Sharing a checklist: what to look for
Quick comparisons among proposals

Grant proposal writer needs...

- help with organizing and formatting the DMP document
- Beyond the DMP template: what expresses my project?
- What extra (competitive) efforts at sharing & preservation are feasible?

Grant proposal reviewer needs...

- Regardless of your role, use the questionnaire to guide the conversation and highlight best practices of data management that researchers infrequently consider during the research process.
- Both DMP guides share these features...
- A table allows listing of research products, highlighting each item’s relevance for data management, and can be ordered by the research workflow.
- We created section headings for both tools help unify diverse guidelines among NSF directorates.
- On MS Word, pop-up text shows guidelines and sample DMP text:

- Sharing can include direct release to interested parties upon request. Accessible generally means unmediated distribution of data through an online resource or database. One example is linking:

- "If data types will be made publically accessible after de-identification, and will use a unique durable identifier..." [Click to follow link]

- Both include guidelines, tips and examples of DMP content on subsequent pages.

Questionnaire for Help Preparing a Data Management Plan

- How to use this document:
- This questionnaire distills NSF’s guidelines for what to address in your data management plan. Make that some guidelines may not apply to your study.

Data Products and Standards

<table>
<thead>
<tr>
<th>Research Outputs</th>
<th>Data Product</th>
<th>Data Source</th>
<th>Format(s)</th>
<th>Estimated Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Data Product</td>
<td>Data Source</td>
<td>Format(s)</td>
<td>Estimated Amount</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Data and Metadata Standards

[Sample selection of questions]

1. Do the listed data products use standards for formats or metadata, and why are you using them? If not, will your project develop and maintain standardized formatting and metadata?
2. What details (metadata) are necessary for others to use your data?
3. How will metadata be generated (automatically, manually, or both)?

Data Storing and Long-Term Preservation

8. What digital and non-digital data will be retained during the project?
9. Where and whose data will be backed up and who is responsible for it?

Data Sharing

19. If the data products generated during the project, which data will be shared? Which data will be publicly accessible?
20. Who is expected to use the shared data? (Continues to Page 2)

The questionnaire format encourages researchers to add project details in their own words, rather than copying template statements.

Using our DMP resources for consulting:

- JHU DMS Data Management Consultants directly consult with researchers who are preparing DMPs, using the questionnaire to guide the conversation and highlight best practices of data management that researchers infrequently consider during the research process.
- Consultants use a “feedback” version of the questionnaire to share their notes from DMP consultation meetings with researchers, offering suggestions customized to their research project.

The Reviewer’s DMP Worksheet is also a useful topic checklist for consultation discussions with researchers about data management for DMP preparation, and their research projects more generally.

JHU Data Management Services

Supporting Data Management Plans: Guides for Grant Writers and Reviewers

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The U.S. National Science Foundation & other funders require Data Management Plans (DMPs), but they provide limited guidelines for proposal writers AND proposal reviewers. JHU DMS developed two guides for DMP creation, evaluation & consulting.

Reviewers’ Worksheet for NSF Data Management Plans

<table>
<thead>
<tr>
<th>Research product</th>
<th>Source</th>
<th>Format</th>
<th>Size</th>
<th>Preserved (how?)</th>
<th>Shared (how?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.g., tables, images, computer code, curriculum items, physical samples</td>
<td>Data repository</td>
<td>JSON, MARC, Excel, database, proprietary</td>
<td>1.5TB</td>
<td>discard, OA, public archive</td>
<td>by request, website, repository</td>
</tr>
</tbody>
</table>

Data management during project:

- If data is publicly accessible?
- When will data be shared?
- Who administers?
- Describes audience to benefit?
- Metadata and supplementary files explaining:
- Content, file structure, procedures, codebook, and standards
- Will convert files to non-proprietary formats
- Data sharing policy:
- Given conditions for re-use?
- Accounts for:
  - Privacy (personal identifiers)/security issues
  - Intellectual property (copyrights, patents)

Data retention after the project:

- Where is data preserved?
- How long?
- Who administers?
- Gives reasons for preserving data
- Using an archive or repository?

Services of archive (if specified for preservation and/or sharing data)

- Preservation activities
- Data sharing services
- Preservation services
- Data integrity checking
- Public access to data files
- Data repository
- Format & media migration
- Persistent data citation

Reviewers can use the worksheet as a printout or in Microsoft Word, either by entering information or as a visual reference when comparing proposals.

Stars indicate ‘extra credit’ details of more thorough plans

A section on archiving highlights the projects’ extra efforts at data sharing