Framework for Open Access (OA) at University of Hertfordshire (UH)

**Synopsis**  
This document describes the policy, resources, processes and reporting that support Open Access at the University of Hertfordshire.

**Audience**  
Pro Vice-Chancellor's Research Management Group; Library and Computing Services Board; Research Managers.

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Oct 2019, v2, Catherine Manthorpe, comments, corrections, restructured  
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1 Open Access Policy

The university’s Open Access (OA) policy mandates Green OA. That is, self-deposit of all research outputs and theses by authors. It also allows for Gold OA.

The policy was established in 2007 with the implementation of the university’s institutional repository; and updated in 2015 to align its descriptions of OA with the prevailing terms used by the scholarly communications community.

Appendix A (online) UH UPR IM18 Open Access Policy

2 OA Support

The university supports OA via two co-working teams, research information systems, and direct funding for publishing:

2.1 Research & Scholarly Communications Team (RSC)

RSC co-ordinates and delivers research support from the university’s combined Library and Computing Service. This support includes scholarly communications expertise, systems maintenance, research output curation, compliance and reporting. RSC deliver advocacy, author support and training jointly with Research Office.

2.2 Office of Vice-Chancellor Research Office (RO)

RO have responsibility for research information governance, statutory returns, grant administration and REF Management. RO deliver advocacy, author support and training jointly with RSC.

2.3 Research Systems

The university maintains a research information system (RIS), and an institutional repository (UHRA).

The RIS allows researchers to record details of their research outputs, activities, and projects, and manage their research grant applications and awards. RIS includes a research portal that presents this information via an organizational structure of schools, research centres and research groups.

Research outputs are curated in RIS and copied to UHRA for long term preservation and dissemination. UHRA is optimized for machine-to-machine interoperability and discoverability of open content.

Appendix B: Research Systems

2.4 Gold OA funding

UH manages two open access funds to pay Article Processing Charges (APCs) for Gold OA. One fund is for authors whose articles acknowledge a UH-held grant from one of the UKRI funding bodies, and the other, the institutional fund, is for authors whose works are unfunded or funded by a funder who does not provide for open access. The funds and APCs are administered by RSC, with oversight of the institutional fund by Associated Deans of Research (ADRs).
In addition, the University is investing in a number of JISC brokered Open Access publishing agreements with publishers such as Wiley, Sage, Public Library of Science, Institute of Physics, BMJ, Oxford University Press, and Cambridge University Press. These agreements include some 2700 titles.

Appendix C (online): Open Access Funding

3 Curation Process

3.1 Aims and objectives

The aim of research output curation is to optimize the impact of our researchers’ work by:

- providing a consistent, high quality record of our research outputs;
- enhancing the visibility of, and facilitating open access to, our work;
- satisfying funder mandates for open access, attribution and acknowledgement (REF2021, UKRI, ERC, NIHR etc).

3.2 Curation Overview

The policy in Section 1 expects Researchers to use RIS to create a record of all their research outputs, including the deposit of full text manuscripts.

RSC monitor the input queue and work with authors to produce bibliographically complete and open records. Repository criteria include the deposit of an appropriate manuscript. If, after best effort, a record meets the criteria, then it is copied to UHRA; otherwise, it remains solely on RIS portal. We recognize it is not always possible to achieve a complete, open record; and we respect author’s decisions about what to include on their portal profiles.

- There are as many as 30 bibliographic data associated with a basic single author research article. This extent may be doubled or trebled for more complex outputs, and by the requirements of compliance. Curation involves checking the fidelity of all this data.
- The availability of public domain metadata from publishers is inconsistent and often poor. Authors are sometimes not aware of this – moreover, that they possess data that RSC cannot obtain independently, and they omit data that curation must recover.
- As a result, curation is often iterative, requiring several visits to a record to achieve a complete, open and compliant record.
- The demands of compliance can exacerbate this iteration. REF2021 OA policy has been the dominant influence since 2016. It necessitated a complete workflow re-design and significant investment in systems. REF expects curation to begin at ‘acceptance’, when very little metadata is available; and has a compliance timeline that depends on publication events that are often opaque or difficult to discover in a timely manner. As a result, significant repetitive manual checking of records is needed.

