Dear Colleague Letter: Special Guidelines for Submitting Collaborative Proposals under U.S. National Science Foundation (NSF) and the Department of Science and Technology (DST) of India Collaborative Research Opportunities

May 23, 2023

Dear Colleague:

The U.S. National Science Foundation (NSF) and the Department of Science and Technology (DST) of the Government of India have signed an Implementation Arrangement on research cooperation. The Implementation Arrangement provides a framework to encourage collaboration between U.S. and Indian research communities and sets out the principles by which joint activities might be supported. Through this research agency partnership, U.S. researchers may receive funding from NSF and India researchers may receive funding from DST respectively.

This NSF-DST collaborative research opportunity focuses specifically upon discoveries and innovations in areas of mutual interest that develop new knowledge in all aspects of computing, communications, and information science and engineering, advanced cyberinfrastructure, secure and trustworthy computing, and cyber-physical systems. Through a research agency partnership, NSF and DST will allow investigators from both countries to collaborate to write a single proposal that will undergo a single review process at NSF, the Coordinating Agency.

The collaborative opportunity described in this Dear Colleague Letter (DCL) remains in effect until archived.

Proposals will be accepted for collaborative research in areas within research divisions and participating NSF programs. The following programs are participating in this opportunity:

- CISE Core Programs (https://new.nsf.gov/funding/opportunities/computer-information-science-engineering-core)
- Cyber-Physical Systems (CPS) program - Directorate of Computer and Information
Proposals are expected to adhere to the research areas, funding limits, and grant durations for the participating NSF programs and for the DST programs from which funding is sought. As details vary by NSF program, U.S. Principal Investigators (PI) are encouraged to contact program directors of pertinent NSF programs for specific guidance.

Proposals must represent the collaborative effort describing the integrated US and India PI efforts including roles and responsibilities and means of collaboration. Eligible U.S. investigators must submit their proposal to the Small Project class of the CISE Core, CPS, and SaTC programs. The budget submitted by the U.S. investigators must be within the Small limit and will reflect U.S. research activities only. For U.S. Investigators, involvement in a joint international proposal will count towards the limit on the number of submissions, as specified in the NSF program webpage or program solicitation to which the proposal is submitted.

Investigators are advised that all documents submitted to NSF or DST may be shared with the other agency in order to implement the two-way agency activities.

PROPOSAL PREPARATION AND SUBMISSION

Proposals will be submitted to NSF, with a separate copy of the same proposal submitted by the India applicants to DST within one week of the NSF submission. The proposals will be reviewed by experts contacted by NSF, the Coordinating Agency, in competition with other proposals received for the same funding round of the program to which the proposal is submitted, using NSF's merit review process. DST will check that the Indian investigators have active and appropriate roles and confirm their eligibility at the onset of the process. DST officials may attend and observe any discussions as part of the merit review process of U.S.-India collaborative proposals submitted in response to this opportunity but will not conduct a parallel review. DST officials will have access to unattributed reviews and panel summaries where applicable. NSF intends to make awards to the U.S. investigators participating in the recommended collaborative proposals, and DST intends to make awards to the Indian investigators participating in the recommended collaborative proposals.

There are no separate NSF funds available for this effort; proposals must compete with all other proposals submitted to the CISE Core, CPS, and SaTC program competitions.

WHEN TO APPLY
U.S. investigators are encouraged to submit to NSF by the target date of August 15. Subsequent target dates will be listed on the website https://www.nsf.gov/od/oise/IntlCollaborations/India.jsp. Proposals submitted late in a given U.S. fiscal year (FY) may be held over for consideration in the following FY.

GUIDELINES

1. The proposed work submitted under an NSF-DST collaboration must represent an integrated collaborative effort. The Project Summary and Project Description of the proposal must include a description of the collaboration, including an explanation of the role(s) of the India collaborator(s) and an explanation of how the team will work together.

2. The proposal must describe the intellectual merits of the proposed research, including the value of the international collaboration and the anticipated broader impacts (including societal benefits) of the effort. As broader impacts are a review requirement for both NSF and DST, the proposal should include relevant societal benefits as well.

