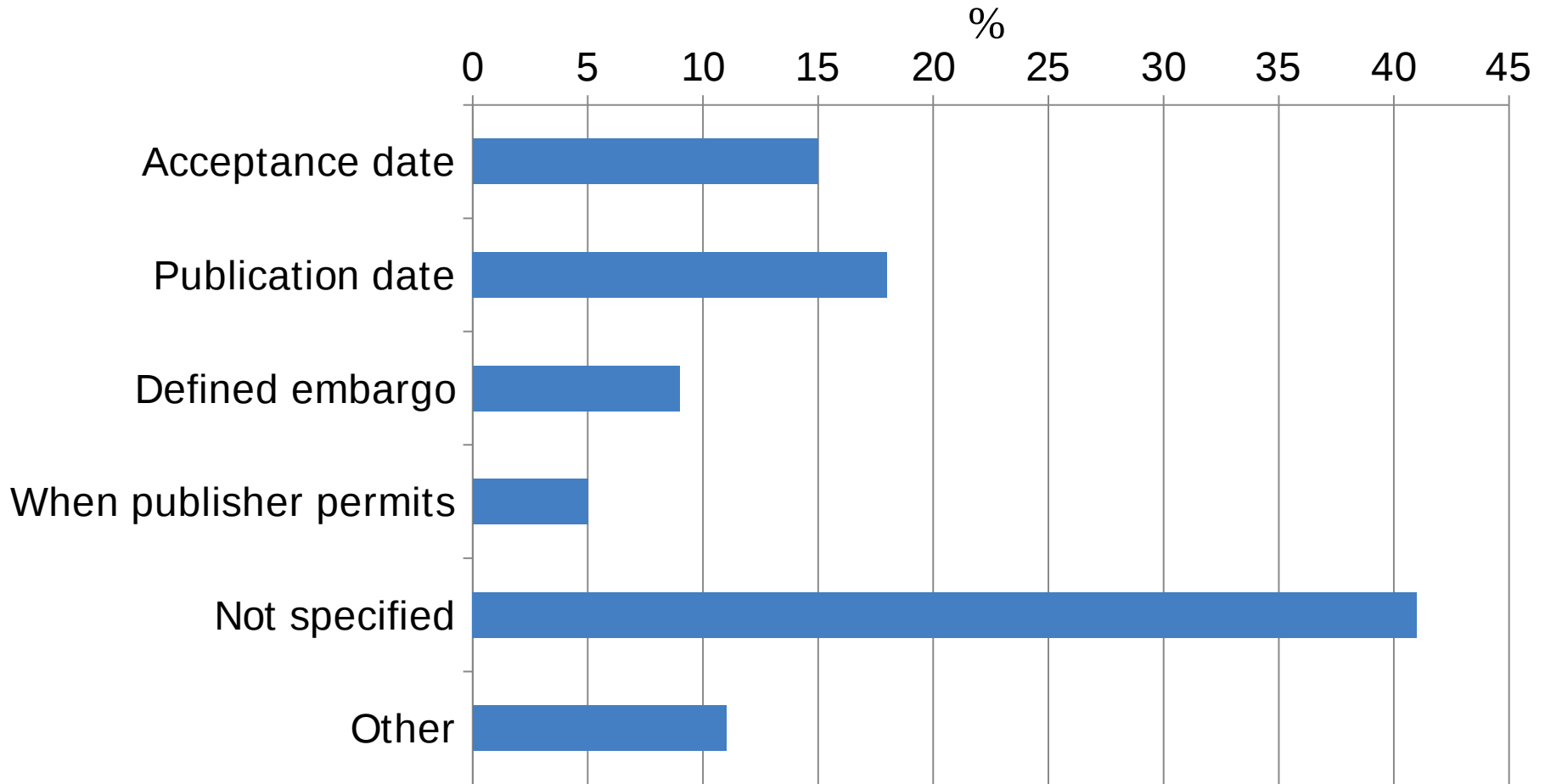
Open Access mandates worldwide



'Green' Open Access: Time of deposit

When deposit is required	Number	%
Acceptance date	52	15
Publication date	64	13
By the end of a defined, permitted embargo period	33	9
When the publisher permits	5	5
Not mentioned	143	41
Other	38	11

'Green' Open Access: Time of deposit



'Green' Open Access: Time of deposit

%



Link to research evaluation and assessment

Region	Number of policies linked to research assessment	% of total policies linked to research assessment
Europe	5	36
North America	4	29
Central / South America	0	0
Africa	0	0
Asia	5	36
Oceania	0	0
All	14	100%



'Gold' Open Access

- No requirements for 'Gold' Open Access
- Some funder policies emphasise or prefer it