The curation workflow for research outputs through the RIS and UHRA systems is shown in Figure 1.
Figure 1. Research Output Curation Workflow

Appendix C: workflow notes (including REF Compliance)
Appendix D (online): RSC curation manual
3.3 Process Challenges
There is significant complexity in the publishing lifecycle and in funding body compliance. These factors challenge both authors and administrators to successfully achieve OA.

3.3.1 Challenges
The main challenges to our OA processes are poor metadata, lack of automated data exchange, ambiguous or inhibiting publisher’s usage terms, and complex policy.

These factors result workflows that remain reliant on manual data processing, and which carry multiple potential points of failure. Our processes are aware of, but not dominated by this risk. Best practice, consistent working, and finessed design are able to mitigate the risks.

3.3.2 Risk
There are three main risks that may result from process failure.

- Failure to achieve Open Access (may adversely affect the impact of the work)
- Non-Compliance with funder policy (may adversely affect the author’s or the institution’s future funding)
- Self-deposit may contravene publisher’s rights (may result in legal challenge)

3.3.3 Result of Mitigation
We believe our processes largely mitigate the risks above. This is demonstrated by:

- our overall rate of OA, measured against the number of all outputs, has increased in the period 2016 to 2020;
- our REF2021 OA compliance rates are within unit of assessment tolerances; and, we rarely find a mistake when reviewing dates and exceptions among items likely to be submitted to REF;
- we have no record of a complaint from a publisher.

Appendix E: Process Challenges Notes

4 Advocacy and Training
The RSC and RO undertake regular open access advocacy and training for authors, managers and administrators.

4.1 for Authors

- small group training for new users in the use of RIS with an emphasis on the benefits of OA for all output types
- one to one advice and refresher training on demand
- continuing advice and feedback via research output curation, one to one interventions for authors displaying difficulty
- seminars on the university’s Post Graduate Researcher training programme (also open to staff)
- refresher training and OA focus sessions for research groups and research centres
- updates and policy news in a regular newsletter to staff, co-ordinated with:
○ **scholarly communications HertsHub pages** addressing key elements of OA: overview; Green and Gold; licensing; APC funding and applications; REF policy requirements; predatory publishing.
  - reminders of REF OA policy requirements via consistent use of email signatures
  - Open Access week events and surgeries.

### 4.2 for Research Management

- Regular reports and specific operational issue papers to Pro Vice-Chancellor’s Research Management Group (PRMG)
- Regular reports and specific strategic issue papers to University Research Committee
- OA briefings for school management and Vice-Chancellor’s group

### 4.3 for Administrators:

New members of the RSC team are trained by knowledge transfer, and best practice is continually reviewed by the whole team, with reference to funder policy guidance updates and discourse within the UK scholarly communications community.

There are a small number of administrators in schools who add content on behalf of senior or visiting researchers. We offer one to one user training specific to their local context.

### 5 Monitoring and Reporting

RIS offers a reporting module that covers all aspects of workflow and content. Reports are designed and scheduled for regular delivery by email to research managers.

OA status is available for all outputs and for aggregations by period, type, author or internal organization.

A REF2021 module in RIS includes extensive tools for monitoring compliance with OA policy. These include a REF status section on individual research outputs and dashboards to track compliance by Unit of Assessment.

RSC monitor compliance levels and trends, and report regularly through the channels noted in Section 4.2 above; and, if necessary, advise ADRs of specific problems for action at a school level. This intervention was particularly successful in raising compliance rates in the period after April 2016 to achieve 85% – 90% compliance across the institution by mid 2018.

Reporting on detailed facets of OA such as Green vs. Gold, license, and funding body (for compliance other than REF) is not well supported by RIS. Additional tools such as Scopus, SciVal, Unpaywall and ResearchFish are used to derive additional insight.

Regular reports include:

- RSC report to Research Committee. 3 per year. This report includes engagement with systems numbers of OA outputs, downland usage of manuscripts from UHRA, and REF and overall compliance rates.

