

## Open Access percentage

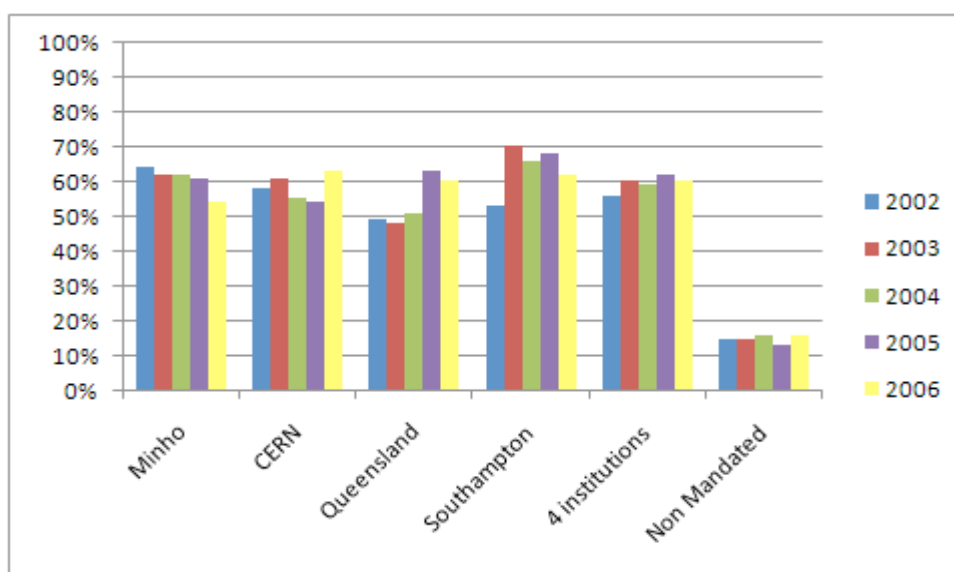
This document presents the OA percentages for 2 different studies we have recently carried out:

1- The first study has been carried out to compare citations counts for mandated articles (M) to those for non-mandated articles (N). The 4 mandated institutions are Southampton University (ECS), Minho, Queensland and CERN. Articles metadata has been collected from our four institutional archives, as well as ISI database. For each article  $M_i$ , we have collected 10 articles  $N_j$  coming from the same journal, the same volume and the same year. The total size of the articles sample (M and N) from 2002 to 2006 is 27 197. The OA of full text for this sample has been verified on the web using our search-robot based on a set of search engines and Google Scholar.

The following table shows the percentages of OA articles among ISI articles, per institution and per year as well as for Non-Mandated institutions:

	Minho	CERN	Queensland	Southampton	4 institutions M	Non Mandated
<b>2002</b>	64%	58%	49%	53%	56%	15%
<b>2003</b>	62%	61%	48%	70%	60%	15%
<b>2004</b>	62%	55%	51%	66%	59%	16%
<b>2005</b>	61%	54%	63%	68%	62%	13%
<b>2006</b>	54%	63%	60%	62%	60%	16%
<b>Average</b>	61%	58%	54%	64%	59%	15%

**Table 1: The percentages of OA articles per institution**



**Figure 1: The percentages of OA articles per institution**

The OA average rate for M institutions is between 56% and 62%, from 2002 to 2006 and between 13% to 16% for Non-Mandated institutions.

**2** – The second sample of articles is about 110 000, covering 11 fields from 1998 to 2006. Articles are selected randomly but cover different Impact Factor revues (IF) and different fields. Four intervals of IF are considered having each one 25% of revues:

- FI\_1: from 0 to 0,1887
- FI\_2: from 0,1887 to 0,469
- FI\_3: from 0,469 to 0,9885
- FI\_4: from 0,9885 to 43,8389

