

Southern African Regional Universities Association
Open Access Leadership Summit
Gaborone, Botswana, 20-21 November 2007

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**IF ONLY AFRICAN SCIENCE
WERE
OUT THERE!
WHY OPEN ACCESS IS THE
ANSWER**

“It is no good just writing a paper that is likely to be thought excellent by anyone who reads it.

It may be, but if nobody has read it, the quality doesn't matter.”

Professor Richard Barnett

Vice Chancellor, University of Ulster, UK

The communication of science

- Opens eyes of the world to African science
- Flow of ideas
- Generation of ideas
- New collaborations
- Technology transfer (e.g. BRICs)
- Create wealth

'Old' paradigms

- Using proxy measures of an individual scientist's merit
- It is a journal's responsibility to disseminate your work
- Printed article is the format of record
- Other scientists have time to find out what you want them to know

'New' paradigms

- Rich, deep, broad metrics for measuring the contributions of individual scientists
- Effective dissemination of your work is now in your hands (at last)
- The digital format will be the format of record (is already in many areas)
- Unless you routinely publish in *Nature* or *Science*, 'getting it out there' is up to you

‘Open Access’?

A much better term to use would have been

Open Dissemination

What Open Access is about

- Freely available
- Publicly available
- Permanently available
- Online, via the WWW

What Open Access is not about

- NOT vanity publishing or self-publishing
- NOT about non-peer-reviewed literature
- NOT about publications that scientists expect to be paid for (e.g. books)

