



INNOVATION FUND NOFO #1 INFORMATION SESSION

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

MAY 2023

Please note that today's session is being livestreamed and recorded to post online.

Agenda

- Welcome
- Overview of the Program and First NOFO
- Technical Overview
- NOFO Best Practices and Guidelines
- Panel Discussion
- Moderated Audience Q&A
- Closing Remarks



Overview: \$1.5B 10-Year Competitive Grant Program

PWSCIF aims to accelerate the adoption of open and interoperable 5G and future generation networks

- Promote and deploy 5G and future gen Open Radio Access Networks
- Accelerate commercial deployment of interoperable equipment
- Promote and deploy compatibility of new 5G equipment
- Manage integration of multi-vendor network environments
- Identify criteria for open standards-compliant equipment
- Promote and deploy security features
- Promote and deploy network function virtualization

Program Timeline

- January 1, 2021:** *FY 2021 NDAA* enacted
- August 9, 2022:** *CHIPS and Science Act* enacted
- January 24, 2023:** Listening Session
- January 27, 2023:** RFC comment period closed
- April 12, 2023:** NOFO published
- June 2, 2023:** NOFO application closes
- August 8, 2023:** Begin awarding funds

Through this Fund, NTIA is working to **drive wireless innovation, strengthen supply chain resilience, and unlock opportunities** for new and emerging companies to compete in the global telecommunications market. This will help us achieve a more diverse, sustainable, and competitive supply chain.



Notice of Funding Opportunity #1

Goal: Promote and improve the open and interoperable RAN testing and evaluation ecosystem, as well as research and development into test methods

T&E Activities: \$10 - 50m per award
Testing Methods R&D: \$250k - \$2m per award

Specific Research Focus Areas

- 1. T&E Activities** - Expand industry-accepted testing and evaluation to effectively facilitate and assess the interoperability, performance, and/or security of open and interoperable, standards-based 5G radio access networks
- 2. Testing Methods R&D** - Develop new and/or materially improve existing testing methodologies to test, evaluate, and validate the interoperability, performance, and security of these networks, including their component parts, in order to address needs not currently met by industry-accepted tests and best practices.

Additional Information

- Activities must take place in the U.S./U.S. territories
- **Eligible** applicants include for-profit companies, non-profit companies, institutions of higher education, industry groups, and consortia consisting of two or more such entities
- Foreign companies are **eligible** (*see: sect. 2.2*)
- Entities that raise unacceptable concerns regarding security, diversity, sustainability, and competitiveness are **ineligible**
- Cost sharing not required, but desired
- POP up to 5 years



Technical Overview

Technical Objectives:

1. Advancing Testing and Evaluation Capabilities

- Ensuring objective T&E is available on a level playing field and providing useful results

2. Researching Test and Evaluation Methods

- Developing nascent testing and evaluation methods for open, interoperable, and virtualized networks that provide meaningful information, to both product developers and customers, in a cost-effective manner



T&E Activities Breakdown

Focus: The current “state of the art” - *what we can learn today*

- ❑ Leverage **existing industry best practices** in testing interoperability, performance, and security to evaluate open and interoperable 5G radio access network products

- ❑ Provide **actionable information** to suppliers to improve products

- ❑ Provide actionable information to groups engaged in 5G and Open RAN standards and specifications to **further refine specifications and improve standardized conformance tests**

- ❑ **Improve transparency:** what is being tested, how it is being tested, what trends are we starting to see



R&D Breakdown

Focus: Filling in the gaps - *what are we missing today and how do we understand it going forward*

- ❑ Improve upon existing T&E methods that may **not be reliable or repeatable** between different suppliers
- ❑ Develop new T&E methods to **address developing needs** stemming from nascent approaches to 5G radio access networks that openness, interoperability, and virtualization present
- ❑ Ensure that new methods **bring value to the supply chain:** actionable data for suppliers, actionable data for customers, and in a cost-effective manner
- ❑ Investigate ways to **improve accessibility of useful information** through automated and virtualized testing
- ❑ Translate lessons learned into **industry-best practices** found in standards and specification groups and into any future certification regimes



