

Editorial

Scientific publishing and Plan S

Since the 1990s there has been steady growth in the concept of Open Research where scientists use transparent methodologies, deposit data for general use, provide open platforms and tools, and publish their results as Open Access (OA). Whilst OA has been growing, under prodding from governments and major funders, changing the basic models of science publishing is both difficult and, for commercial publishers, damaging to their profits. Unnoticed by most scientists the European Commission has recently delivered what could be a paralysing blow to scientific publishing. Starting with the best of intentions – that research funded by public money should be publically accessible – the EU announced in September 2018 that from 1 January 2020 all government funded research across the EU would have to be published in OA journals or on OA platforms (Plan S). To implement this, fees for OA will be standardised and capped across Europe, fees will be paid by the funding councils and universities and not by the authors, and publication in subscription or hybrid journals (those having a mixed income from subscriptions and OA fees) will not be allowed. The move reflects impatience with the slow uptake of OA over the past ten years due, in large part, to efforts by the major international science publishers to safeguard their considerable profits.

Although the objective may be creditable the approach proposed seems completely lacking in any understanding of the diversity inherent in scientific publishing. Whilst the giant commercial publishers like Springer, Elsevier and Wiley may be the major targets, thousands of important journals are published by scientific societies, university presses and charities, of which this journal is an example. Their business model does not allow them to suddenly become OA and still support their area of science. Those journals publishing large numbers of papers from outside the EU and North America need continuing subscriptions as OA funding is simply not available to less developed countries.

A part of the concern about hybrid journals is that they are profiteering, taking money for subscriptions and then adding further profits from OA article fees. To combat this many scholarly publishers instituted a "double dipping" policy years ago that allows for a falling subscription rate as OA fees increase as a proportion of income. But the EU has not recognised this.

Such a sudden and precipitate change in research publishing will result in chaos and possible bankruptcy for many smaller journals. To make the new business model work firstly the funding needs to be adequate and that is not certain, secondly the institutions need to move the management of funds from library budgets to an OA management system which takes time, and thirdly the large publishers will have to accept a severe restriction on the present article charge. For some companies with high levels of charge this will clearly be of great importance to their expected income, but for many smaller publishers this restriction seems unlikely to impact their existing more modest charges. The new approach appears to be one designed to bring the excessive profits of the big publishers under control. Elsevier, Springer, Taylor and Francis, and Wiley between them control the publication of almost 9000 major journals, including many of the most highly cited ones. Scientists themselves have already organised boycotts of specific publishers whose charges are considered excessive and individuals have resigned from Editorial Boards and refused to publish in or review for a wide range of these journals. Under these circumstances it seems inexplicable that major national funders like UK Research and Innovation, Research Council of Norway, Science Foundation of Ireland and the French National Research Agency have agreed to support this poorly considered Plan S. The objective is justifiable but the means is not. A rethink is essential.

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