  *Appendix F Specimen Research Committee report*
- RSC/RO UKRI annual open access report.  
  Appendix G (online) RCUK open access return 2016
- PRMG research metrics report, to be introduced 2021, to include OA Citation Advantage.  
  Appendix H Field Weighted Citation Impact vs. Open Access type
Appendices

Appendix A  UH UPR IM18 Open Access Policy

Appendix B  Research Systems

1  Research Information System (RIS)
Elsevier Pure, 750 user licenses. Maintained since 2012. See https://www.research.herts.ac.uk/ and http://researchprofiles.herts.ac.uk/portal/.
Pure is a market leading CRIS which allows researchers to record details of their research outputs, projects, activities and awards. In addition, it has a REF preparation and submission module that includes REF OA policy checking and tracking. Access to RIS is available for all post-doctoral researchers. Post-Graduate Researchers are encouraged to deposit via their supervisors or research leaders.

2  Institutional repository (UHRA)
dSpace 5.8; maintained since 2007; upgraded in 2014 and 2018 for interoperability and discoverability of open content. See University of Hertfordshire Research Archive https://uhra.herts.ac.uk/ The deposit of Masters and PhD by research is a condition of award. Registered with CORE, re3data, IRUS-UK, BL-Ethos. Repository page addresses, known as handles, are functionally equivalent to DOIs. Datacite DOIs can also be allocated to support datasets, theses and other locally published material such as commissioned reports.

3  Additional integrated tools and subscriptions
   • Scopus
   • SciVal
   • ORCID
   • Datacite

4  Costs
The combined cost of this infrastructure amount to approximately £100k per annum.
Appendix C  Workflow Notes

Figure 1. Research Output Curation Workflow

In the following notes bold curly braces {} refer to elements of figure 1.

1 (IN)

Researchers are expected to use RIS to create a record of all their research outputs, including full text deposits.
1.1 Creation: authors can create items by manual entry; by import from file; or by import from online sources, including Scopus, PubMed and ArXiv. RIS can send alerts to authors when new candidates with their affiliation are found in these sources.

REF2021 policy for deposit on acceptance has led to an increased reliance on inefficient manual entry, since most research outputs reach online sources subsequent to publication and are, therefore, not available for import on acceptance.

1.2 Visibility: authors have control over the visibility of a record and its individual manuscript files at the point of entry. The system is configured so that unless the author chooses to hide a record or embargo a file, the research output is open and accessible immediately upon creation on their research profile at http://researchprofiles.herts.ac.uk/portal/.

1.3 Workflow Step: authors have control over the curation workflow step. The default is ‘For approval’, but authors can set ‘Entry in progress’ for items in preparation. RSC do not routinely address ‘Entry in progress’ items and it is the responsibility of authors to complete and pass these items ‘For approval’ upon acceptance.

2 {Curation step 1}

Research outputs are assessed against {completeness criteria}, for example, has full dates; has manuscript; has doi etc. and for their status in the publication life cycle. If an output is incomplete or not yet {accepted}, it can be returned to ‘Entry in progress’ {back to user} for the further attention of the author.

3 {Curation step 2}

Research outputs are finessed with aim of achieving an open, bibliographically complete record for inclusion in the institutional repository.

3.1 Data Quality: We make our best attempt to acquire accurate data. Research Output records are compared with public domain metadata sources. These sources include Publisher/Journal websites, Scopus, ArXiv, Pubmed, and other institutional repositories.

We regard the metadata found on Publisher/Journal websites as authoritative. Where author entered metadata and published metadata disagree, we use the latter - unless there is a strong case to the contrary.

Where a full publication date dd/mm/yyyy is not available we use day 1 of whichever month or period we can identify.

3.2 Deposited manuscripts: We make best effort to satisfy publisher’s expectations for deposited manuscripts. We use SHERPA Romeo, UK-CORR community resources, and publisher websites to ascertain permissions and embargo periods. Where we are unable to ascertain permissions (most often for conference contributions) we ask the publisher using a standard form of words; and add any returned information to community resources.

3.3 Repository Criteria: the criteria for inclusion in UHRA are:

- published, online or in print (including In-Press where the publisher makes the accepted version available);
○ an author with a current association to the University of Hertfordshire contributed to the work;
○ an open or embargoed full text manuscript is included.

In some cases, where the expectation of a manuscript is not appropriate, or a permanent metadata only record is desirable, a record with only an abstract or extended description may also be transferred to UHRA.

