Open Access: How it affects UK mathematical science researchers

The aim of this note is to explain what `Open Access Publishing' is, and how and why it will affect UK researchers. The key definitions concerning Open Access (which comes in two main flavours) are given below. The urgency of this issue for UK researchers is generated in part by recent policy developments from the UK Research Councils (RCUK): these changes require that all peer-reviewed publications which acknowledge RCUK support and which are submitted for publication on or after 1 April 2013 should be freely available through one of the standard Open Access routes. With that in mind, we have tried to write here with the needs in mind of the individual researcher trying to find an appropriate home for her or his latest article. This note is intended to complement the <u>RCUK's policy document</u>,¹ which gives clear guidance about its expectations. The reader is referred also to RCUK's <u>frequently asked questions²</u> on this policy. The compliance of the main LMS journals with RCUK's open access criteria is also briefly laid out here.

Definitions:

Open Access (OA): The philosophy which holds that the data and the outcomes of research should be freely available to all who wish to access them, in the form of the original journal articles arising from that research.

Green Open Access: This is the variant of OA where access is freely available without payment, to a version of a publication held in a repository, for example an institutional repository or an international subject archive. The openly available version may be available immediately upon publication of the journal version, or after passage of a specified embargo period.

Gold Open Access: This is the variant of OA where access is universally available without payment to the version of record of a publication, via the publisher's own platform. *Article Processing Charge* (APC): This is the payment made on an author's behalf (by the author herself or – more usually - by an author's employer or grant-awarder) to the publisher of an article published under Gold OA.

Accepted Manuscript, also called Postprint: This is the version of a journal article that has been accepted for publication in a journal, that is, with the changes made as required by the referee.

Version of Record, also called Publisher's Version: This is a fixed version of a journal article that has been made available by any organization that acts as a publisher by formally and exclusively declaring the article "published", carrying such features as the publisher's logo, DOI and volume details.

<u>**Comments on the definitions:**</u> (i) These definitions are essentially lifted from the Finch Report³. But in practice an extra gloss is usually carried by the adjectives green and gold: namely, the author *pays* an APC for Gold OA, and *does not pay* for Green OA. (ii) In Green OA, the precise specification of what is an allowable version of a repository-posted article is deliberately left open above; there are many variants, and this is currently the subject of debate. More on this below.

¹ http://www.rcuk.ac.uk/documents/documents/RCUKOpenAccessPolicy.pdf

² http://www.rcuk.ac.uk/documents/documents/OpenaccessFAQs.pdf

³ http://www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINAL-VERSION.pdf

(iii) In principle, in Gold OA authors could be charged varying fees according to the length of their articles, but a fixed fee per article seems to be more standard. Hence the word "article" in APC.

<u>RCUK policy on Open Access</u>:

The quickest and clearest way to grasp RCUK policy on OA is via the tree diagram below, from the Publishers' Association⁴, also endorsed and reproduced by RCUK in its briefing materials.



<u>Commentary on the diagram:</u>

(i)The phrase "Research publicly funded?" in the top box means, for the present at least, "Research funded by RCUK?" Thus, in particular, research carried out in a UK university without the support of an RC grant, and so, implicitly, *with* the support of Funding Council QR funds, is *not* at present encompassed within these directives⁵.

(ii) The word "your" in the phrase "from your publisher", in the second branching box, means "as chosen by you the author(s), having an eye to academic issues, as opposed to (say) issues of publishing politics".

 ⁴ <u>http://www.publishers.org.uk/index.php?option=com_docman&task=doc_download&gid=780&Itemid=</u>
⁵ For the latest on how HEFCE's policy is evolving, see: http://www.hefce.ac.uk/whatwedo/rsrch/rinfrastruct/openaccess/

(iii) The box "Are APC funds available from Research Funder?" also maybe requires some explication. It means that, when submitting a paper on research which has received some RCUK funding for publication in a journal which offers a Gold OA option, we should *first* ask our institution for funds to pay the APC. If this is available, we should take the Gold route; but if such institutional support is not available, we are free to follow the green route (provided any embargo period does not exceed 12 months).

(iv) "Green OA after 12-24 months" means that the publisher may impose an embargo period after initial publication, before OA is granted. For us in the mathematical sciences the maximum permitted embargo period is actually at most 12 months.⁶

<u>The London Mathematical Society's journals and OA:</u> All LMS journals are fully compliant with RCUK policy. Details are as follows.

(i)With a single exception, Green OA is available for all articles published by the LMS. Namely, authors can upload version(s) of their paper to the arXiv, up to and including the version of it accepted for publication by the LMS, the Postprint. This permission applies also to repositories run by research funders, and to the repository of an author's university employer.

(ii) The exception referred to in (i) is the new Transactions of the LMS, which is Gold OA only, introduced in part to cater for authors whose institutions insist that they follow a pure Gold OA route, with no hybrid options. Standards for acceptance will be the same for TLMS as for the other LMS journals.

(iii) All articles published in the LMS's journals are freely and universally available from the publisher's site for the first six months after publication. Thereafter they move behind the subscription wall.

(iv) A Gold OA option is available to all authors of articles published by the LMS (and has been available since 2008)⁷. In return for payment of an APC, free permanent universal online access to the paper is enabled. Under the Gold option, re-use of the article is permitted under the CC-BY licence, in compliance with RCUK policy. (CC-BY breaks up as CC=Creative Commons (the licencing protocol) together with the sole restriction BY (the requirement that the original author is attributed in any reuse).)

⁶ See RCUK FAQs, answer to 2.2.

⁷ The single exception to this sentence is the Journal of Computation and Mathematics, which is freely accessible to all readers.