

NSF 24-092

Dear Colleague Letter: Planning Proposals for Large-scale Projects in Computer and Information Science and Engineering (CISE) in Eligible EPSCoR Jurisdictions

May 22, 2024

Dear Colleagues:

The National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) welcomes the submission of planning proposals from eligible institutions under the Established Program to Stimulate Competitive Research (ESPCoR) to expand geographic and institutional diversity in the CISE project portfolio. Through this Dear Colleague Letter (DCL), NSF calls for planning efforts for large-scale CISE research projects that enable sustainable capacity-building and competitiveness across EPSCoR jurisdictions, leading to success in CISE large-scale projects competitions. Collaborative proposals between EPSCoR and non-EPSCoR institutions, with EPSCoR institutions as the lead, are particularly welcomed. Participation by Minority Serving Institutions (MSIs) and Emerging Research Institutions (ERIs) in EPSCoR jurisdictions is especially encouraged.

This DCL reaffirms NSF's commitment to bolster research that engages diverse communities across EPSCoR jurisdictions and is responsive to the **CHIPS and Science Act** of 2022, Section 10325 (Expanding geographic and institutional diversity in research). NSF firmly believes in the immense untapped potential within EPSCoR jurisdictions and through this DCL is actively seeking planning proposals from research teams within ESPCoR institutions for the CISE large-scale projects competitions, defined below

A planning proposal is a type of proposal used to support conceptualization, planning and collaboration activities that aim to formulate new and sound plans for large-scale projects in emerging research areas for future submission to an NSF program. For guidance on the preparation of Planning proposals, see Chapter II.F.1 of the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG). This type of proposal is not intended to provide seed funding for a proposal that has been declined, nor is it appropriate for preliminary research on efforts that are aligned with established research programs. Rather, planning proposals are

appropriate for the development of larger-scale proposals in specific areas in which NSF wishes to ensure a sufficiently robust competition in the future. CISE is especially interested in activities that would catalyze new collaborations in EPSCoR jurisdictions, or among EPSCoR and non-EPSCoR jurisdictions but led by EPSCoR institutions, that broaden the participation of individuals or organizations underrepresented in larger-scale CISE award portfolios.

ELIGIBLE LARGE-SCALE PROJECT COMPETITIONS

Only planning proposals, led by eligible institutions from EPSCoR jurisdictions, aimed for future submissions to the following CISE competitions are eligible for this DCL:

Expeditions in Computing: provides the CISE research and education community with the opportunities to pursue large-scale, ambitious, fundamental research agendas that promise to define the future of computing and information.

Frontier Projects in Cyber-Physical Systems (CPS): investigates foundational issues of CPS to create capabilities well beyond today's CPS systems that address critical technical challenges across a wide range of application domains.

Secure and Trustworthy Cyberspace Frontiers (SaTC Frontiers): supports research centers addressing cybersecurity and privacy, drawing on expertise in one or more of these areas: computing, communication and information sciences; engineering; economics; education; mathematics; statistics; social and behavioral sciences.

CISE Core Programs, Large Projects: aims to support proposals on bold new ideas tackling ambitious and fundamental research problems in CISE that cross the boundaries of CISE core programs and are well suited to a large-scale integrated collaborative effort.

PLANNING PROPOSAL PREPARATION AND SUBMISSION

The Principal Investigator (PI) must hold a faculty appointment at an eligible institution within an EPSCoR jurisdiction and must be eligible to serve as PI on a proposal submitted to one or more of the participating large-scale projects competitions listed on this DCL.

There are two documents that must be submitted: a concept outline and the planning proposal. Upon the successful review of the concept outline, the PI will receive an email confirming approval to submit a planning proposal based on that concept outline.

REQUIRED CONCEPT OUTLINE:

Pls are advised that they must submit a concept outline prior to submission of a planning proposal. This will aid in determining the appropriateness of the work for consideration under this type of proposal. *Concept outlines* must be submitted by email to

Planning_DCL_EPSCoR@nsf.gov. Pls will receive an email from the cognizant NSF program officer that specifies whether a full proposal may be submitted. The email confirming approval to submit a planning proposal must be uploaded by the prospective PI in the "Program Officer Concurrence Email" section of Research.gov.