3.4 Waiting ‘In press’: unpublished research outputs or those awaiting confirmation of REF OA policy compliance status remain at ‘for approval’ until {Published} and/or compliance is ascertained (see {REF check}, below). An integration between RIS and Scopus offers post-publication updates for approximately 80% of our research outputs, but these are not timely enough to be relied upon for REF2021 purposes, leading to repeated manual checking for publication.

3.4 Approval: If the repository criteria are met, research output metadata is copied to a new item on UHRA. The attached file is transferred out of RIS and into UHRA. The corresponding RIS record remains visible on research profiles (RIS portal), but attached files, which are displayed on both systems, are served from UHRA. UHRA manages the release of embargoed material automatically. Updates to the source records on RIS are updated in UHRA once re-validated.

If a record does not meet the repository criteria it is still approved, but not transferred. It remains visible on the author’s research profile.

4 {REF check}

RIS has a flag for REF OA compliance status on each record.

4.1 Scope of the policy: Research outputs are made in or out of scope automatically by RIS, based on the type of output and its date.

4.2 Compliance calculation: The system checks compliance status by considering acceptance date; publication date, attached document version, and visibility and/or embargo period of the attachment.

*The calculation depends on an accurate and full acceptance date.* Our experience shows acceptance date is only available in the public domain for about 50% of journal articles, and much less often for conference contributions. In the absence of an authoritative acceptance date, we rely on author entered data. Non-corresponding co-authors often find acquiring acceptance date difficult.

For conference items we use the last day of the event for both acceptance date and publication date, unless there is publisher metadata to the contrary.

In cases where acceptance date cannot be obtained, we enter a fixed token acceptance date (2/4/yyyy) so as to bring the record into compliance reporting. Our records show this occurs for ~3% of outputs subject to the policy.

*The logic for calculating compliance status is here (Elsevier Pure Support login required).*
4.3 Exceptions: If the basic conditions for compliance are not met, exceptions allowed by the policy may be selected using RIS. Not all exceptions are applied during curation, some being reserved for oversight by RSC/RO management.

During curation we employ the following exceptions:

- **The output was published as Gold open access.**
  This is no longer an exception to the policy but RIS uses it as a flag for compliance.

- **There was a delay in securing the final peer-reviewed text (for instance, where a paper has multiple authors).** We ask authors for evidence of delay and keep this on the record.

- **The staff member to whom the output is attributed was not employed on a Category A eligible contract by a UK HEI at the time of submission for publication.**
  We use the author’s start date drawn from the Human Resources system.

- **The publication concerned requires an embargo period that exceeds the stated maxima, and was the most appropriate publication for the output.**
  We accept the author’s prerogative and do not seek evidence for most appropriate venue.

- **The publisher actively disallows open access deposit in a repository, and was the most appropriate publication for the output.**
  We accept author’s prerogative and do not seek evidence for most appropriate venue.

- **At the point of acceptance, the staff member to whom the output is attributed was employed at a different UK HEI, and it has not been possible to determine compliance with the criteria.**
  We use the author’s start date drawn from the Human Resources system. We do not seek to establish compliance via a previous UK HEI.

- **The output was not deposited within three months of acceptance date, but was deposited within three months of the earliest date of publication.**
  For outputs published after 1 April 2018 that meet the exception and otherwise satisfy the policy. We also use this exception when an acceptance date cannot be obtained and our token acceptance date (2/4/yyyy) leads RIS to report non-compliance, but the output otherwise satisfies the policy.

4.4 Other Exception: *Other Exception* and any of the allowable named exceptions not noted in 4.3 above are applied only after review by RSC/Research Office management. We expect our use of Other Exception to be very limited.

There is a situation where the sequence of events in a protracted publication cycle can lead to a logic failure, and as a result RIS reports non-compliance for an output that has clearly met the policy. This happens in 1 or 2 in 1000 outputs. In these cases, we apply an Other Exception and explain the circumstances in the exception note.

There are a number of other situations where the sequence of events in a protracted publication cycle can lead to an actual failure in compliance. An example is when an article is embargoed until publication date, but that publication date is overlooked - whether by automated update, failure of the author to communicate, or by repeated checking by RSC - so that it is not made available within 1 month of publication (or end of embargo) and does not
meet the policy. We accept this as a failure of process and do not apply an exception in these cases.

**4.5 Review of Exceptions:** to ascertain that exceptions have been consistently and appropriately applied we will review and check all exceptions for outputs selected for submission.