Why researchers publish their work

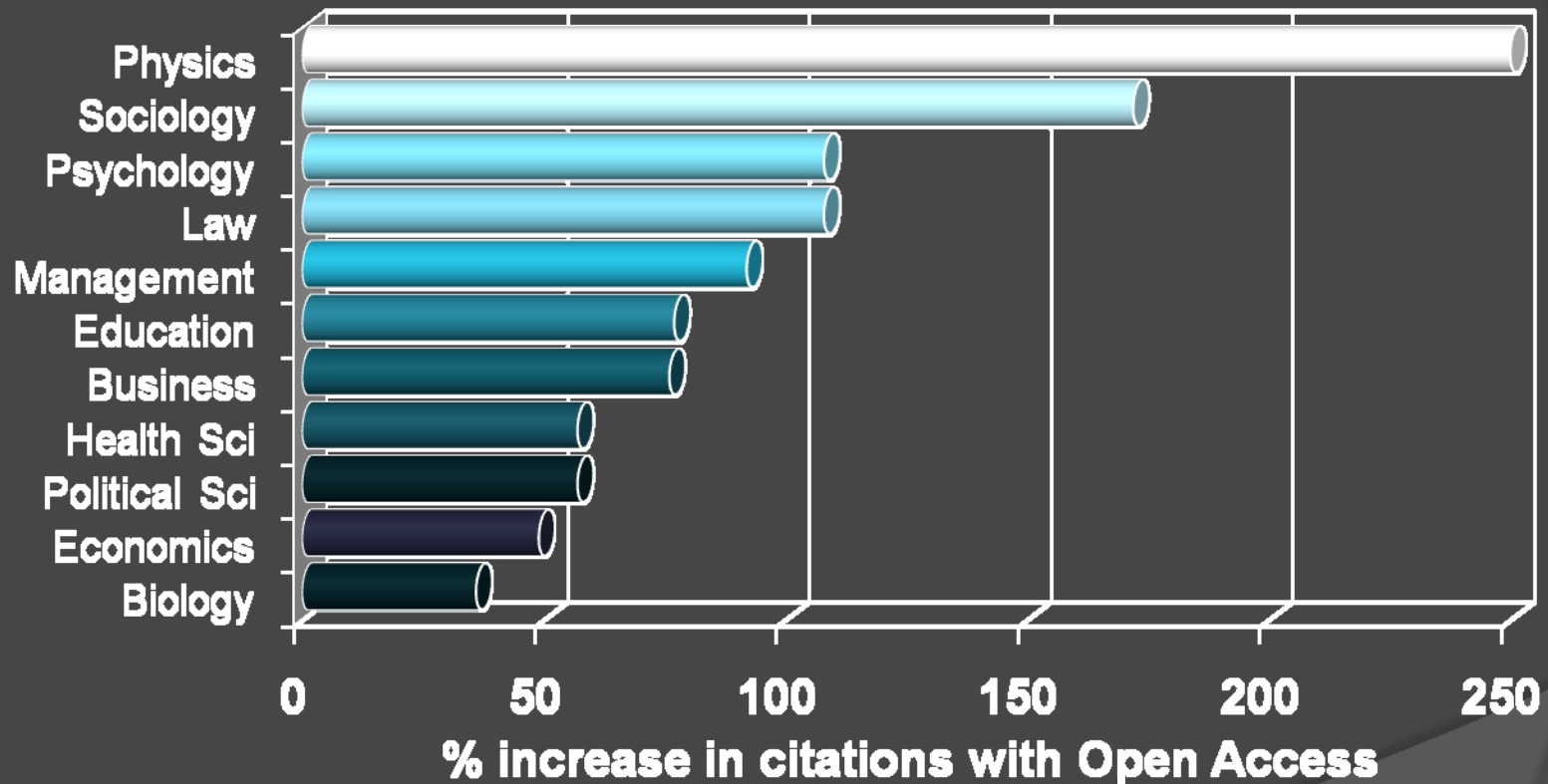


“It is one of the noblest duties of a university to advance knowledge, and to diffuse it not merely among those who can attend the daily lectures — but far and wide.”

Daniel Coit Gilman

First President, Johns Hopkins University

Open Access increases research impact



Range = 50%-200%

(Courtesy Stevan Harnad and co-workers)

Lost impact for African science

- In 2005, there were **9671** African articles listed in the Web of Science (ISI Science Citation Index)
- And **4001** citations to them by February 2006
- With Open Access there could have been **2000 more** citations by mid-February 2006 (**6001 total**)

There is also a monetary measure...

- With an S&T budget of 157 million USD for '06-'10 (NEPAD's budget)
- ...and 50% of impact lost
- ...that means a loss of 78.5 million USD-worth of impact to African economies over the next 5 years

Two ways to provide Open Access

- Publish in an Open Access journal (www.doaj.com)
- Deposit copies of published articles in an Open Access repository ('self-archiving')

Open Access repositories

- c1000 worldwide
- Open source software (e.g. EPrints from Southampton University)
- Interoperable (interlinked)
- Form a global database of freely-accessible research

Why an institutional repository?

- Fulfils a university's mission to engender, encourage and disseminate scholarly work
- Enables a university to compile a complete record of its intellectual effort (the 'baseline data')
- Enables standardised online CVs for all researchers (e.g. RAE exercise)
- 'Marketing' tool for universities

