

Research Data Peer Review & the PREPARDE project

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Home

Fundina

Research and

Research

Funding

Areas of

Research

Research

Research

Priorities

Peer review

Eligibility for

funding

remits

Terms and Conditions of

fEC Grants

Research Council

How to apply for

research funding

which may cross

Research Council

Research Council

Applications

Cross-Council





Research Careers



Engagement with Research



Knowledge Exchange and



Impact



Terms and Conditions of Research Counci Training Grants



About

Excellence with Impact

Home > Research and Funding > RCUK Common Principles on Data Policy

RCUK Common Principles on Data Policy

Making research data available to users is a core part of the Research Councils' remit and is undertaken in a variety of ways. We are committed to transparency and to a coherent approach across the research base. These RCUK common principles on data policy provide an overarching framework for individual Research Council policies on data policy.

Principles

- Publicly funded research data are a public good, produced in the public interest, which should be
 made openly available with as few restrictions as possible in a timely and responsible manner that
 does not harm intellectual property.
- Institutional and project specific data management policies and plans should be in accordance with relevant standards and community best practice. Data with acknowledged long-term value should be preserved and remain accessible and usable for future research.
- To enable research data to be discoverable and effectively re-used by others, sufficient metadata should be recorded and made openly available to enable other researchers to understand the research and re-use potential of the data. Published results should always include information on how to access the supporting data.
- RCUK recognises that there are legal, ethical and commercial constraints on release of research data. To ensure that the research process is not damaged by inappropriate release of data, research organisation policies and practices should ensure that these are considered at all stages in the research process.
- To ensure that research teams get appropriate recognition for the effort involved in collecting and analysing data, those who undertake Research Council funded work may be entitled to a limited period of privileged use of the data they have collected to enable them to publish the results of their research. The length of this period varies by research discipline and, where appropriate, is discussed further in the published policies of individual Research Councils.
- In order to recognise the intellectual contributions of researchers who generate, preserve and share key research datasets, all users of research data should acknowledge the sources of their data and abide by the terms and conditions under which they are accessed.
- It is appropriate to use public funds to support the management and sharing of publicly-funded
 research data. To maximise the research benefit which can be gained from limited budgets, the
 mechanisms for these activities should be both efficient and cost-effective in the use of public
 funds.



Public good Preservation

- Discovery
- Confidentiality
- First use
- Recognition Public funding

Data Policy

Open Access

RCUK Common

Principles on

G8UK UNITED KINGDOM 2013 Open Scientific Research Data

We are committed to openness in scientific research data to speed up the progress of scientific discovery, create innovation, ensure that the results of scientific research are as widely available as practical, enable transparency in science and engage the public in the scientific process.

- To the greatest extent and with the fewest constraints possible publicly funded scientific research data should be open, while at the same time respecting concerns in relation to privacy, safety, security and commercial interests, whilst acknowledging the legitimate concerns of private partners.
- Open scientific research data should be easily discoverable, accessible, assessable, intelligible, useable, and wherever possible interoperable to specific quality standards.
- To ensure successful adoption by scientific communities, open scientific research data principles will need to be underpinned by an appropriate policy environment, including recognition of researchers fulfilling these principles, and appropriate digital infrastructure.

Peer-review of data

- Technical
 - author guidelines for GDJ
 - Funder Data Value Checklist
 - implicit peer review of repository?
- Scientific
 - pre-publication?
 - post-publication? E.g. F1000R
 - guidelines on uncertainty e.g. IPCC
 - discipline specific?
 - EU Inspire spatial formatting
- Societal
 - contribution to human knowledge
 - reliability

University of Leicester



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

http://libguides.luc.edu/content.php?pid=5464&sid=164619





Draft Recommendations on Peerreview of data

- Summary Recommendations from Workshop at British Library, 11 March 2013
- Workshop attendees included funders, publishers, repository managers, researchers
- Draft recommendations put up for discussion and feedback captured
- Feedback from the community still welcome
- 2nd workshop 24 June: put recommendations to peer reviewers!

