

**MEMORANDUM OF AGREEMENT BETWEEN
THE NATIONAL SCIENCE FOUNDATION,
THE NATIONAL TELECOMMUNICATIONS AND INFORMATION
ADMINISTRATION,
AND THE FEDERAL COMMUNICATIONS COMMISSION
REGARDING THE SPECTRUM INNOVATION INITIATIVE**

I. PARTIES

This Memorandum of Agreement (MOA) sets forth an agreement between the National Science Foundation (NSF), the National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce, and the Federal Communications Commission (FCC) through which NTIA and the FCC will collaborate with the NSF to provide support on the development and implementation of the NSF Spectrum Innovation Initiative (SII).

II. AUTHORITIES

The authorities for this MOA, respectively, are:

- A. NSF: National Science Foundation Act of 1950, 42 U.S.C. §1861 et seq.
- B. NTIA: 47 U.S.C. §§ 902(b)(2)(H), (L)(iii)-(iv), (O).
- C. FCC: 47 U.S.C §§ 151, 154(i), 154(n), and 303(g).

III. PURPOSE

The purpose of this MOA is to facilitate the sharing of NTIA and FCC subject matter expertise to help ensure that NSF SII investments in spectrum research, infrastructure, and workforce development are in alignment with U.S. spectrum regulatory and policy objectives, principles, and strategies.

IV. BACKGROUND

In 2020, NSF launched the SII to seek advancements in the following three R&D areas: spectrum flexibility and agility, near real-time spectrum awareness, and improved spectrum efficiency/effectiveness through secure/autonomous spectrum decision making. The four key initiatives of the SII include: (1) National Radio Dynamic Zones (NRDZ); (2) National Center for Wireless Spectrum Research; (3) Spectrum Research Activities; and (4) Education and Workforce Development. More information about the NSF's Spectrum Innovation Initiative is available at https://nsf.gov/mps/oma/spectrum_innovation_initiative.jsp.

During Fiscal Year 2020, NSF released three funding opportunities for the SII:

- NSF 20-081 Dear Colleague Letter, entitled “NSF’s Spectrum Innovation Initiative and associated Supplemental, Funding Opportunities,” announced the SII program generally and outlined funding opportunities for supplemental support to existing NSF-owned-and-operated facilities, NSF platforms, NSF-supported projects, and NSF educational

programs directly related to spectrum innovation. Available at <https://www.nsf.gov/pubs/2020/nsf20081/nsf20081.jsp>.

- NSF 20-079 Dear Colleague Letter, entitled “Supplemental Funding Opportunity to explore feasibility of National Radio Dynamic Zones (NRDZ),” announced a supplemental funding opportunity to explore the feasibility of NRDZ. Available at <https://www.nsf.gov/pubs/2020/nsf20079/nsf20079.jsp>.
- NSF 20-557 Solicitation announced a funding opportunity for a new NSF SII National Center for Wireless Spectrum Research (SII Center). Available at <https://www.nsf.gov/pubs/2020/nsf20557/nsf20557.htm>.

The SII Center will serve as a focal point for sustained spectrum research that serves to establish partnerships or arrangements between universities; colleges; national laboratories; private sector research laboratories; federal, state and local government laboratories; and international organizations. The SII Center is also expected to educate and develop an agile workforce needed to support the regulatory and spectrum management activities of the NTIA and FCC, relating to federal and non-federal spectrum users, respectively, and the wireless industries of the future, which will rely heavily on advanced technology solutions and will require new automated spectrum management techniques. During Fiscal Year 2020, 17 NSF SII Center planning grants were awarded to groups intending to develop SII Center proposals to NSF.