'Gold' Open Access: policy provisions

Gold Open Access conditions	% all	% European
'Gold' Open Access costs allowable from grant	3.3	3.9
Funder provides additional funds for 'Gold' OA costs	2.7	4.8
Institution has a 'Gold' Open Access fund	9.6	8.1

'Gold' Open Access: policy provisions

%



■ All
■ Europe

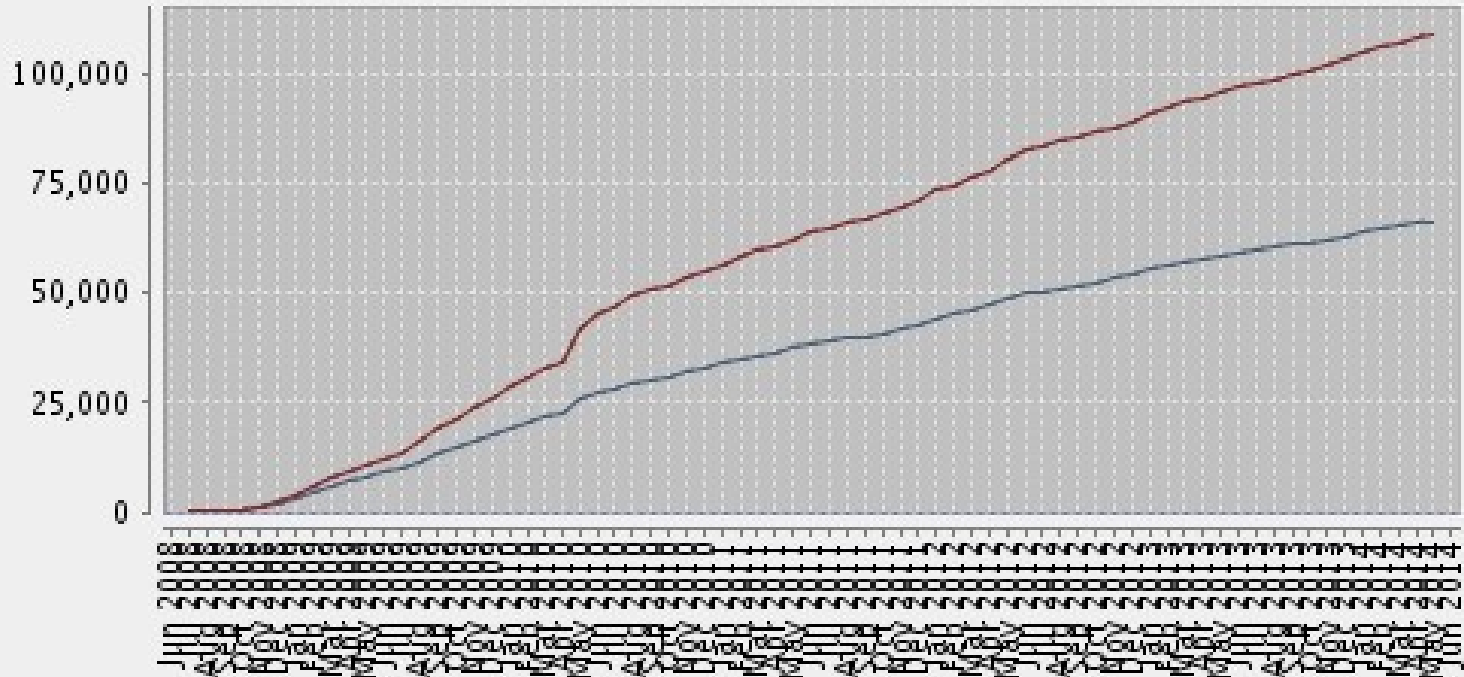


Policy effectiveness: Universite de Liege

- Must deposit
- At acceptance
- In the institutional repository (ORBi)
- May respect publisher embargoes
- Deposit linked to performance assessment
- Deposit rate is now 87%
- The highest in the world
- Second is U.Minho (Portugal): 69% (rising)