NOFO Best Practices and Guidelines

- System for Award Management
- Grants.gov
- Multiple Project Submission Instructions
- Requirements for Consortium Applicants
- Budget Narrative and Justification
- Non-Federal Cost Share



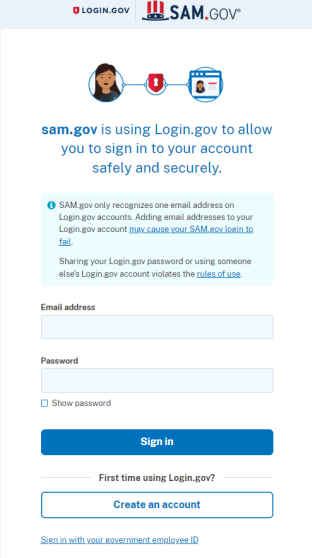
All entities applying through Grants.gov must register with the System for Award Management

Organizations must have an active System for Award Management (SAM) registration which provides a Unique Entity Identifier (UEI), and Grants.gov account to apply for grants.*

Receiving a SAM registration may take weeks. Please ensure registration is done in sufficient time so that it does not impact your ability to meet submission deadlines.

An active registration of the designated recipient is required at the time of an award.

**In the case of consortiums, the entity serving as the 'principal applicant' must register.*



The screenshot shows the sam.gov Login.gov sign-in interface. At the top, it displays the LOGIN.GOV and SAM.GOV logos. Below the logos is a graphic of a person's profile, a red shield with a white 'U', and a blue shield with a white 'S'. The text reads: "sam.gov is using Login.gov to allow you to sign in to your account safely and securely." A blue information box contains the following text: "SAM.gov only recognizes one email address on Login.gov accounts. Adding email addresses to your Login.gov account may cause your SAM.gov login to fail." Below this, it says: "Sharing your Login.gov password or using someone else's Login.gov account violates the rules of use." The form includes an "Email address" input field, a "Password" input field, and a "Show password" checkbox. A blue "Sign in" button is positioned below the password field. At the bottom, there is a "First time using Login.gov?" section with a "Create an account" button, and a link for "Sign in with your government employee ID".

Submitting an application through Grants.gov

Registering through Grants.gov

1. Register with SAM to receive a UEI
2. Register an account with Grants.gov
3. Add a profile to a Grants.gov account representing a single applicant organization (you will need your organization's UEI)
4. The EBiz POC will receive the request and must authorize the appropriate roles, including the Authorized Representative (AOR)

Submitting an application via Grants.gov

1. Create a Workspace
2. Add participants to the workspace to complete required forms and work on the application together
3. Submit the Workspace to submit the application. Grants.gov recommends submitting at least 24-48 hours prior to the close date

Important Submission Information

- **APPLICATION DEADLINE:** 11:59 pm (EDT) on June 2, 2023
- NTIA will only accept applications submitted electronically via Grants.gov
- Before you submit, confirm the latest and correct versions of your documents have been uploaded

For additional support on using Grants.gov, please visit: <https://www.grants.gov/web/grants/applicants/apply-for-grants.html>



Submission instructions for multiple projects

My organization is considering...	My organization should submit...
More than one distinct R&D project	<ol style="list-style-type: none">1. <u>Separate</u> application packages for each R&D project <p>- OR -</p> <ol style="list-style-type: none">2. One (1) application package with <u>separate</u> Technical Proposals, Budget Narrative and Justifications, and SF-424A forms
Both R&D and T&E projects	<u>Separate</u> application packages for each R&D and T&E project

Best Practices

- Clearly indicate in the Technical Proposal the specific research focus area and project sub-type(s)
- Name documents so they clearly indicate what the contents are and/or which project they are associated with



Requirements for Consortium Applicants

1

SELECT A PRINCIPAL APPLICANT

- Serves as the primary point of contact during the application period and post award
- Will be the signatory on the grant application

2

DESCRIBE THE CONSORTIUM

- Describe the key participants and the role each participant will play
- Describe the structure of the consortium and the benefits of applying as a consortium
- Submit documentation and evidence of the planned operating model, such as the working model, governance structure, decision-making authority/rights, contractual obligations, financial obligations, roles and responsibilities, and any memoranda of understanding

3

DEMONSTRATE CONSORTIUM MEMBER COMMITMENT

- Provide letters of commitment (or one letter with signatures from all members) evidencing each member has read the application and is committed to executing its roles, responsibilities, or commitments related to the application



Other Letters of Commitment

Who should submit Letters of Commitment?

