



The Save British Science Society

29-30 Tavistock Square, London, WC1H 9QU

Tel: 020 7679 4995 Fax: 020 7916 8528

SBS 04/02

A competitive market in ideas

SBS response to the House of Commons Science & Technology Committee's inquiry into scientific publications

1. Save British Science is pleased to submit this response to the committee's inquiry into scientific publications. SBS is a voluntary organisation campaigning for the health of science and technology throughout UK society, and is supported by over 1,500 individual members, and some 70 institutional members, including universities, learned societies, venture capitalists, financiers, industrial companies and publishers.

Competitive Markets

2. Although the committee asks about the need for a competitive market in scientific publications, the market that really matters is the *market in ideas*. Science moves forward by the generating and testing of competing ideas.

3. Competitive markets only work if good information exists about what is available where and at what cost. Likewise, the market in scientific ideas only works well if researchers have access to good information about what others are thinking and doing.

4. The market in scientific publications should not therefore be looked at in terms of what is cheapest for researchers or what makes most money for publishers, but at what makes gives the widest range of researchers access to the widest range of scientific ideas, coupled with appropriate information about the degree to which those ideas have been tested (such as whether they have been peer reviewed or checked by professional copyeditors for mistakes).

5. Whether or not individual libraries are hampered by "big deals" and whether or not publishing companies are making big profits are not therefore the most appropriate questions.

Executive Committee

R W Joyner FRSC (Chr)
W Banks FREng
D Braben
R Dowler
M Freeman
L Georghiou
H Griffiths FREng
C Hardacre

J Harley
H Jones
U Martin
D Noble CBE FRS
S J Robinson OBE FRS FREng
P T Saunders
V Stone
M Trevan

Advisory Council

Sir George Alberti
Sir Geoffrey Allen FRS FREng
Prof S Arnott CBE FRS
Sir Eric Ash CBE FRS FREng
Sir James Black OM FRS
Professor V Bruce OBE FRSE
Jane Cannon MBE
Dr Simon Campbell FRS FRSC
Sir David Cox FRS
Prof A Cullen OBE FRS FREng
Sir Richard Doll CH FRS
Sir Brian Follett FRS
Dr Ian Gibson MP

Prof A Hewish FRS Prof C
Humphreys FREng
Sir R Hoffenberg KBE FRCP
Dr Tom Inch FRSC
Sir Hans Kornberg FRS
Sir Harold Kroto FRS
Prof Joe Lamb FRSE
Lord Lewis of Newnham FRS
Sir C Llewellyn Smith FRS
Sir Ian Lloyd
Sir John Maddox
Prof Bob Michell MRCVS
Sir Paul Nurse FRS

Dame Bridget Ogilvie
Prof Hugh Pennington FRSE
Sir Martin Rees FRS
Sir Derek Roberts FRS FREng
Baroness Sharp of Guildford
Sir David Smith FRS
Sir Richard Southwood FRS
Sir Richard Sykes FRS
Ian Taylor MBE MP
Sir John Vane FRS
Prof Maurice Wilkins CBE FRS
Dr Ivan Yates CBE FREng

6. The key question is whether the research community has access to the material it needs for an optimum market in ideas.

7. While a general notion of “open access” may seem to be the answer, questions remain about how such access can be sustained in the long term. For example, scientists continue to need access to old material. As a random example, in the issue of *Nature* published on 29 January 2004, some 13% of the references cited by the original scientific research papers were published more than twenty years ago. Five per cent were published before 1970 and about 1% were published more than half a century ago; there is even one citation from the 1920s.¹ A similar pattern is found in the issue of *Science* published in the same week, which also includes at least one citation to work published more than 80 years ago.²

8. As the format of electronic publications continues to change, existing formats will become less universally accessible. This has, for example, already happened with the floppy disk technology used to store the BBC’s Domesday survey of the United Kingdom, created less than 20 years ago³ (*after* approximately 17% of the papers used by researchers publishing in the world’s leading scientific journals). Although this particular example may not be of prime importance to modern science, it illustrates the potential difficulties of maintaining access to a huge archive of different kinds of publications, which will be a crucial part of “open access”.

9. Someone will have to continue to pay for this access, and it remains unclear how these costs are to be met in a sustainable way.

10. It seems entirely possible that the costs associated with the ever-changing technological interfaces that will be necessary to provide access to the huge archive of material (as well as up-to-the-minute publications) could be at least as great as those of the traditional storage of hard copies.

11. Given the stagnation of the British Library’s budget and the huge strains on university budgets, it is obviously foolhardy to assume that these costs will be met by the public purse.

Legal Deposit Libraries

12. The Legal Deposit Libraries do a superb job within what must be extremely difficult circumstances. Several are part of universities, which even the Government admits are under-funded to the tune of billions of pounds per annum.⁴ The British Library has not seen an inflationary rise in its Grant-in-Aid in recent years. Indeed, in the financial year 2002-03, its grant of £85.19 million was almost 4% lower than it had been in the previous year.⁵ This is particularly

bizarre given that the Library generates £4.40 of economic gain in the UK for every £1 that the taxpayer invests through it.⁶

13. Although the libraries receive some material free of charge, they must still bear the costs of material published outside the UK and of cataloguing and making material accessible to researchers. With the burgeoning growth in material, there is both a quantitative and a qualitative shift in the work associated with this provision.

14. It seems hard to believe that the Legal Deposit Libraries will be able to continue to do such a good job of giving researchers access to a whole world of material as they have in the past, unless their income streams can be enhanced. Funds are under pressure from the trends (a) simply for more material to be published year on year, (b) for that material to appear in an increasing number of different formats (some of which must remain accessible when the original technology has been superseded), and (c) for more publications to deal with the interfaces between existing disciplines, requiring more complicated cataloguing and indexing.

February, 2004

Notes and References

¹ *Nature*, 29 January 2004, pp.419-468.

² *Science*, 30 January 2004, pp.643-692.

³ Digital Domesday Book unlocked, *BBC News Online*, 2 December 2002.

⁴ *Hansard* [House of Commons] 27 January 2004, column 167.

⁵ *Annual Report of the British Library*, 2002-03.

⁶ *Measuring Our Value*, British Library, 2004.