Document at: http://bit.ly/DataPRforComment

Feedback to: <u>https://www.jiscmail.ac.uk/DATA-</u> <u>PUBLICATION</u>



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Dissemination: Proposed Research Data Alliance Interest Group Publishing Data



- http://rd-alliance.org/
- Close coordination with ICSU WDS working group, CODATA and other ongoing initiatives in data publication
 - WDS under International Council of Science cf. RDA covers non-scientific areas
 - Avoid duplication within related RDA and WDS WGs join up
 - For WDS partnerships between publishers and data centres key
- scope the territory gap analysis
- Use RDA Forum and new <u>http://jiscmail.ac.uk/data-publication</u> 350+ list
- Take findings from RDA / WDS group(s) and trial in other communities / disciplines / institutional repositories
- Build on e.g. Jisc funded PRIME & JoRD project journal data policy bank

Proposed RDA Interest Group: Publishing Data

• Potential **RDA Working Groups**

- Dynamical citation WG already proposed ©
- Repository Accreditation WG already proposed ©
- Data Linking future WG?
- Data Peer Review PREPARDE+ project draft recommendations = future WG?

• ICSU-WDS working sub groups on publishing data

- <u>Workflows for linking data and publications</u> *RDA-WDS WG (Jonathan Tedds)*
- Citations and bibliometrics RDA-WDS WG (Kerstin Lehnert)
- Cost models and Policies RDA-WDS WG (Ingrid Dillo)
- Publication Services RDA-WDS WG (Hylke Koers)

Draft Recommendations on data peer review

Summary Recommendations from Workshop at the British Library, 11 March 2013

- Connecting data review with data management planning
- Connecting scientific, technical review and curation
- Connecting data review with article review
- 4-5 draft recommendations in each of above
- Assist Researchers, Publishers, Journal Editors, Reviewers, Data Centres, Institutional Repositories to map requirements for data peer review
- Matrix of stakeholders vs processes
 - Assist in assigning responsibilities for given context
 - New for most disciplines
 - Learn from disciplines where this already happens

TODO

- What's missing?
 - Need context including long tail and international
 - Currently assume a lot
 - publishing paradigm
 - Processes/workflows
 - Suggest criteria in at least one discipline as example?
 - International Journal of Epidemiology & statistical review
 - Open community review?
- Who are they for?
 - Long tail
 - Journal submission systems model more generically
- What next?
 - how much would it *cost* in resources to implement these reccs
 - Future RDA WG?
 - Practical training in data review?
 - RDA Workflows WG: can we map the reccs to the workflows
 - Is your org ready to buy into this
 - E.g. of FORCNET: build community around





Connecting data review with data management planning

- 1. All research funders should at least require a "data sharing plan" as part of all funding proposals, and if a submitted data sharing plan is inadequate, appropriate amendments should be proposed.
- 2. Research organisations should manage research data according to recognised standards, providing relevant assurance to funders so that additional technical requirements do not need to be assessed as part of the funding application peer review. (Additional note: Research organisations need to provide adequate technical capacity to support the management of the data that the researchers generate.)
- 3. Research organisations and funders should ensure that adequate funding is available within an award to encourage good data management practice.
- 4. Data sharing plans should indicate how the data can and will be shared and publishers should refuse to publish papers which do not clearly indicate how

underlying data can be accessed, where appropriate.

Connecting scientific, technical review and curation

- Articles and their underlying data or metadata (by the same or other authors) should be multi-directionally linked, with appropriate management for data versioning.
- Journal editors should check data repository ingest policies to avoid duplication of effort, but provide further technical review of important aspects of the data where needed. (Additional note: A map of ingest/curation policies of the different repositories should be generated.)
- 3. If there is a practical/technical issue with data access (e.g. files don't open or exist), then the journal should inform the repository of the issue. If there is a scientific issue with the data, then the journal should inform the author in the first instance; if the author does not respond adequately to serious issues, then the journal should inform the institution who should take the appropriate action. Repositories should have a clear policy in place to deal with any feedback.

Connecting data review with article review

- For all articles where the underlying data is being submitted, authors need to provide adequate methods and software/infrastructure information as part of their article. Publishers of these articles should have a clear data peer review process for authors and referees.
- 2. Publishers should provide simple and, where appropriate, discipline-specific data review (technical and scientific) checklists as basic guidance for reviewers.
- 3. Authors should clearly state the location of the underlying data. Publishers should provide a list of known trusted repositories or, if necessary, provide advice to authors and reviewers of alternative suitable repositories for the storage of their data.
- 4. For data peer review, the authors (and journal) should ensure that the data underpinning the publication, and any tools required to view it, should be fully accessible to the referee. The referees and the journal need to then ensure appropriate access is in place following publication.
- 5. Repositories need to provide clear terms and conditions for access, and ensure that datasets have permanent and unique identifiers.