3. The proposal should describe the full proposed research program, including the total U.S. and Indian resources that will be part of the project. NSF investigators should indicate only the NSF expenses in the NSF budget. DST investigators should indicate only the DST research expenses on the DST budget form. The DST budget and budget justification must be included in the NSF proposal as a Supplementary Document. The Budget Justification section of the NSF proposal should clearly differentiate the NSF budget from any similar funds requested by the India team and justify the full NSF project budget. Proposals that request duplicative funding may be returned without review.

4. DST investigators will submit their full proposal as per DST guidelines that will be available at https://onlinedst.gov.in/.

5. NSF investigators must submit their proposal to a participating NSF program or program solicitation by a U.S. institution, using Research.gov (https://www.research.gov), or Grants.gov (https://www.grants.gov/). Proposals must be submitted in accordance with the standard requirements described in the NSF Proposal & Award Policies & Procedures Guide (PAPPG) and comply with requirements in the relevant programs' solicitation. Where programs have a solicitation, the requirements in the solicitation take precedence over those listed in the PAPPG.

6. By submitting, Principal Investigators (PIs) and their organizations agree that NSF may share unattributed reviews and information pertaining to the review process with DST.

7. For NSF Investigators, involvement in a joint international proposal will count towards the limit on the number of submissions in which an individual may participate as a PI, co-PI, or senior personnel, as specified in the NSF program page or program solicitation to which the proposal is submitted.
8. The title of the proposal should be prefixed with "NSF-DST:", after any solicitation-specific title requirements, to indicate that the document is to be considered by both NSF and DST.

9. If the proposal is submitted as part of a set of collaborative proposals, the title of the proposal should begin with "Collaborative Research:" followed by "NSF-DST". **Do not check "collaborative" proposal unless more than one U.S.-based organization will be submitting the same proposal for separate funding** (i.e., the "collaborative" check box only applies if there is more than one collaborating organization on the U.S. side, each submitting the same proposal).

10. For proposals submitted to NSF, DST Investigators should be listed as "non-NSF funded collaborators." This listing is for administrative purposes and is not intended to characterize the level or value of the contribution of DST investigators to the project. Guidance on information to provide for "non-NSF funded collaborators" is below.
   - Biographical Sketch – Required. The biographical information must be clearly identified as "non-NSF funded collaborators" biographical information and uploaded as a single PDF file in the Other Supplementary Documents section of the proposal. Use of a specific format is not required.
   - Current and Pending Support – Not required for DST investigators.
   - Results from Prior NSF Support – Not required for DST investigators.
   - Collaborators and Other Affiliations (COA) information should be provided through the use of the [COA template](#), identified as "non-NSF funded collaborators" information, and uploaded as a PDF file in the Single Copy Documents section of the proposal.

11. NSF investigators should indicate only the NSF expenses in the NSF budget. DST investigators should indicate only the DST research expenses on the DST budget form. The DST budget and budget justification must be included in the NSF proposal as a Supplementary Document including expenses in U.S. dollars. The Budget Justification section of the NSF proposal should clearly differentiate the U.S. budget from any similar funds requested by the India team and justify the full NSF project budget. Proposals that request duplicative funding may be returned without review.

12. The Data Management Plan must include mechanisms for sharing and archiving data including experimental data, results, and software developed and their associated privacy and security aspects.

13. For projects involving human subjects/participants or vertebrate animals, investigators should follow both NSF and DST policies, submitting documentation to each as appropriate.

14. Letters of collaboration may be included; however, they **must** comply with the requirements in PAPPG Chapter II.D.2.i.

15. For DST Investigators, there are limits on the number of submissions per NSF-DST call for proposals:
   - PIs can submit one proposal.
Co-PIs can be involved in up to two proposals.
DST Investigators involved in the implementation of two or more projects that were previously supported by the DST International Group and that are not expected to be completed by 31 December 2023 are not eligible to be a member of a research team. This limitation does not apply to projects supported by other divisions or groups within DST.

POST AWARD CONSIDERATIONS

Awardees will be expected to comply with the award conditions and reporting requirements of the agencies from which they receive funding.

Awardees will be required to acknowledge both NSF and DST in any reports or publications resulting from the award. Requests for changes in awards (for example, changes in scope) will be discussed by NSF and DST before a joint decision is made.

Questions about this DCL may be directed to india-collaboration@nsf.gov. Additionally, the NSF Office of International Science and Engineering helps to coordinate the overall engagement between NSF and DST. The current OISE program manager for India is listed at https://www.nsf.gov/od/oise/country-list.jsp.

Sincerely,

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