Usage stories

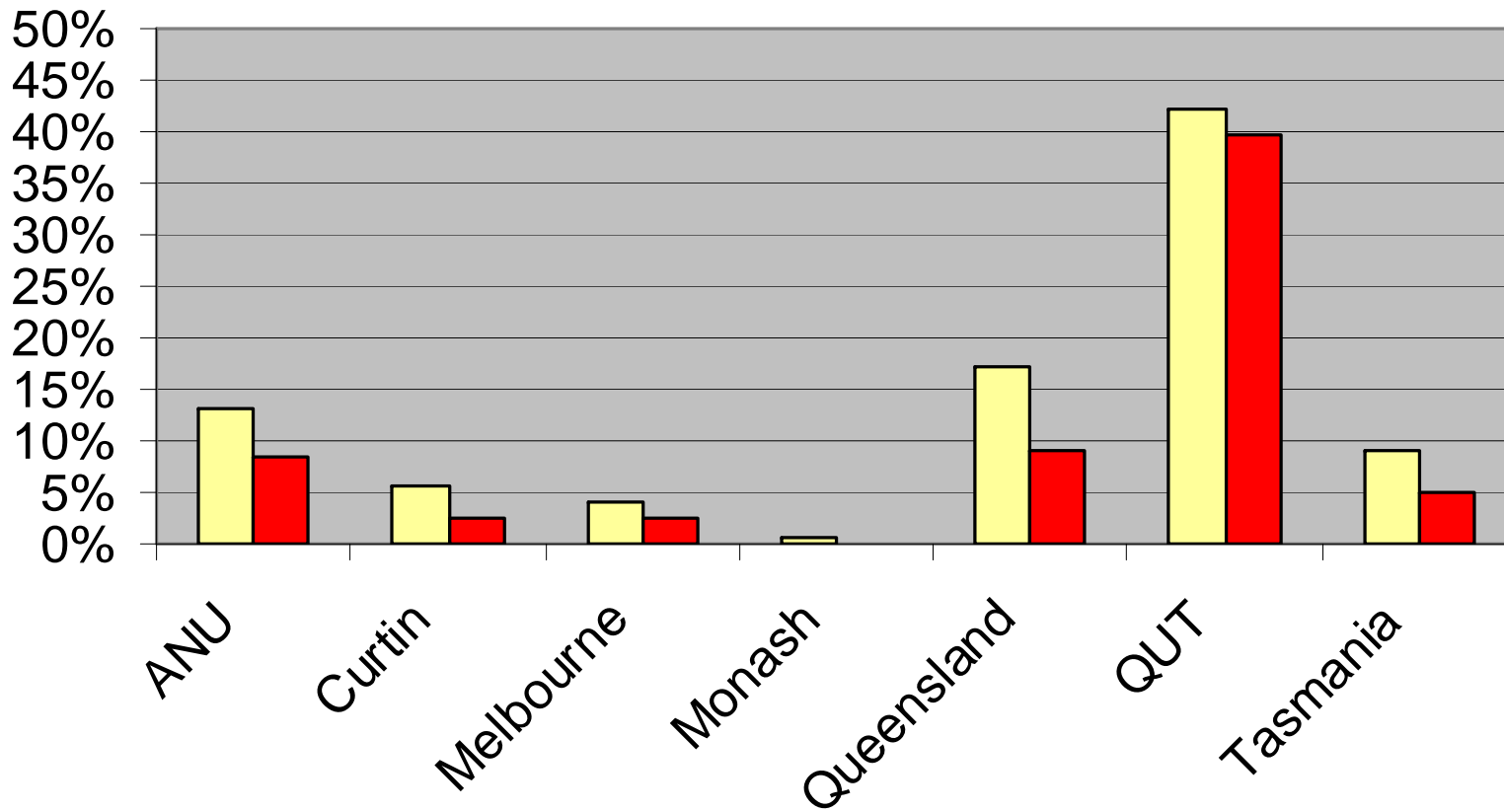
- UoC's eScholarship repository logged 3 million downloads
 - 2 years - 0.5m
 - 1 year – 1m
 - 9mths – 2m
 - 10K records at end 2005
- University of Otago Business School
 - Launched mid-November
 - 20K downloads by mid-February
 - For 220 documents