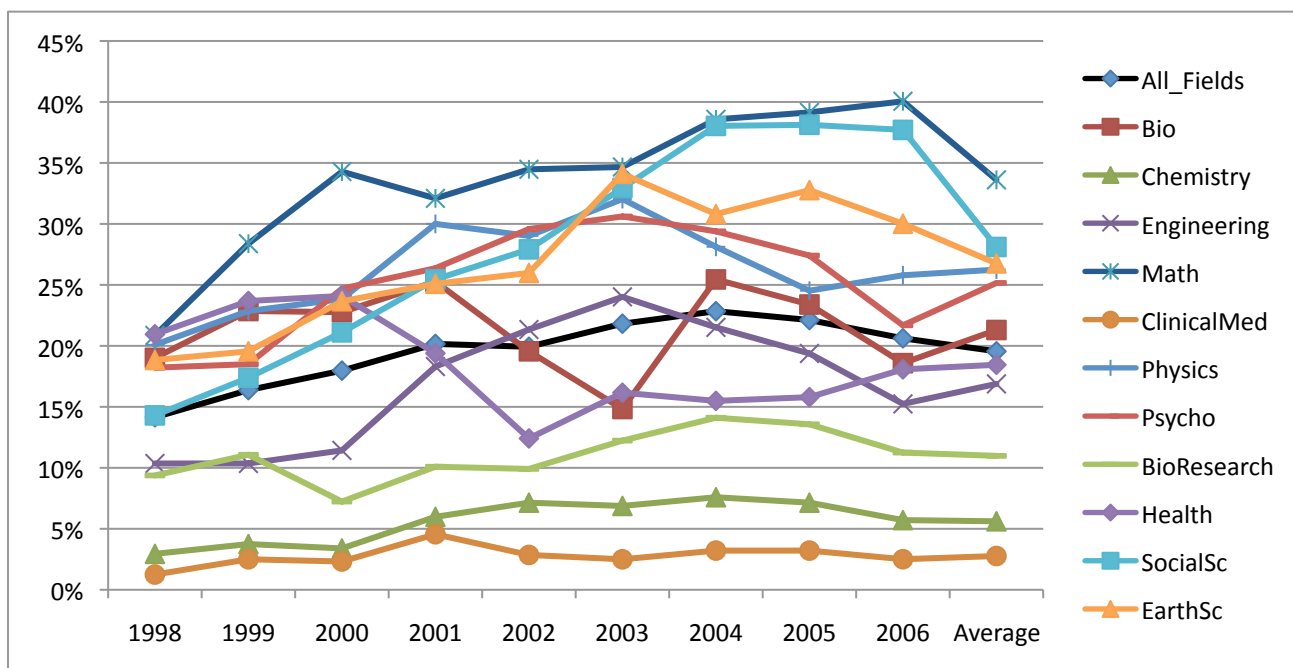
So the sample is constituted by:

- Field (10 000 articles / Field)
- Year (1 111 articles / Year)
- IF (278 articles / Field / Year / FI)
- Revue (70 articles / Field / Year / FI / Revue)

The following table shows the percentages of OA articles for all fields as well as by field from 1998 to 2006.

ub_Year	All_Fields	Bio	Chemistry	Engineering	Math	CliniMed	Phy.	Psycho	BioResearch	Health	SocialSc	EarthSc
1998	14%	19%	3%	10%	21%	1%	20%	18%	9%	21%	14%	19%
1999	16%	23%	4%	10%	28%	3%	23%	18%	11%	24%	17%	20%
2000	18%	23%	3%	11%	34%	2%	24%	25%	7%	24%	21%	24%
2001	20%	25%	6%	18%	32%	5%	30%	26%	10%	19%	25%	25%
2002	20%	20%	7%	21%	34%	3%	29%	30%	10%	12%	28%	26%
2003	22%	15%	7%	24%	35%	3%	32%	31%	12%	16%	33%	34%
2004	23%	25%	8%	22%	39%	3%	28%	29%	14%	15%	38%	31%
2005	22%	23%	7%	19%	39%	3%	25%	27%	14%	16%	38%	33%
2006	21%	19%	6%	15%	40%	3%	26%	22%	11%	18%	38%	30%
Average	20%	21%	6%	17%	34%	3%	26%	25%	11%	18%	28%	27%

