

NTIA's Public Wireless Supply Chain Innovation Fund

Digital Dialogue Webinar: US Government Financing for
Telecom Infrastructure Development
July 17, 2024





The Public Wireless Supply Chain Innovation Fund

What is the Innovation Fund?

The Innovation Fund is a **ten-year, \$1.5 billion grant program, focused on advancing open wireless network technologies**. Funded through the CHIPS and Science Act of 2022, the Innovation Fund will make major wireless investments as part of the Biden-Harris Administration's "Investing in America" agenda.

Why Invest in Open Radio Access Networks (RAN)?

The 5G equipment market is static and dominated by a few providers. Open RAN can disrupt this market concentration with its interoperability, which will making it easier for new suppliers to enter the market. **By transitioning to Open RAN, the U.S. and partner countries can help the wireless ecosystem flourish for 5G and beyond.**

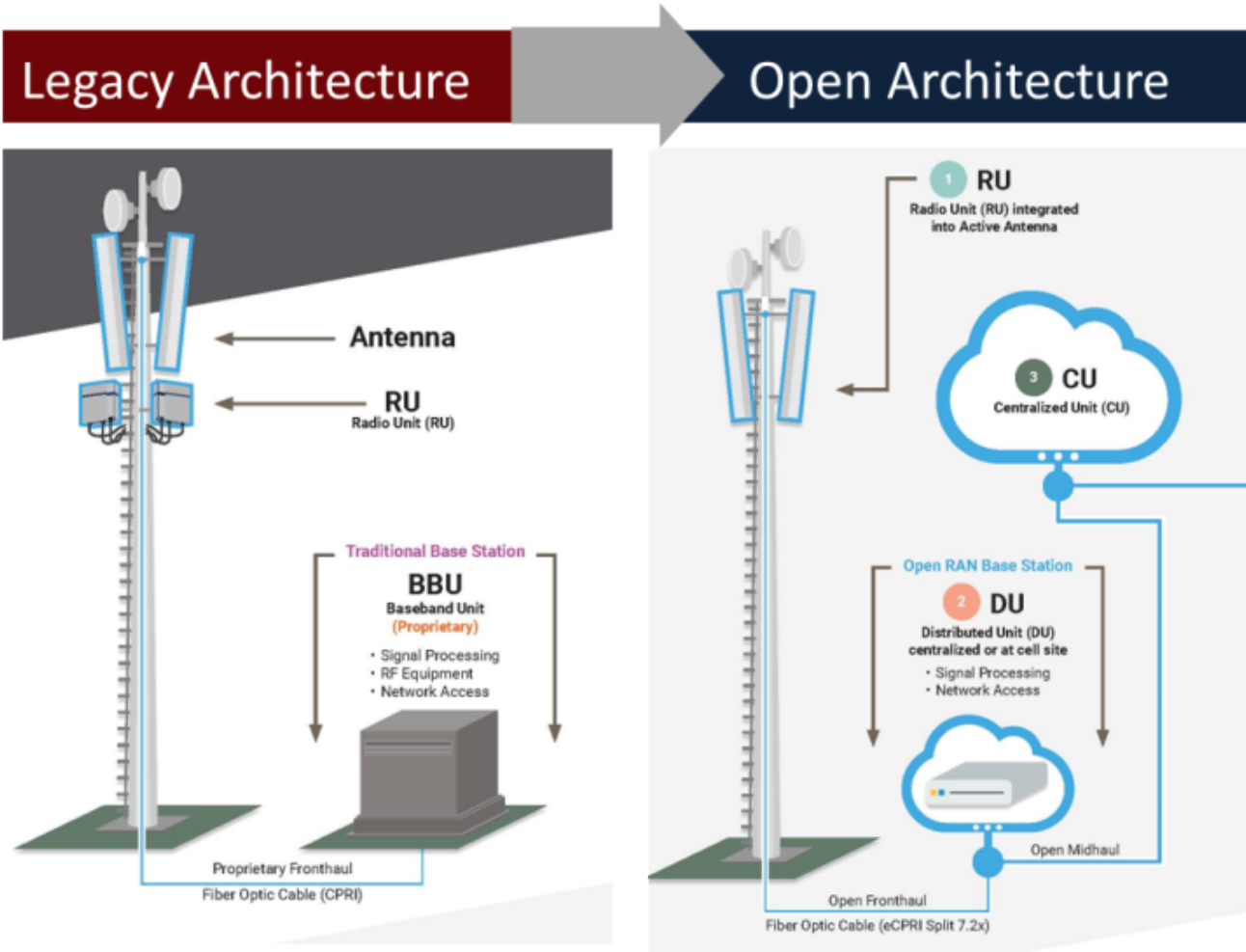
What will the Innovation Fund Accomplish?