But ... there is a problem

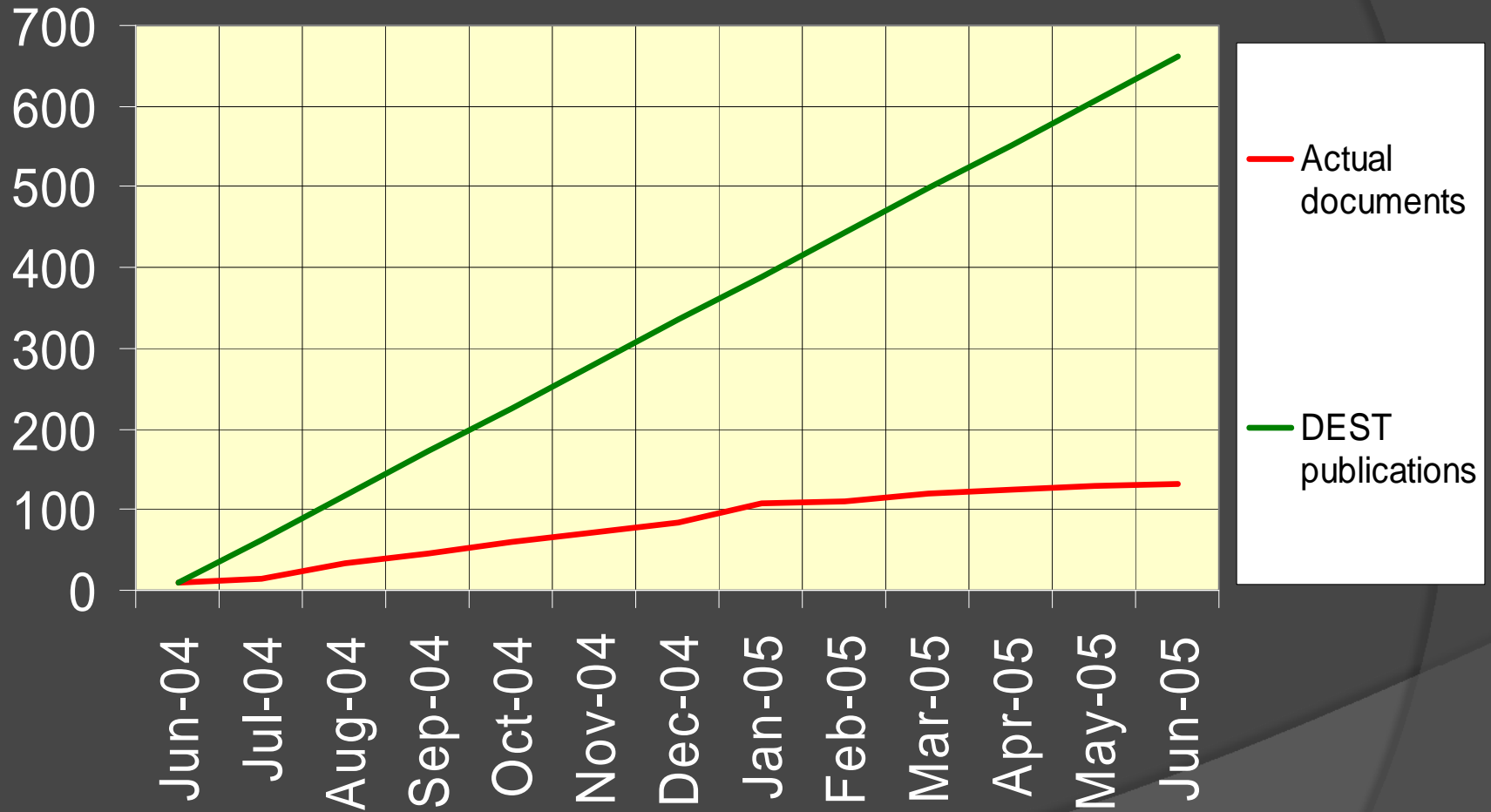
- Authors do not spontaneously 'self-archive' their work to any worthwhile extent
- 15% of outputs are Open Access
- To raise this level, proper policies are needed