Appendix D RSC curation manual
Appendix E      Process challenges notes

1 Immediate visibility

Research outputs are made publicly available on portal immediately after creation by authors, without waiting for the attention of RSC. This has a risk of contravening publisher’s rights. The university considers this openness and autonomy a benefit which balances the risk of an author occasionally contravening their publisher’s expectations.

The university mitigates this approach through a target to scrutinise all new research outputs by RSC within one week; and, a rapid take down policy.

2 Incorrect manuscripts

Authors may incorrectly deposit their manuscript as the accepted text. This carries the risk of either misrepresenting a pre-print or contravening publisher’s rights by use of an enhanced version.

The university mitigates this risk by an emphasis on ‘accepted text’ during training; training on the use of major online submission systems; manuscript checks by experienced administrators; and, a rapid take down policy.

3 Incorrect metadata

Publisher’s public domain metadata is often poor, even extending to the lack of a well-defined publication date. Acceptance dates are often unavailable. This has a risk of incorrectly reporting REF OA compliance or contravening publisher’s rights.

The university mitigates this risk by encouraging authors to deposit evidence of acceptance in RIS; and, by attention to detail by expert staff during curation.

4 Lack of clarity in publisher expectations

License and right statements are often missing or ambiguous. Small publishers and conferences often do not consider OA at all. This has risks of contravening publisher’s rights via incorrect action; and, of frustrating OA via risk adverse behavior of authors, leading to a failure to deposit.

The university mitigates this risk through the use of the SHERPA/ROMEO database of publisher policies; seeking permission from publishers; attention to detail by expert staff during curation; and, by emphasizing that authors have a safety net of RSC oversight.

5 Resource constraints

2 to 3 FTE is deployed in various processes, interventions and advocacies intended to achieve Open Access.

The effort of establishing compliance for outputs subject to REF2021 OA Policy consumes a significant and detrimental proportion of this resource. As a result, the pursuit of OA for outputs not subject to the policy is diminished. This has a risk of missed opportunity to achieve OA across the whole output portfolio.

The university mitigates this risk through an emphasis on OA ‘everywhere’ during training; and, consistent requests for ‘self-deposit’ during initial curation.
Appendix F  Specimen Research Committee report (extract)

OA reporting sections are highlighted blue in the following report sections

1  RIS / UHRA in numbers

UH has two public facing systems for presenting our research: RIS portal, which presents our work via research staff profiles; and UHRA, which is our repository for open access and long term preservation of research outputs.

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Notes:

1.1  The rate of addition of research outputs over 2 years prior to this report is 1750 per year.
1.2  330 people logged in to RIS in the 3 months prior to this report.
1.3  Some empty profiles and unlocked accounts that have not been used since 1/1/2014 were locked, so as to bring our number of active accounts in line with our Pure license, which allows for 750 active users.
1.4  UHRA OA rate (%) is (the number of items with a manuscript)/(total number of items)
1.5  UHRA download figures are independently calculated by IRUS-UK http://irus.mimas.ac.uk.
## 2 HEFCE REF Open Access compliance

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<th>Research Outputs</th>
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<tr>
<td>Outputs currently selected for the output pool</td>
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<td>3%$^{2,2}$</td>
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</table>

Notes:

2.1 Only items that are subject to REF2021 Open Access (OA) Policy have a compliance status. Outputs subject to policy are peer reviewed journal articles or a peer reviewed conference proceeding with an International Standard Serial Number (ISSN), accepted since April 2016. The submission includes other outputs that are out of scope of the policy, by date (prior to April 2016) or by output type (books, commissioned reports, non-textual forms etc). These compliance rates are calculated by considering the number of outputs that are not compliant as a percentage of all outputs (within and without the scope of the policy).

2.2 REF2021 Open Access Policy allow for up to 5% of outputs submitted to be non-complaint (per Unit of Assessment).
Appendix G    RCUK open access return 2016
https://uhra.herts.ac.uk/handle/2299/17253

Appendix H    Specimen Open Access metrics report

Specimen from Research Metrics report for Pro Vice-Chancellor's Research Management Group showing Field Weighted Citation Impact vs. Open Access type for UH articles 2014 - 2018

Benchmarking FWCI of Gold, Green, and Paywalled Articles 2014-2018