

8 April 2010

Dr Malcolm Read, OBE  
Executive Secretary  
Joint Information Systems Committee

Dear Malcolm

Your letter of 22<sup>nd</sup> March expressed a desire to speak about how Internet and Web Technologies can make the dissemination of research outputs more effective, and why subscription costs continue to rise above the rate of inflation. We welcome the opportunity to do so because there appears to be a wide and troubling disparity between your negative perceptions and the positive reality of STM (Scientific, Technical and Medical, including Social Science & Humanities) publishing in 2010. We have prepared the attached document to guide an objective, fact-based discussion on 12<sup>th</sup> April. Some key facts are as follows:

- STM journal publishers exist to provide essential services to STM researchers, notably the registration, quality assurance through peer review, dissemination, and archiving in perpetuity of primary research findings. Around 2,000 STM publishers compete intensively to offer a broad range of brands, services, technologies and business models to researchers.
- STM journal publishers have invested over £2 bn since 1999 to digitize STM publishing functions, with the result that most UK researchers can now access most of the current and historical articles they need digitally.<sup>1</sup>
- The growth of STM publishing is driven primarily by the growth in R&D output, which in turn is driven by R&D funding. For decades, this output has grown by around 3% annually (5% annually in the UK since 2004).
- STM journal costs and *list* prices are driven by inflation (typically 3-4% annual growth), R&D output (around 3% annual growth), and usage (around 20% global annual growth in the last 5 years, higher in the UK.) However, the *actual price paid* by subscribers in today's predominantly electronic world is typically a fraction of list price due to licensing innovations and volume discounts that have accompanied publishers' investments in digital technologies. As a result, UK universities are able to access significantly more articles for continually reducing unit prices, as you will know from JISC's procurement function. For example:
  - UK universities accessed 32% more journals in 2008 than they did in 2004, while the average price paid per title accessed fell 11% over the same period.<sup>2</sup>
  - UK university researchers' usage of those journals increased by 160% from 2004-2008, while the price paid per article downloaded fell 42% over the same period.<sup>2</sup>
  - By 2008, UK universities paid 70 pence per peer-reviewed article downloaded.<sup>3</sup>
- These dynamics have delivered massive productivity and output increases for researchers globally, and especially in the UK:
  - As we noted in our letter of 15<sup>th</sup> March, 94% of UK university researchers report that access to journal articles is 'easy or very easy'. Globally the figure is 93%. Journal articles are the easiest to access form of research content, while also being the most important according to researchers.
  - This in turn is driving institutional productivity. A recent RIN study showed that universities with more article downloads are disproportionately productive in terms of articles published, PhDs awarded, and research grants won.<sup>4</sup>
  - Collective institutional productivity is driving national productivity: as the Royal Society recently reported, the UK is 'punching well above its weight'. It accounts for just 1% of the global population and 3% of global research funding. However, it accounts for 8% of journal articles published, 12% of all citations and 14% of the world's most highly cited articles.<sup>5</sup>
- These benefits are also being realised in other UK segments. While STM publishers focused first on delivering these benefits to universities, they are now extending them to R&D intensive corporations, SMEs, individual researchers and the public through segment-specific licensing and other access mechanisms. As a

<sup>1</sup> Industry estimates based on known numbers for a subset of the industry that are then scaled to 100% based on article share of the subset

<sup>2</sup> Based on an analysis of SCONUL Annual Library Statistics, Society of College National and University Libraries, 2004-2008 eds.

<sup>3</sup> Based on SCONUL data (Ciber analysis of 113 UK universities).

<sup>4</sup> E-journals: their use, value and impact <http://www.rin.ac.uk/system/files/attachments/E-journals-report.pdf>, RIN (2009)

<sup>5</sup> The Scientific Century: securing our future prosperity <http://royalsociety.org/the-scientific-century/>

<sup>6</sup> Access by UK small and medium-sized enterprises to professional and academic information, Publishing Research Consortium <http://www.publishingresearch.net/SMEAccess.htm>

result, 69%-85% of researchers in these constituents find access to journals 'easy or fairly easy', numbers that we expect to increase in the next few years as publishers focus more on these segments.<sup>6</sup>

- STM publishers are continuing to invest heavily to address areas that researchers say would make a real difference and help improve their productivity further, such as:
  - Enhancing and enriching articles' content by leveraging semantic searching, social-networking and visualisation tools, enabling delivery of journal content to mobile devices, and facilitating access to research datasets
  - Facilitating the extraction of insights across articles via text mining and bibliometric tools, for example that map institutional and national research strengths to support the allocation of research funding.
  - Collaborating to set up systems that facilitate permissions processing, that detect and eliminate plagiarism, and that encourage the application of consistently high ethical standards

A key issue is that funding for STM content has not kept pace with the rate of growth of R&D outputs even as publishers have reduced unit costs. Since 2004 UK university library budgets have grown at around 3% (i.e. in line with inflation, but *not* in line with inflation-plus-volume-and-usage-expansion-minus-unit-cost-decreases). Consequently, UK university library budgets' share of overall university budgets has fallen from around 3% in 2004 to 2.7% in 2008.

These dynamics have important implications for the alternative models that JISC is spending significant sums of taxpayer funds to advocate. As long as R&D outputs continue to grow at around 3%, there will be comparable growth in STM published research and therefore with its associated costs *over and above inflation*. A shift from the existing predominantly subscription-based publishing system to one funded by article processing charges ('gold') or self-archiving of manuscripts in repositories ('green') - both of which are strongly advocated by JISC - would *not* eliminate this issue. As we stated in our 15<sup>th</sup> March letter, publishers are already facilitating these approaches: around 30% of articles are published in journals that offer 'gold' options, and the majority of articles are published in journals that permit manuscript posting. However, it is critical that UK stakeholders and particularly UK universities understand that the costs of 'gold' and 'green' would also increase over and above inflation, driven by the expansion of R&D outputs. This is particularly important given that 'gold' would cost UK universities more than double what they pay today for journals, while 'green' would cost them at least 16% more.

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We have set out the above in order to fact-based and transparent about what drives STM publishing and what UK universities have been getting in return. We are proud of these results and of the positive story that they tell about STM publishing and about UK research. These facts do not indicate at all that 'the market does not seem to work well' as you said in your letter. Your statement indicates an outdated view that is out of touch with reality: STM publishing is an innovative, dynamic industry that has invested billions of pounds and is delivering massive productivity benefits to UK and global researchers. As such, it is an industry to be applauded and supported.

Our industry has long embraced the digital world and continues to do so in a responsible manner, exploring many new avenues such as semantic tagging and linking to datasets to enhance the research discovery process. We have genuinely reached out to work with bodies dedicated to the needs of researchers, including JISC and RIN, to understand outstanding issues and access gaps with a view to addressing these in a sustainable manner. We are keen to continue to collaborate and address any remaining issues. We feel that our efforts are not helped by the misleading picture of the industry that JISC continues to promulgate in contravention of what the facts show.

We look forward to our discussion with you on 12<sup>th</sup> April.

Yours sincerely,

Graham Taylor, The Publishers Association

Ian Russell, Association of Learned and Professional Society Publishers

Michael Mabe, International Association of Scientific, Technical & Medical Publishers

cc: Sir Tim O'Shea  
Professor David Baker

<sup>7</sup> CIBER Analysis of SCONUL data from 113 UK institutions