% of DEST output

2004 2005



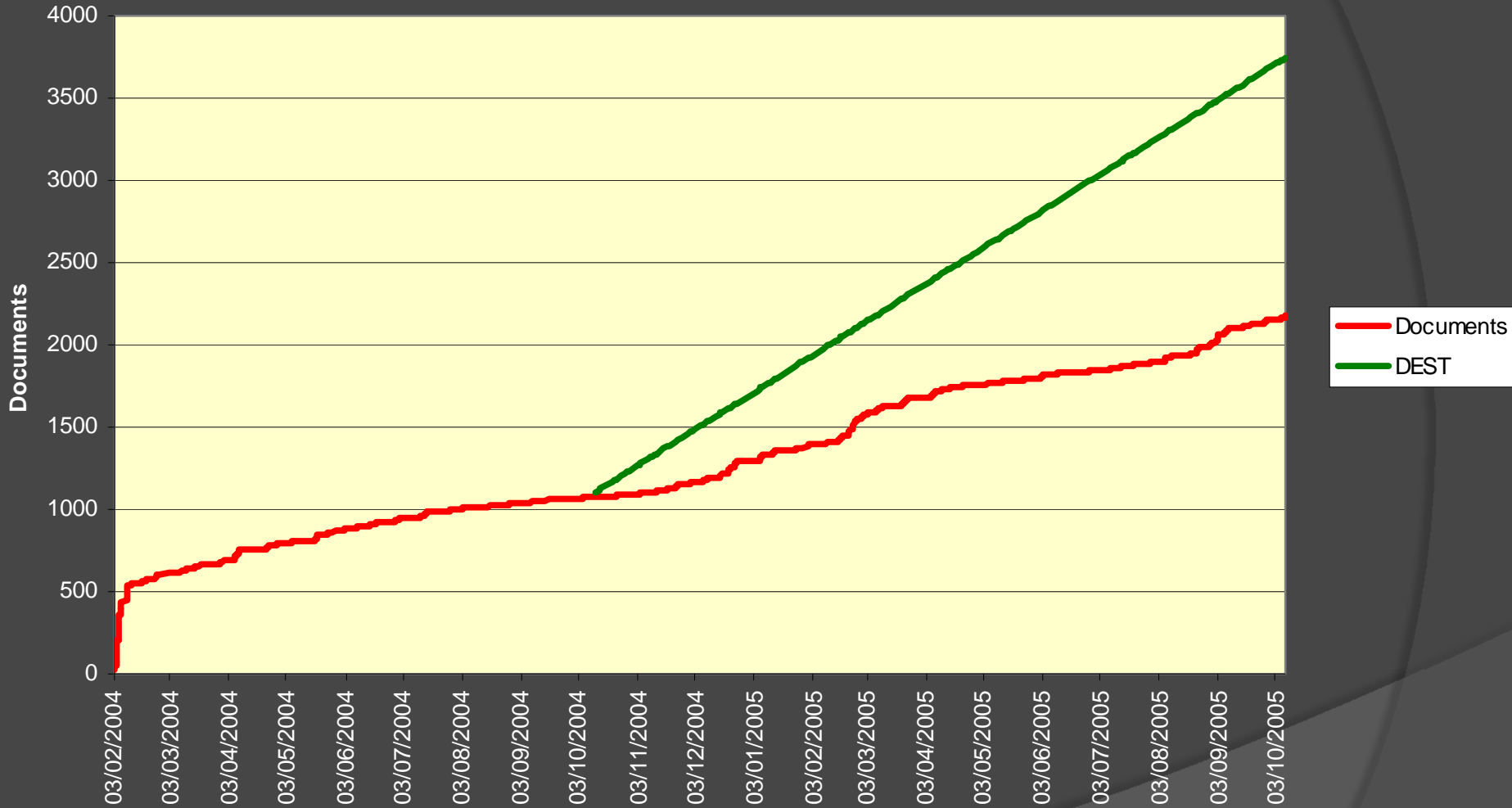
University of Tasmania



(Australian data courtesy of Arthur Sale)