University of Liege repository: authors deposit



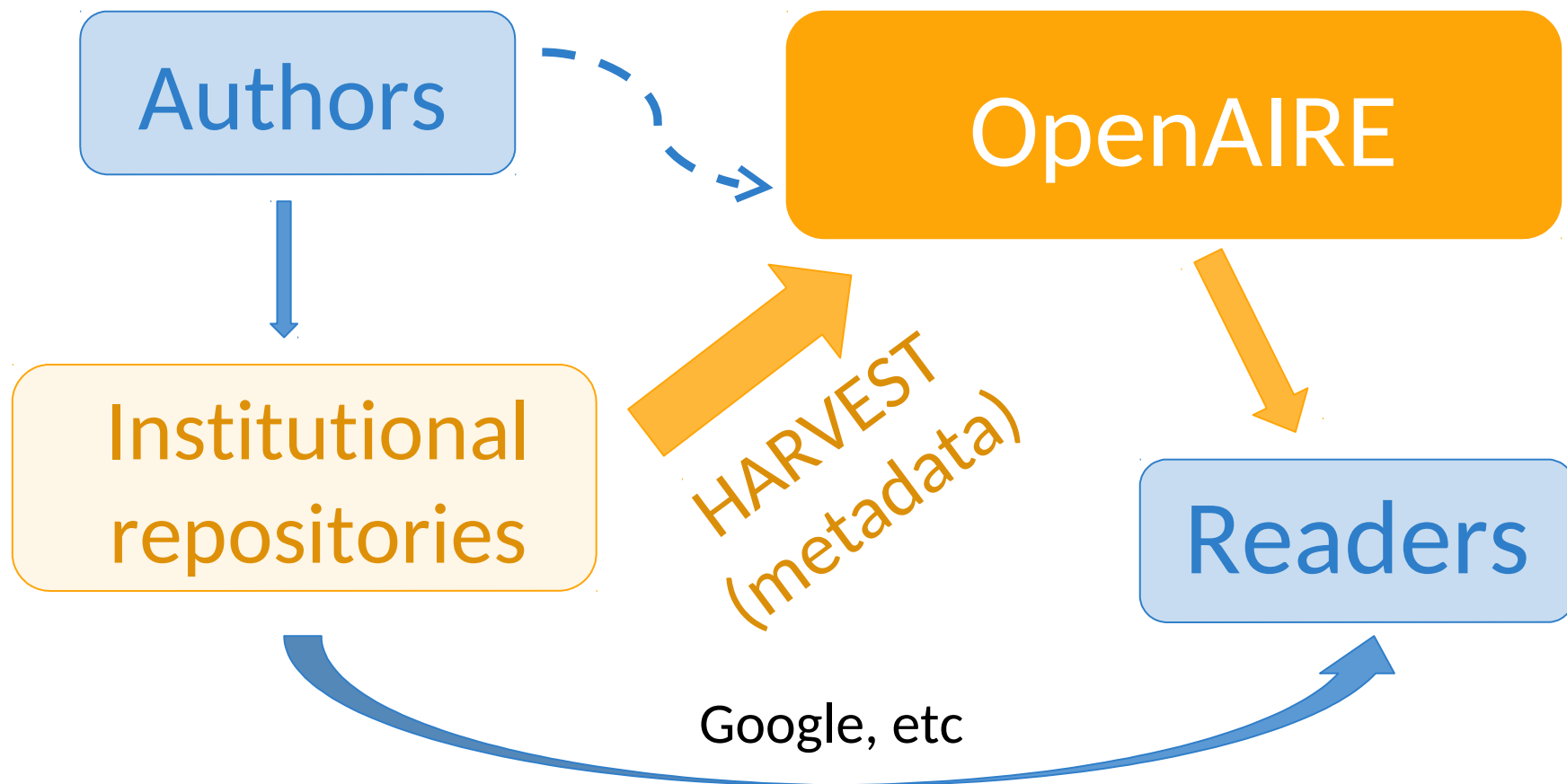
— Number of references --- with extrapolation
— Number of references with full text --- with extrapolation

H2020 and Open Access

- Mandatory for peer-reviewed publications
- **'Green' OA** mandate (repositories)
 - Publish as normal in subscription-based journals
 - Place author's copy in OA repository
 - Deposit this at acceptance for publication
- **'Gold' OA:** Permits payments from grants for OA journal publication
- Mute on **monographs**
- Definite on data, announcing an **open data pilot** for H2020



OA infrastructure for EU research



Recommendation to Member States

(July 2012)

- Member States develop policies on OA
- Consistency between H2020 policy and those of MS
- Coordination of MS at EU level
- Reporting at MS and EU level
- Multi-stakeholder dialogue to be established



PASTEUR4OA project

- Policy Alignment Strategies for European Union Research
- Promoting policy development
- Promoting good policy development:
 - Mandatory
 - Deposit in repository
 - At the time of acceptance for publication
 - Link deposit to performance evaluation
- Developing a network of national expert organisations to encourage and advise policymakers



Policy alignment

- Irons out dissonances for researchers working in interdisciplinary areas or on international teams
- Supports EU harmonisation agenda for ERA (research conditions, researcher mobility, gender issues, knowledge sharing, etc)
- Key issue in changing author practices and norms
- Allows generic infrastructural services to be established in support of policy



Critical policy elements

- Must deposit
- At acceptance for publication
- In institutional repositories
- May respect publisher embargoes
- Deposit linked to performance assessment

Thank you for listening

almaswan3@gmail.com

www.sparceurope.org

www.openscholarship.org