The following provides guidance regarding the preparation and submission of concept outlines:

- The concept outline title must begin with "Planning_DCL_EPSCOR: CISE Large:" or "Planning_DCL_EPSCOR: Expeditions:" or "Planning_DCL_EPSCOR: CPS Frontier:" or "Planning_DCL_EPSCOR: SaTC Frontier:" for submission to the corresponding CISE large projects competition.
- A minimum of two or more investigators (PI, co-PI, or other Senior/Key Personnel) with complementary expertise must be associated with a concept outline for planning proposals for large-scale projects in CISE.
- Concept outlines are strictly limited in length to 3 pages plus a half-page justification of the estimated budget, for a total of 4 pages, including references.
- An individual may appear as PI or co-PI on no more than one planning proposal submitted in response to this DCL.
- The first paragraph of the concept outline must describe the research idea with a clear explanation of why it is innovative, potentially transformative, or otherwise potentially impactful. Reasons why this project is appropriate for planning funding must be provided in a separate paragraph
- All correspondence, inquiries, and concept outlines must be submitted to Planning_DCL_EPSCoR@nsf.gov.

The correspondence permitting submission of a planning proposal can be expected approximately 3 weeks after submission of the concept outline.

PLANNING PROPOSAL:

Proposals must be prepared in accordance with the guidance for Planning Proposals specified in Chapter II.F.1 of the *NSF Proposal and Award Policies and Procedures Guide (PAPPG)* and submitted through Research.gov. Proposers should select the current PAPPG as the funding opportunity and direct proposals to the Directorate for Computer and Information Science and Engineering, Division of Computer and Network Systems, CPS-Cyber-Physical System program. Choose "Planning" as the type of proposal. For an invited planning proposal, this DCL allows only a **single proposal** submission with subawards administered by the lead organization. Separately submitted collaborative proposals from multiple organizations will not be accepted. The planning proposal title must begin with "Planning_DCL_EPSCOR: CISE Large:" or "Planning_DCL_EPSCOR: Expeditions:" or "Planning_DCL_EPSCOR: SaTC Frontier:" for

submission to the corresponding CISE large projects competition.

The following provides additional guidance regarding the preparation and submission of a planning proposal in response to this DCL upon approval of the concept outline by the cognizant NSF program officer:

- The Project Description is expected to be brief and must be no more than eight pages. It
 must include clear statements as to why this project is appropriate for a planning
 proposal, including how the funds will be used to formulate a sound approach for future
 submission to one of the participating CISE large projects competitions.
- The Project Description should also include an assessment of the EPSCoR jurisdiction's existing research capacity in the chosen CISE research topic areas and how a competitive research capacity building effort will be created and sustained.

Planning proposals do not constitute any commitment on behalf of the PI/co-PI(s) or their organizations to submit a future proposal or carry out a research, education, or infrastructure project, nor do they imply an intent on the part of NSF to support a future proposed project beyond the planning grant.

DCL PROGRAM MANAGEMENT TEAM:

The cognizant program directors for this DCL are:

- Mitra Basu, Division of Computing and Communication Foundations (CCF), telephone: (703) 292-8910, email: Planning DCL EPSCoR@nsf.gov.
- Dan Cosley, Division of Information and Intelligent Systems (IIS), telephone: (703) 292-8832, Planning DCL EPSCoR@nsf.gov.
- Ralph Wachter, Division of Computer and Network Systems (CNS), telephone: (703)
 292-8950, email: Planning_DCL_EPSCoR@nsf.gov.
- Danella Zhao, Division of Computing and Communication Foundations (CCF), telephone: (703) 292-4434, email: Planning_DCL_EPSCoR@nsf.gov.

IMPORTANT DCL DUE DATES

For full consideration in fiscal year 2024:

- 1. The PIs may submit their planning concept outline at any time, but no later than **June 15, 2024**.
- 2. Full planning proposals for the approved concept outlines should be submitted no later than **July 15, 2024**.

Concept outlines submitted after June 15, 2024 or full planning proposals submitted after July 15, 2024 may be considered, based on availability of funds, until **December 1, 2024**.

Questions should be directed to the cognizant program directors listed above, preferably by email to Planning_DCL_EPSCoR@nsf.gov.

Thank you for your unwavering dedication to advancing science and ensuring that all jurisdictions have equal opportunities to contribute to the national scientific enterprise. We look forward to receiving your planning proposals and the exciting possibilities they hold.

Sincerely,

Dilma Da Silva Acting Assistant Director, NSF CISE