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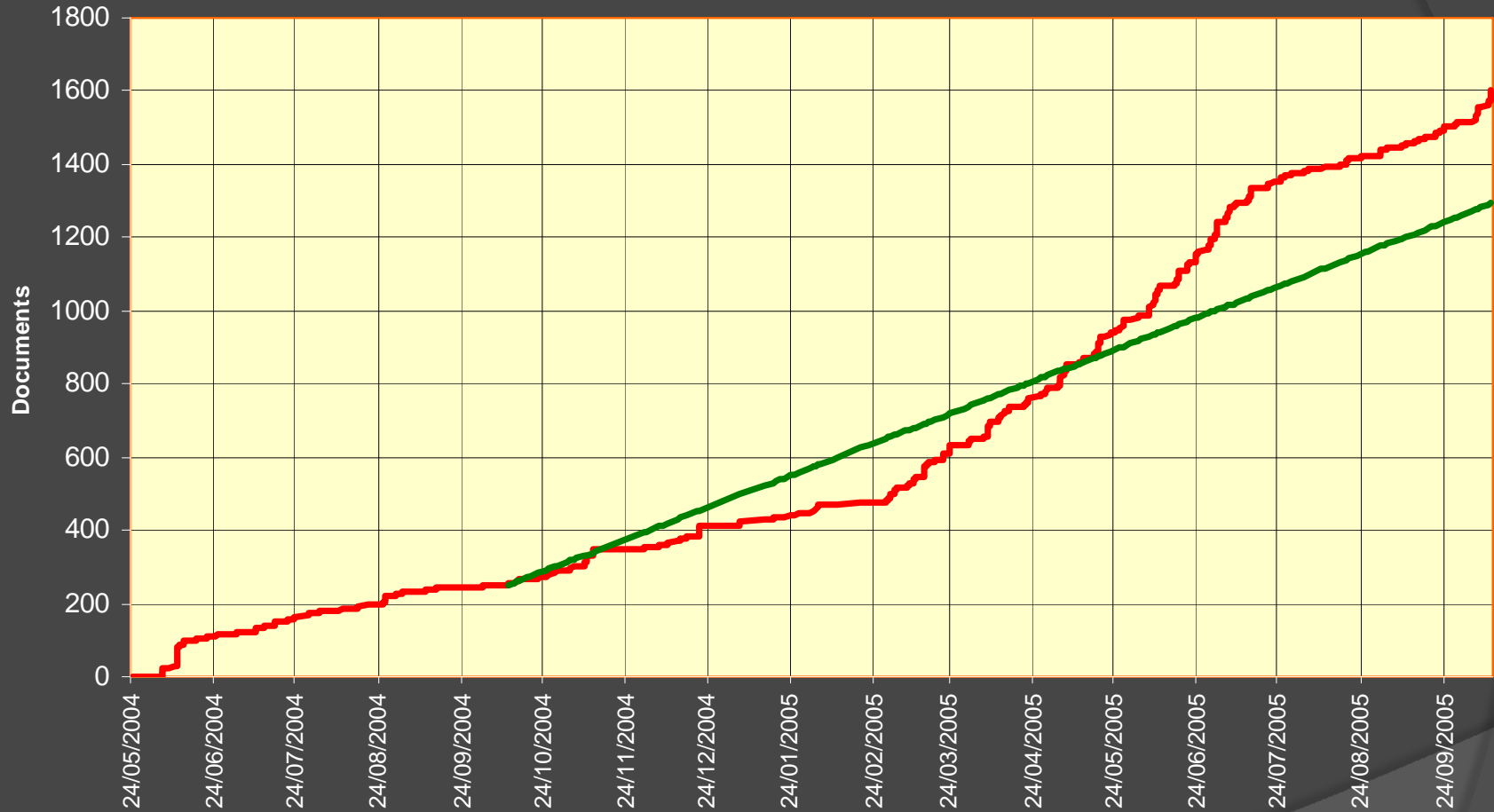
University of Queensland



(Australian data courtesy of Arthur Sale)