The following provides a timeline for planned SII Center activities and deadlines:

- February 1, 2021 – NSF deadline for Letters of Intent to submit SII Center full grant proposals
- April 1, 2021 – NSF deadline for SII Center full grant proposals
- May/June 2021 – NSF merit review panel
- July 2021 – NSF awards SII Center

The SII Center award selection will follow established NSF procedures, including that:

- NSF will manage, organize, and conduct the review process of all proposals submitted to NSF, in compliance with the Federal Advisory Committee Act (FACA), as amended (5 U.S.C. App 2). Proposal receipt and compliance issues will be governed by NSF standards and procedures. NSF retains final decision in selection of all reviewers.
- Nothing in the MOA alters or amends NSF’s review processes, rules, and procedures, including NSF confidentiality policies, NSF conflict-of-interest rules and procedures, and use of NSF Form 1230P for all panel reviewers. NSF will inform reviewers that their unattributed reviews may be shared with other government agencies as part of this MOA.
- All confidential information, such as submitted proposals, any associated unattributed panel reviews, and panel summaries will be shared through secure file sharing systems and will be clearly marked as “confidential”.

V. AGREEMENT OF THE PARTIES

Subject to the availability of funds and consistent with the authority of each Party, the Parties agree that:

- A. The NSF, the FCC, and the NTIA, through their expert staff, will exchange information on leading edge and high impact research relevant to the NSF SII investments in spectrum research, infrastructure, and workforce development to help ensure those investments are in alignment with U.S. spectrum regulatory and policy objectives, principles, and strategies.
 1. Initial exchanges of information will occur prior to NSF making an SII Center award.
 2. Subsequent information exchanges will occur periodically, and may include reports and status briefings by NSF on NSF funded SII research, and discussions of new potentially impactful research topics.
- B. To promote ongoing impact at the national level from SII programs, the NSF may share information from SII proposals (including Letters of Intent, SII Center full grant proposals and NRDZ proposals) with the NTIA and the FCC, may discuss the shared information with the NTIA and the FCC, and may request feedback from NTIA and the FCC on the merit of SII proposals.
- C. NSF may revise existing or release future Dear Colleague Letters or solicitations under the SII program that may refer to this MOA. The NTIA and the FCC agree to consult on notices of funding opportunities that refer to this MOA.

VI. POINTS OF CONTACT

The points of contact for each of the Parties to this MOA are:

For the NSF

Name: Sean L. Jones
Title: Assistant Director, Directorate of
Mathematical and Physical Sciences
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For NTIA

Name: Charles Cooper
Title: Associate Administrator,
Office of Spectrum Management
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Name: Sheryl Genco
Title: Director, Institute for
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For the FCC

Name: Ronald T. Repasi
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The Parties agree that if there is a change regarding the information in this section, the Parties making the change will notify the other Parties in writing.

VII. OTHER TERMS AND CONDITIONS

- A. This MOA does not call for the transfer of funds between the Agencies. This MOA shall not be construed to obligate any particular expenditure or commitment of funds and/or resources by any of the Parties.
- B. This MOA shall become effective on the date of the last signature of the Parties and shall remain in effect for a period of two (2) years.
- C. This MOA may be amended at any time by mutual consent of the Parties. Such amendment shall be in writing clearly setting forth the terms and signed by each of the Parties.
- D. Each Party shall have the right to terminate this MOA and any amendments at any time for any reason and shall provide written notice to the other Parties at least thirty (30) days before such termination.
- E. This MOA may be executed in counterparts. Each counterpart may bear a penned or digital signature, which signature of or on behalf of the Party can be seen, and may be transmitted by mail, by hand, or electronically. Each counterpart shall be regarded as an original and all of them taken together shall constitute one and the same agreement.
- F. No provision of this MOA is intended to, and no provision of the MOA shall be construed to, limit or otherwise affect the authority of the FCC to administer, implement, or enforce any provision of any law subject to its jurisdiction.

Approved by the National Science Foundation:

_____ Date: _____
Sean L. Jones
Assistant Director, Directorate for Mathematical and Physical Sciences
National Science Foundation

Approved by the National Telecommunications and Information Administration:

Charles Cooper Digitally signed by Charles Cooper
Date: 2021.01.25 14:11:13 -05'00'

Date: _____

Charles Cooper
Associate Administrator, Office of Spectrum Management
National Telecommunications and Information Administration

Approved by the Federal Communications Commission:

Date: _____

Ronald T. Repasi
Acting Chief, Office of Engineering and Technology
Federal Communications Commission