- **Promote** 5G+ technologies that are secure, open, and virtualized.
- **Advance** the deployment of open and interoperable equipment.
- **Support** the integration of networks with multiple brands of equipment.
- **Identify** criteria to decide if equipment follows open standards.





Open RAN's Potential



Source: Open RAN Policy Coalition

A shift to Open RAN adoption:

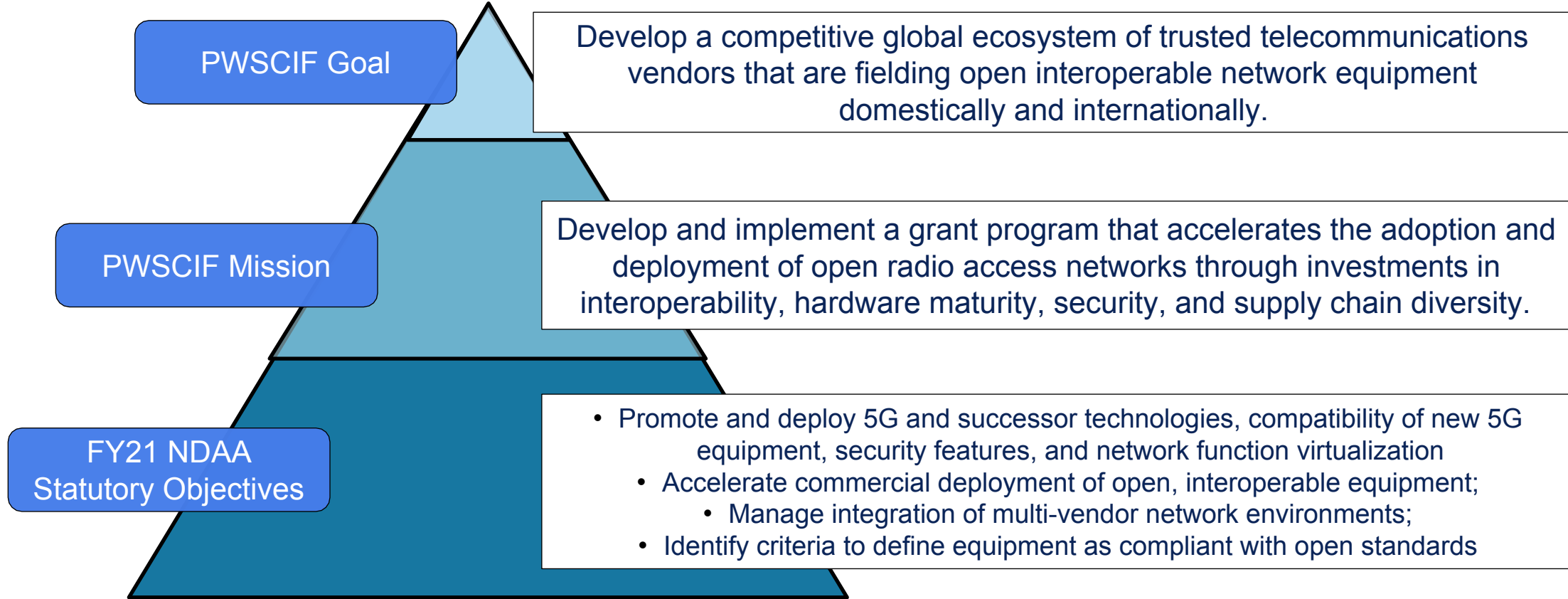
- Enables innovation and competition
- Reduces costs for consumers and operators
- Bolsters security/supply chain resilience

Open RAN is still relatively new and deployment at scale is challenging. Some of the challenges include:

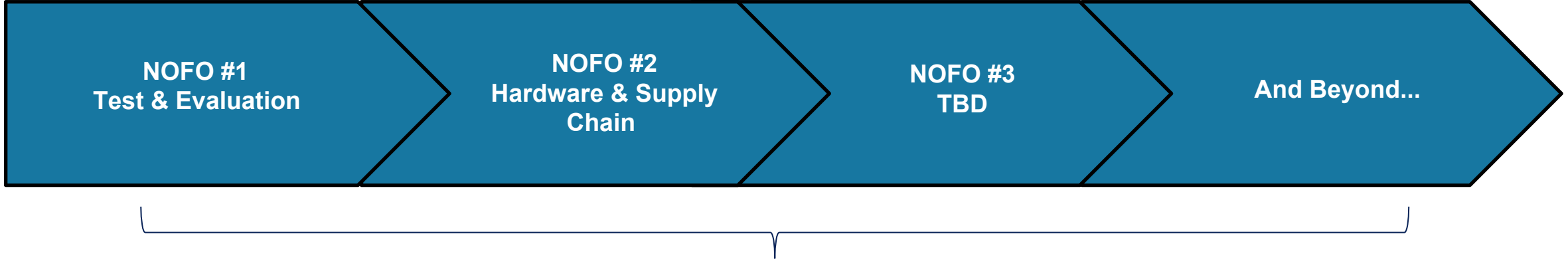
- Immature standards and specifications
- Limited commercial adoption
- Limited vendor ecosystem/capacity



PWSCIF Program Vision and Goals



Innovation Fund Approach



Minimum Viable Profile: Industry-led effort to develop baseline specification that enables rapid system level validation of open & interoperable networks.