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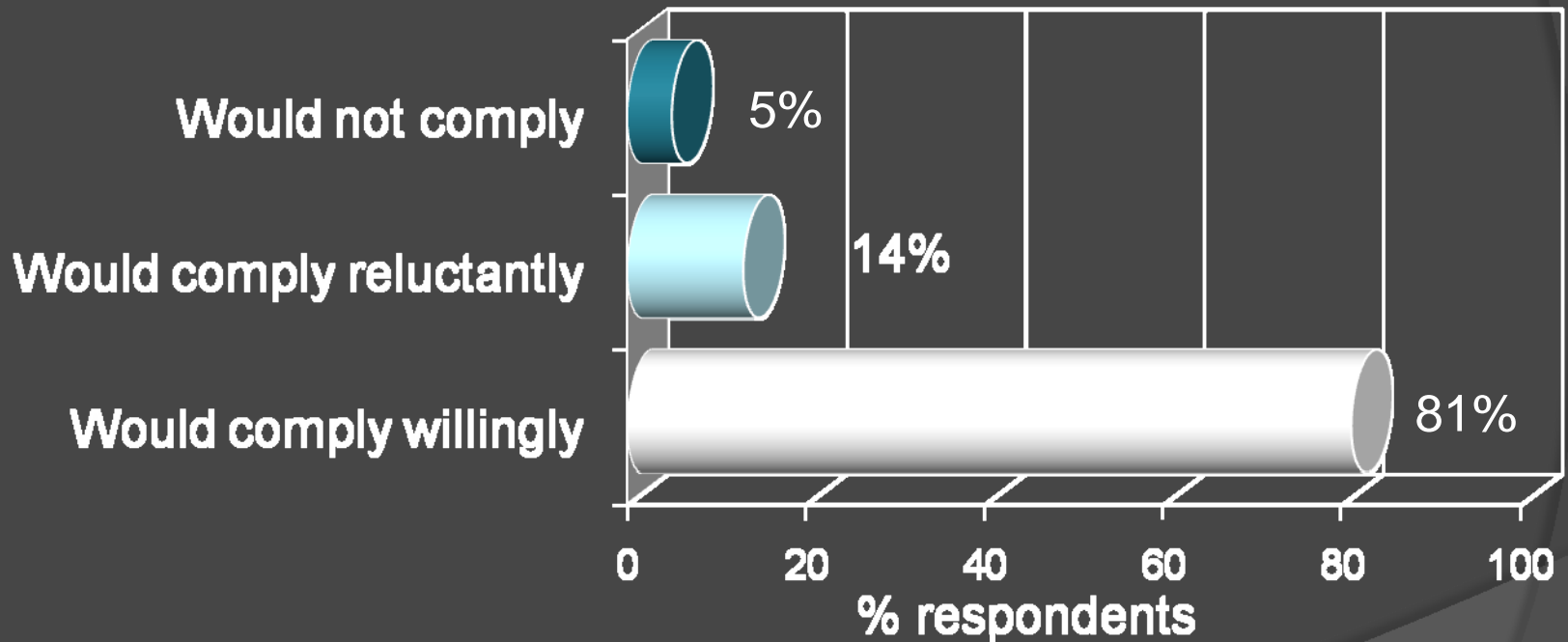
Queensland University of Technology



(Australian data courtesy of Arthur Sale)

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Author readiness to comply with a mandate



Policy developments around the world

- Wellcome Trust
- UK research councils
- UK medical research charities
- NIH (USA)
- Australian Research Council and AMRC
- DFG
- Austrian Science Research Council
- and others ...

Other drivers for Open Access

- Data sharing stipulations
- E-science
- Interdisciplinary research
- Scientometrics

“Just funding the research is a job only part done. A fundamental part of [our] mission is to ensure the widest possible dissemination and unrestricted access to that research.”

Robert Terry

Senior Policy Advisor, Wellcome Trust

Thank you for listening

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www.keyperspectives.co.uk/OpenAccessArchive/