Advanced Cyberinfrastructure Coordination Ecosystem: Services & Support (ACCESS) Program NSF 21-555 & NSF 21-556



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Manish Parashar, Office Director
Robert Chadduck, Alejandro Suarez, Tom Gulbransen
Office of Advanced Cyberinfrastructure (OAC)

Directorate for Computer & Information Science & Engineering (CISE)

NSF 21-555: http://go.usa.gov/xsT4W

NSF 21-556: http://go.usa.gov/xsT4k



Webinar Activities

- Set context for the ACCESS program
- Describe the ACCESS Program and objectives
- Detail Solicitations NSF 21-555 and NSF 21-556
- Answer questions from potential proposers



NSF Office of Advanced Cyberinfrastructure (OAC)

NSF's vision for a National Cyberinfrastructure Ecosystem for Science and Engineering in the 21st Century



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An agile, integrated, robust, trustworthy and sustainable CI ecosystem that drives new thinking and transformative discoveries in all areas of S&E research and education.



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Overarching principles:

- View CI more holistically
- Support translational research
- Balance innovation with stability
- Couple discovery and CI innovation cycle
- Improve usability



http://go.usa.gov/xm8bU

Cc Resources

Security Layers





NSF's vision for a National Cyberinfrastructure Ecosystem for Science and Engineering in the 21st Century

Community-informed blueprints provide implementation strategies for different elements of the CI ecosystem

Visioning / Community engagement

Blueprints

Solicitations



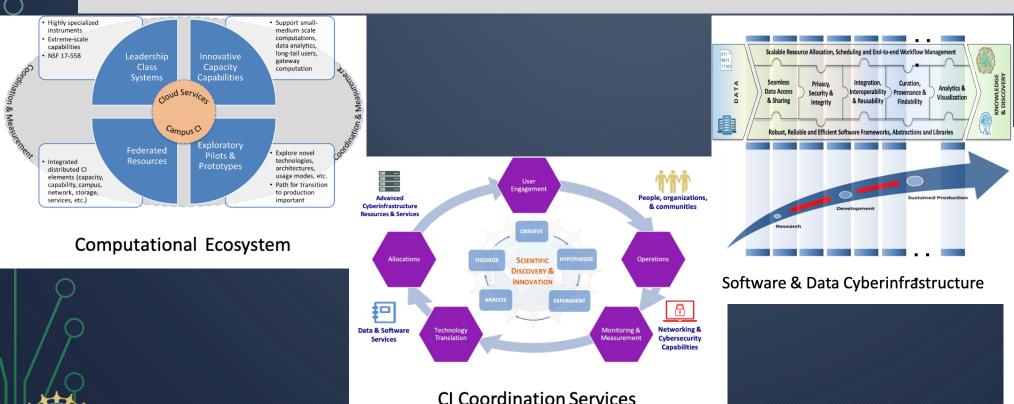
National Cyberinfrastructure Coordination Service Conference

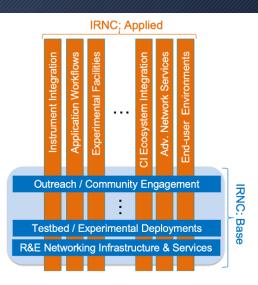
June 27-18, 2019 Alexandria, VA Goal: Rethink the nature, composition, and execution of NSF-supported national scale coordinated cyberinfrastructure services that are essential to 21st century science & engineering research and education

- Transforming Science
- It's an Ecosystem
- New Domains Served
- Spanning all Campuses
- Integrative Services
- Service and Resource Allocation

NSF's vision for a National Cyberinfrastructure Ecosystem for Science and Engineering in the 21st Century

Community-informed blueprints provide implementation strategies for different elements of the CI ecosystem



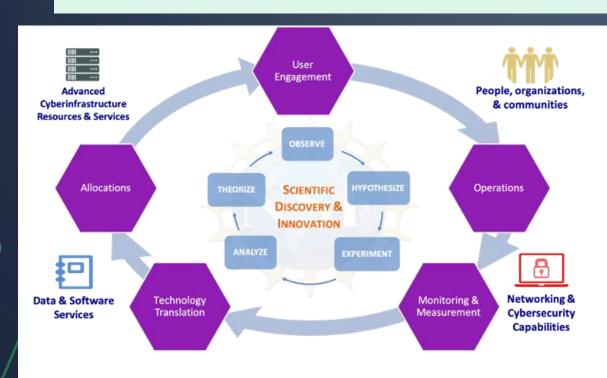


International R&E Networking

More information at: http://go.usa.gov/xm8bU

NSF's vision for a National Cyberinfrastructure Ecosystem for Science and Engineering in the 21st Century

Community-informed blueprints provide implementation strategies for different elements of the CI ecosystem



CI Coordination Services

- Scalability with size & breadth of community
- Flexibility in coordination and management
- Agility in operation and evolution