We released NOFO 2 on May 7, 2024 and applications are due today, July 17, 2024.



NOFO #1 Snapshot



Funding Areas

- **Testing & Evaluation Facilities:** Making industry-accepted testing assessment for open wireless equipment more accessible throughout the United States. Access to affordable T&E is important to make the market more inclusive to new players and competitive.
- **Research & Development:** Promoting the development of new and/or improved testing methodologies, which will ensure that testing better prepares 5G open network technology for real-world deployments.

The Why

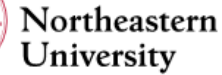
- 76% of respondents to the Fund's request for comment highlighted **interoperability testing as an investment priority.**
- The costs and logistical challenges of testing create real barriers for emerging wireless players. By investing in new testing infrastructure and methods, **the Fund can reduce barriers and increase competition.**



NOFO #1 Overview



\$140,443,216
INVESTED IN **17** GRANTEES





NOFO #1 Grantees

Testing & Evaluation					
\$50,000,000 DISH Wireless, Fujitsu, Mavenir, and VMware		\$21,714,112 VIAVI Solutions		\$42,299,693 AT&T, Verizon, NTT Docomo, and Reliance Jio	
Automation				Energy Efficiency	
\$1,989,783 Northeastern University	\$1,989,773 Northeastern University	\$1,731,182 Michigan State University	\$1,996,592 Northeastern University	\$1,964,462 Open Networking Foundation	\$1,943,101 Rice University
Security / Cybersecurity					
\$1,322,825 Mississippi State University		\$1,991,300 Booz Allen Hamilton		\$2,000,000 Virginia Tech	
Improved Testing Methods - Radio		Improved Testing Methods – Equipment/Software		Improved Testing Methods – Network Functions	
\$2,000,000 New York University	\$1,492,269 DeepSig Inc	\$1,999,984 PhasorLab		\$2,000,000 Virginia Tech	\$1,999,140 Cirrus360

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Bu belge, 5070 sayılı Elektronik İmza Kanununa göre Güvenli Elektronik İmza ile imzalanmıştır.

Evrak sorgulaması https://odaborsaebys.tobb.org.tr/tso-mersin-envision/Validate_Doc.aspx?eD=BS43L8VM0Y&eS=11795 adresinden yapılabilir.





Overview

- This 2nd Notice of Funding Opportunity (NOFO) invests in open **radio unit (RU)** commercialization and innovation. It is comprised of two *specific research focus areas* (“SRFA”):

SRFA 1 – Open RU Commercialization

- **Funding Range:** \$25,000,000-\$45,000,000.
- **Period of Performance:** 18-24 months.
- **Place of Performance:** RU development **must** be performed in the U.S. Testing for verification, validation, and demonstration may be performed outside of the U.S.
- **10% minimum cost share requirement.** Applications with 16% or more cost share will receive favorable weighting during Programmatic Review.
- **All applicants must** include a Letter of Partnership Intent with a Mobile Network Operator (MNO).
- **U.S. and international entities are eligible**, but either the applicant, an MNO partner, or both must hold Ultimate Beneficial Ownership (UBO) in the U.S., its territories, and possessions.

SRFA 2 – Open RU Innovation

- **Funding Range:** \$5,000,000-\$10,000,000.
- **Period of Performance:** 3-5 years.
- **Place of Performance:** All activities **must** occur in the U.S., its territories, and possessions.
- **No cost share** requirement.
- **No** partnership requirement.
- **U.S. and international** entities are eligible. Applicants may be based in the U.S. or abroad and are not required to hold UBO in the U.S., but place of performance requirements still apply.

Key Objectives

SRFA 1 – Open RU Commercialization: Accelerate the development of open RU products to the point where they meet carrier needs and are ready for commercial trials.

SRFA 2 – Open RU Innovation: Improve the overall performance and capabilities of open RUs through targeted research and development.

For more detailed information please visit: <https://www.ntia.gov/program/innovation-fund/grant-programs/round-2-2024>



Final Thoughts

- Innovation fund is leveraging investments to energize a global ecosystem of trusted telecommunications suppliers
- Industry involvement and investment is essential to the success of this Initiative
- Significant funding opportunities in the coming months and we encourage your participation
- Question or comments please reach out to **innovationfund@ntia.gov**





QUESTIONS?

Richard Upchurch

Policy Director, Public Wireless Supply Chain Innovation Fund

