Data Management Plan (DMP) Basics

SBIR/STTR projects will produce data, and applicants must determine whether that data will be disseminated publicly.

Determining which data should be shared and/or preserved

In determining which data should be shared and preserved, researchers must consider the data needed to validate research findings and are encouraged to consider the potential benefits of their data to their own fields of research, fields other than their own, and society at large.

- Data Management Plans (DMP) should reflect relevant standards and community best practices for data and metadata and make use of community accepted repositories whenever practicable.
- Costs associated with the scope of work and resources articulated in a DMP may be included in the proposed research budget as permitted by the applicable cost principles.
- To improve the discoverability of and attribution for datasets created and used in the course of research, the applicant is encouraged to cite publicly available datasets within the reference section of publications, and the identification of datasets with persistent identifiers such as Digital Object Identifiers (DOIs). In most cases, the Office of Science (SC) can provide DOIs free of charge for data resulting from DOE-funded research through its Office of Science and Technical Information (OSTI) Data ID Service[1].

Key Principles

1. DMPs should describe whether and how data generated in the course of the proposed research will be shared and preserved. If the plan is not to share and/or preserve certain data, then the plan must explain the basis of the decision (for example, cost/benefit considerations, other parameters of feasibility, scientific appropriateness, or limitations due to confidentiality and/or security concerns). At minimum, DMPs must describe how data sharing and preservation will enable validation of results, or how results could be validated if data are not shared or preserved.
2. DMPs should provide a plan for making all research data displayed in publications resulting from the proposed research digitally open, machine-readable and digitally accessible to the public at the time of publication. This includes data that are displayed in charts, figures, images, etc. In addition, the underlying digital research data used to generate the displayed data should be made as accessible as possible to the public in accordance with the principles stated in the DOE Requirements and Guidance for Digital Research Data Management.[2] This requirement could be met by including the data as supplementary information to the published article, or through other means. The published article should indicate how these data can be accessed.

[1] https://www.osti.gov/pids/doi-services/doe-data-id-service
[2] https://www.energy.gov/datamanagement/doe-requirements-and-guidance-digital-research-data-management

3. DMPs should consult and reference available information about data management resources to be used in the course of the proposed research. In particular, DMPs that explicitly or implicitly commit data management resources at a facility beyond what is conventionally made available to approved users should be accompanied by written approval from that facility. In determining the resources available for data management at SC User Facilities, researchers should consult the published description of data management resources and practices at that facility and reference it in the DMP.

4. DMPs must protect confidentiality, personal privacy, sensitive and protected personally identifiable information, and U.S. national, homeland, and economic security; recognize proprietary interests, business confidential information, and intellectual property rights; avoid significant negative impact on innovation, and U.S. competitiveness; and otherwise be consistent with all applicable laws and regulations. There is no requirement to share proprietary data.