**Table 2: The percentages of OA articles by field**

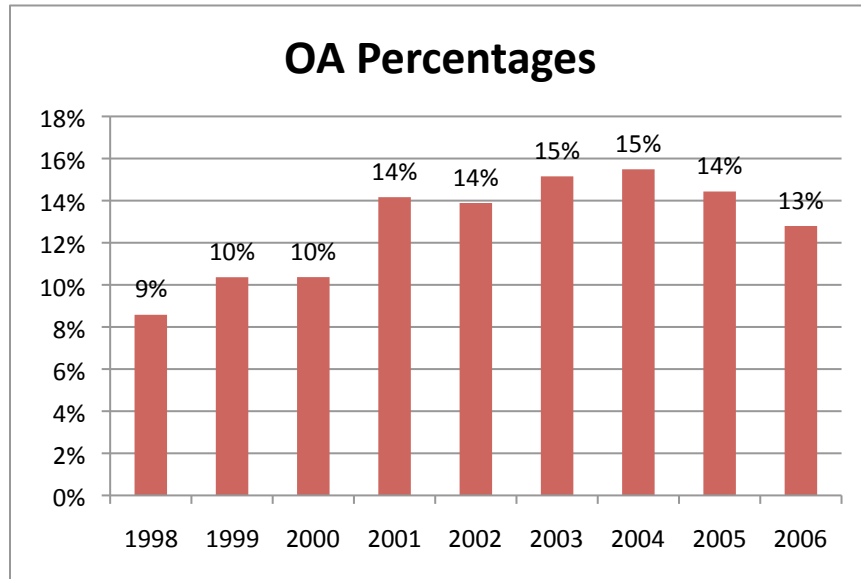


**Figure 2 : The percentages of OA articles by field**

The average percentage OA grew to 22% from 2004 to 2006, but with a lot of variation between disciplines, from 3% in clinical medicine to 39% in mathematics. The average percentage OA is calculated by simply averaging all the discipline fields, in other words, by weighting them all as equally important. However, the average across disciplines needs to be weighted by the number of papers published annually in each discipline, and a SCOPUS-weighted analysis (where disciplines are weighted by their number of documents published in 2007) is a more accurate estimate. As shown in **Table 3**, that puts the current cross-discipline average for 1998-2006 at about 13% rather than 20% (**Table 2**). And the current rate is probably about 15%.

Pub_Year	All_Fields	Bio	Chemistry	Engineering	Math	CliniMed	Phy.	Psycho	BioResearch	Health	SocialSc	EarthSc
1998	9%	1,43%	0,15%	2,42%	0,48%	0,36%	1,31%	0,19%	0,83%	0,30%	0,42%	0,69%
1999	10%	1,73%	0,19%	2,42%	0,64%	1,09%	1,51%	0,19%	1,01%	0,35%	0,51%	0,73%
2000	10%	1,73%	0,15%	2,66%	0,78%	0,72%	1,57%	0,26%	0,64%	0,35%	0,64%	0,88%
2001	14%	1,88%	0,29%	4,36%	0,73%	1,81%	1,96%	0,27%	0,92%	0,27%	0,76%	0,91%
2002	14%	1,50%	0,34%	5,08%	0,78%	1,09%	1,90%	0,31%	0,92%	0,17%	0,85%	0,95%
2003	15%	1,13%	0,34%	5,81%	0,80%	1,09%	2,09%	0,32%	1,11%	0,23%	1,00%	1,24%
2004	15%	1,88%	0,39%	5,33%	0,89%	1,09%	1,83%	0,30%	1,29%	0,22%	1,15%	1,13%
2005	14%	1,73%	0,34%	4,60%	0,89%	1,09%	1,64%	0,28%	1,29%	0,23%	1,15%	1,20%
2006	13%	1,43%	0,29%	3,63%	0,91%	1,09%	1,70%	0,23%	1,01%	0,26%	1,15%	1,09%
Average	13%											

**Table 3 : The percentages of OA articles by discipline weighted by their number of documents published in 2007**



***Figure 3 : The percentages of OA articles by discipline weighted by their number of documents published in 2007***

Note: Disciplines are weighted by their number of documents published in 2007 (source SCImago/Scopus, by Arthur Sale)