

NSF Data Management Plan requirement overview.

The Data Management Plan (DMP) is a new NSF mandatory supplementary document for all research proposals submitted to the agency. <http://www.nsf.gov/bfa/dias/policy/dmp.jsp>
Each directorate, including the Engineering Directorate (ENG), and several of the divisions have prepared documents providing some specific directions and required elements for the DMP submission. The ENG document is at:
http://nsf.gov/eng/general/ENG_DMP_Policy.pdf

NSF policy now requires that “investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data ... created or gathered in the course of work under NSF grants.” The DMP specifies how the project data will be shared. The DMP is a maximum of two pages and will not count against the 15 page limit for proposal bodies.

The basic level of digital data to be archived and made available includes analyzed data (**not raw data**) and the metadata (descriptive data about the data) that define how these data were generated. **For Engineering Directorate grants, raw data from sensors or other instruments is not required to be archived.** The DMP must specify plans for the management and dissemination of data that are or should be published in refereed journal articles, and for supplemental data attachments for manuscript, book and book chapters, and other publications. The metadata elements will include descriptions or suitable citations of experiments, apparatuses, raw materials, computational code, and compute-calculation input conditions.

NSF assumes that DMP documents will be vetted and standardized through the review process. It is expected that a community of practice will evolve over the next several years. In all cases, the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate), should be documented along with any proposed solutions or remedies. These include:

- a. policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
- b. policies and provisions for re-use, re-distribution, and the production of derivatives; and
- c. plans for archiving data, samples, and other research products, and for preservation of access to them.

The DMPs for the Engineering Directorate have four required components or elements. We have put together a template document with suggested text to assist you in constructing the DMP for your NSF proposal. The template document includes example text and instructional comments for each of the four required elements. Our instructional comments are enclosed in brackets [....].