Data Infrastructure Building Blocks (DIBBS)

NSF Solicitation 14-530
Webinar -- January 27, 2014

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Agenda

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- Questions and answers

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The DIBBs Solicitation

- Seeks proposals that explore innovative, use-inspired infrastructure options (the 'building blocks') that contribute to future discovery and innovation across multiple disciplines
  - Guided by science and engineering research priorities
  - Built upon recognized community data collections
  - Implemented through collaborations between cyberinfrastructure experts and specific science and engineering research communities, to ensure continuing relevance

- Focus areas:
  - Pilot Demonstrations: up to 7 awards, each up to $500K per year for up to 3 years
  - Early Implementation Awards: up to 2 awards, each up to $1M per year for up to 5 years

Changes Since Last Time (2012 Solicitation)

Participating Organizations

- Seven Directorates (BIO, CISE, EHR, ENG, GEO, MPS SBE), and the Director's Office of International and Integrative Activities (EPSCOR and ISE), have participated in the development of this solicitation, and will participate in the proposal review and evaluation process.
- A Cognizant Program Officer from each organization is a member of the DIBBs solicitation management team.

Directorate Priorities:

- Each Directorate developed a statement of domain-specific priorities and data problems. The list is included in the Program Description section of the solicitation.
- The DIBBS program is guided by (and expects proposers to focus upon) innovative infrastructure addressing the research needs and priorities of these NSF science, engineering, and education communities.

Categories of Awards:

- This solicitation seeks two types of proposals: pilot demonstrations, and early implementations.
- Awards will be standard/continuing awards.

2014 DIBBS Solicitation: Schedule and Further Information

- Webinar — January 27, 2014
- Proposals Due — April 9, 2014
- Award Decision (anticipated) — August 2014

DIBBs Solicitation (NSF 14-530) available at:

http://www.nsf.gov/pubs/2014/nsf14530/nsf14530.htm

NSF Grant Proposal Guide (GPG) available at:

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg

Proposal Preparation / Project Description

Section V-A of the DIBBs solicitation contains detailed proposal preparation instructions.

The project description is limited to 15 pages, and must address the following:

- **Vision and Rationale**
  - scientific advance(s) motivating the data infrastructure building block
  - the impact on discovery and learning across disciplines
- **Activities**
  - research, education and training plans
  - Integrative components
  - plans for obtaining active user input
  - plans for assessment and evaluation
- **Management**
  - the organizational structure of the proposed team
  - a management plan identifying how the various project components interact and are brought together into a functional whole
- **Results from Prior Research**
  - directly and immediately relevant to this proposal

Proposal Submission

- Proposals must address:
  - the need within and across the scientific, engineering and education community for the proposed data cyberinfrastructure;
  - data elements and frameworks relevant to the specified community and the sustainability challenges to be addressed;
  - data storage architectures and lifecycle processes, development, testing and deployment methodologies, validation and verification of proposed data management techniques, and any additional measures addressing trustworthiness and data security;
  - usability and interface considerations, data curation and required infrastructure and technologies;
  - the required organizational, personnel and management structures, project plans and operational processes; and
  - a plan for governance and long-term sustainability of the data infrastructure as well as the data themselves.

- Additional documents:
  - Data Management Plan
  - Postdoctoral mentoring plan (if postdocs), list of conflicts
  - 1-page system design diagram (optional)

Proposal Review

- In their reviews, panel discussion, and panel summaries, reviewers and panel will address:
  - Intellectual Merit
  - Broader Impacts, and
  - DIBBs Additional Review Criteria

- Since January 14, 2013, the Intellectual Merit and Broader Impacts elements have had new guidance. Revised guidance for these two merit review criteria is available at http://www.nsf.gov/bfa/dias/policy/merit_review/resources.jsp.

- When evaluating NSF proposals, reviewers will consider:
  - What the proposers want to do
  - Why they want to do it
  - How they plan to do it
  - How they will know if they succeed
  - What benefits would accrue if the project is successful

  These considerations apply both to the technical aspects of the proposal (intellectual merit) and the way in which the project may make broader contributions (broader impacts)

Review Criteria Specific to the DIBBs Solicitation

- Rationale for the proposed capability;
- Ability to address data sharing issues and capabilities across scientific and engineering domains;
- Potential for extending proposed data capabilities to other research communities and domains;
- Appropriateness of the approach, ability to address cybersecurity challenges in data privacy, integrity and confidentiality, and specific steps that will be taken to implement the conceptual design of the proposed capability;
- Significance of milestones, and relevance of community/usage metrics, for each year of the award;
- Potential success of mechanisms used to reach out to engage users; and
- Effectiveness of the management plan.

Thank You!

These slides, an audio recording, and a transcript of this webinar will be available at http://www.nsf.gov/events/

Questions?

Please send questions to: DIBBsQueries@nsf.gov

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