More information at: http://go.usa.gov/xm8bU

Advanced Cl Coordination Ecosystem: Services & Support / Coordination Office

ACCESS Service Tracks End User Monitoring & Technology Operations & Allocation Support Integration Measurement Translation Services Services Services **Services** Services Pilot / General User Allocation Operational M&M Development Assistance Services **Operations** Phase Support Operations Allocation & Utilization Data & Production Innovative Assistance Service Networking Phase **Pilots** Model Support Operations End User Training Data Technology Service Cybersecurity **Analytics Translation** Computational Support Model Framework **Pipeline** Science Support Network

ACCESS Coordination Office Services

Executive Council Communications & Outreach

Advisory Board

- ACCESS: NSF 21-555
- ACCESS-ACO: NSF 21-556



Realizing a National Research Infrastructure

S&E Researchers / NSF PIs

Integrative Application Workflows

Science Portals

Intelligent Data Delivery

Democratized Access for all of S&E

Allocations Services End User Support Services Operations and Integration Services Monitoring & Measurement Services

Translation Services

Integrative Coordination Services

Seamless Discovery, Sharing, Integration

Leadership Computing

Advanced Systems & Services

Cloud Services

Prototypes & Testbed

Campus Cl

Instruments / Edge Services

Data Sources

Advanced Computing Ecosystem



Description De

- •NSF 21-555 ACCESS Service Tracks
 - Requests proposals from organizations willing to serve as one of five independently-managed yet tightly coordinated service tracks.
- •NSF 21-556 ACCESS Coordination Office
 - Serve as a coordination office to support collective and coordinated operation of the ACCESS service tracks.



NSF 21-555

ACCESS Service Tracks

Allocation Services

> Allocation Services

Innovative Pilots

> Service Model

End User Support Services

General User Assistance

Allocation & Utilization Assistance

End User Training

Computational Science Support Network Operations & Integration Services

Operational Support

Data & Networking Support

Cybersecurity Support Monitoring & Measurement Services

M&M Operations

> Service Model

Data Analytics Framework Technology Translation Services

Pilot /
Development
Phase
Operations

Production Phase Operations

Technology Translation Pipeline

NSF 21-556

ACCESS Coordination Office Services



Executive Communications & Outreach

Advisory Board

Track 1: Allocation Services

- Budget: \$7,500,000 over a duration of five (5) years
- Relevant activities
 - Allocation Services
 - Innovative Pilots
 - Service Model



Track 2: End User Support Services

- Budget: \$10,000,000 over a duration of five (5) years
- Relevant activities
 - General User Assistance
 - Allocation and Utilization Assistance
 - End User Training
 - Computational Science Support Network



Track 3: Operations & Integration Services

- Budget: \$20,000,000 over a duration of five (5) years
- Relevant activities
 - Operational Support
 - Data and Networking Support
 - Cybersecurity Support
- Note: activities *not* expected to include helpdesk-level support specific to a given resource provider



Track 4: Monitoring & Measurement Services

- Budget: \$10,000,000 over a duration of five (5) years
- Relevant activities
 - M&M Operations
 - Service Model
 - Data Analytics Framework



Track 5: Technology Translation Services

- Budget: \$10,000,000 over a duration of five (5) years
- Relevant activities
 - Pilot/Development Phase Operations
 - Production Phase Operations
 - Technology Translation Pipeline



Note on planned activities for all tracks

 Expectations for each track's defined activities, their scope, and review criteria can be found in the Program Description, Proposal Preparation Instructions, and Additional Solicitation Specific Review Criteria sections of NSF 21-555



Note on connection to NSF 21-556 (ACO)

 Awardees in all tracks if NSF 21-555 will be expected to interface operationally with one or more other defined ACCESS service tracks and with a coordination function to be supported by NSF through the separate ACCESS Coordination Office (ACCESS-ACO)



NSF 21-555 Eligibility Information

- Who May Submit
 - Institutions of Higher Education (IHE)
- Number of Proposals per Pl or co-Pl: 1
 - An individual may be the PI on no more than one proposal that responds to this solicitation. An individual may also serve as a co-PI or senior personnel on proposals to tracks other than the track to which they have submitted a proposal as the PI.
- Limit on Number of Proposals per Organization: 1
 - An organization may submit only one proposal but may be a subawardee on other proposals responding to this solicitation.



NSF 21-555 Eligibility Information cont.

- Note on collaborative projects
 - Collaborative projects may **only** be submitted as a single proposal in which a single award is being requested (<u>PAPPG Chapter II.D.3.a</u>). The involvement of partner organizations should be supported through subawards administered by the submitting organization.
- Note on Eligibility constraints
 - These eligibility constraints will be strictly enforced in order to treat everyone fairly and consistently. In the event that an organization/individual exceeds this limit, the proposals received within the limit will be accepted based on the earliest date and time of proposal submission. No exceptions will be made.



NSF 21-555 Proposal Preparation Instructions

- Proposal titles: Must begin with "Track 1:" or "Track 2:", etc., depending on the track being proposed.
- Only personnel directly connected to the project should be listed as collaborators.
- The page limit for the Project Description: 25 pages.
- Please refer to the solicitation for more detail about content required in proposals.