- Partner labs who will be integral to the success of the project
- Consultants, sub-recipients, or subcontractors who will be actively involved in the project

Letters of Commitment should address:

- The organization's levels of participation
- The qualifications of personnel who will be actively involved
- How successful completion of the project will benefit open and interoperable 5G industry adoption
- Any voluntary committed cost share including specific services and/or products to be used in the project

Important Submission Information

- Included letters do not count against the Technical Proposal's page limit
- Letters must be signed by an individual with the authority to legally bind the organization to its commitment



Preparing the Budget Narrative and Justification

The Budget Narrative and Justification should:

- Only organize costs according to the cost categories in the SF-424A
- Provide itemization for each cost and a full description, including the necessity and basis of each charge
- Include funding levels consistent with the project scope
- Only reflect allowable costs consistent with the project's scope

Ineligible Costs Include

- Pre-application expenses including previously incurred administrative costs or previously purchased supplies or equipment
- Construction costs
- Equipment, supplies, and services from vendors designated as foreign entities of concern

Personnel Costs:

Job Title	Hours/Week	Rate	Commitment	Total Cost
Program Coordinator	20 Hours/Week	\$50 per hour	100 Weeks	\$100,000
Senior Researcher	40 Hours/Week	\$80 per hour	100 Weeks	\$320,000

Example details for items above:

Program Coordinator (\$100,000) – Staff time estimated 20 hours/week @ \$50 per hour for the duration of the program to complete mandatory grant management activities such as completing reports, responding to audit requirements, conducting budgetary activities, and other activities as required by the grantor. These activities are necessary to meet the reporting and compliance requirements of the grant program.

Senior Researcher (\$320,000) – Staff time estimated 40 hours/week @ \$80 per hour to design and execute testing methods as a part of the project. Staff will document testing methods and assessment criteria and support the execution across lab and field environments.



Applicants should ensure budget alignment before submission

Common Mistakes

- Budgets do not exactly match across the:
 - SF-424
 - SF-424A
 - Budget Narrative and Justification
- The budget narrative and justification includes cost categories that do not align with the SF-424A categories
- Total project costs mentioned in the executive summary or other narratives do not align with the budget documents
- **For applications proposing multiple distinct R&D projects:** The sum of the federal requests in the individual SF-424A forms do not match the total request in the SF-424 form

Best Practices

- Provide a summary table of budget information in the beginning of the budget narrative to aid in comparison across the application
- Clearly indicate line items that will be funded partially or completely by matching funds
- Ensure the latest versions of your budget materials are uploaded, and check over the entire application for cost alignment before submission



Non-Federal Cost Share

- There is not a mandatory cost share requirement
- NTIA will give preference to applications that demonstrate cost sharing in their project plan and project budget
- A full accounting of matching cost sources and the basis for the valuation must be included in the budget narrative and SF-424A

SECTION C - NON-FEDERAL RESOURCES					
	(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8.		\$ []	\$ []	\$ []	\$ []
9.		[]	[]	[]	[]
10.		[]	[]	[]	[]
11.		[]	[]	[]	[]
12. TOTAL (sum of lines 8-11)		\$ []	\$ []	\$ []	\$ []

Non-federal cost share amounts must be provided in Section C of the SF-424A, and exactly match the amounts in the SF-424 and budget narrative

Eligible Cost Share

- Direct costs (e.g., cash, equipment, personnel, and facilities)
- Indirect costs (e.g., overhead and management and administrative costs)
- For a proposed cost share to be eligible, the cost must be allowable as a direct cost



Panel Discussion and Moderated Q&A

Today's session is being livestreamed and recorded to post online

If you would like to ask a question during the audience Q+A, please use one of the standing microphones in either aisle. If you are unable to access the microphone or would prefer to stay seated, please raise your hand and we will bring a wireless microphone to you.



THANK YOU

EMAIL US AT: INNOVATIONFUND@NTIA.GOV