NSF 21-556 ACCESS Coordination Office (ACO)

- Budget: \$5,000,000 over a duration of five (5) years
- Relevant activities
 - Executive Council
 - Advisory Board
 - Communications & Outreach
- NOTE: The ACO itself will not engage in overall management responsibilities for ACCESS but will enable the other ACCESS awardees to accomplish those activities.



NSF 21-556 Proposal Preparation Instructions

- Proposal titles: must begin with "ACO:".
- Only personnel directly connected to the project should be listed as collaborators.
- The page limit for the Project Description: 25 pages.
- Please refer to the solicitation for more detail about sectioning of defined activities within the project description.



NSF 21-556 Eligibility Information

- Who May Submit
 - Institutions of Higher Education (IHE)
- Number of Proposals per Pl or co-Pl: 1
 - An individual may be the PI on no more than one proposal that responds to this solicitation. An individual may also serve as a co-PI or senior personnel on proposals to tracks other than the track to which they have submitted a proposal as the PI.
- Limit on Number of Proposals per Organization: 1
 - An organization may submit only one proposal but may be a subawardee on other proposals responding to this solicitation.



Eligibility Information NSF 21-555 vs NSF 21-556

- Eligibility restrictions on NSF 21-555 and 21-556 are independent from each other.
- For Example, and organization/PI could, if desired, apply to NSF 21-555 within the its eligibility restrictions AND also apply to NSF 21-556 within its eligibility restrictions



NSF 21-555 & NSF 21-556

The Award Process

- Awards made for NSF 21-555 and NSF 21-556 are expected to be
 Cooperative Agreements
- Additional reporting requirements may apply. Such requirements will be negotiated with the PI institution prior to award and will be incorporated into the special terms and conditions of the award.



Summary

- Deadline (both NSF 21-555 and NSF 21-556): **June 16, 2021**
- Pay careful attention to eligibility information on each solicitation
- Specific Sections are required as part of the Project Description (see *Proposal Preparation Instructions*)
- The award tracks for NSF 21-555 are meant to be *independently* managed yet tightly cooperative.
- The ACO (NSF 21-556) is meant to provide support for governance/communication among ACCESS awardees and the public (**not** overall management of ACCESS).
- Solicitation specific Review Criteria apply



Q&A Session

PLEASE USE THE Q&A FUNCTION TO SUBMIT YOUR QUESTIONS



What is the anticipated start date for NSF 21-555 and NSF 21-556 awards?

• Awards for NSF 21-555 and NSF 21-556 are expected to be made in FY 2022, subject to the outcome of proposal reviews and availability of funds.



What is the expected duration of awards for ACCESS tracks and ACCESS-ACO?

•Awards from NSF 21-555 and 21-556 are each anticipated to be for a duration of five (5) years.



Are renewals possible for awards made by NSF 21-555 and NSF 21-556?

• Yes. For each award made in NSF 21-555 and NSF 21-556, there is a possibility of a renewal award contingent upon availability of funds, the successful evaluation of the awardee's performance, and NSF merit review of a renewal proposal.



Can I / my institution apply to both NSF 21-555 and NSF 21-556?

• Yes. Eligibility information on NSF 21-555 and 21-556 are **independent** from each other. Hence, an institution can submit and/or an individual may be PI on one proposal to NSF 21-555 and one proposal to NSF 21-556.



My institution does not qualify as an Institute of Higher Education (IHE). Would my institution be able to participate in NSF 21-555 or NSF 21-556?

• Yes. There are opportunities for an organization that is not an IHE to participate. As set forth in the solicitations, organizations that do not qualify as an IHE may not apply as the submitting organization for NSF 21-555 or NSF 21-556. Partnerships between an IHE and certain other organizations are allowed provided that all requirements specified in the NSF PAPPG and the solicitations are met.



I don't see a service provided by the current NSF-supported CI coordination services landscape in this solicitation. Will that service continue?

• The services currently being solicited are specific to calls NSF 21-555 and NSF 21-556. For more information about NSF's vision for the CI service ecosystem more broadly, visit NSF's blueprint a National Cyberinfrastructure Ecosystem for Science and Engineering in the 21st Century:

http://go.usa.gov/xm8bU



Will detailed knowledge about existing incumbent activities be required to prepare a successful proposal?

• No. NSF seeks innovative proposals that can drive new thinking and transformative discoveries in all areas of S&E research and education, including where applicable, the transition of certain existing activities to the proposer's vision. Proposals will be reviewed using the NSB approved merit review criteria, namely intellectual merit and broader impacts, and respective solicitation-specific review criteria. The XSEDE project and the XSEDE Metrics Service (XMS) project have made material, including documents labeled transition plans, available on their web presences. Any material presented by incumbent awardees on their web presences are the views of the awardee(s) and do not necessarily reflect those of the NSF.







Thank you!

- A recording of this webinar will be available at
 - https://go.usa.gov/xsync
- Further questions?
 - Robert Chadduck: <u>rchadduc@nsf.gov</u>
 - Alejandro Suarez: <u>alsuarez@nsf.gov</u>

