Charter of the
National Advanced Spectrum and Communications Test Network

1. Purpose

The purpose of this Charter is to describe the mission, function, and structure of the National Advanced Spectrum and Communications Test Network (NASCTN) in support of the national need for improved spectrum sharing. The purpose of NASCTN is to improve opportunities for spectrum sharing through accurate, reliable, and unbiased measurements and analyses. It is the intent that organizations that are signatories to this Charter will work in good faith partnership in accordance with the roles and responsibilities identified to support this purpose.

This Charter also establishes the framework by which the National Institute of Standards and Technology (NIST), National Telecommunications and Information Administration (NTIA), other federal agencies and non-federal entities (hereafter referred to collectively as “MEMBERS”) perform their roles in providing the NASCTN functionality.

2. Background

Rapid advances in communications technology have fundamentally changed the way we as a Nation work and live. These advances, especially the rapid growth of mobile wireless devices capable of transmitting and receiving large quantities of data, have placed significant new demands on access to the electromagnetic spectrum. In order to continue to benefit from advances in technology in a way that balances demands for commercial broadband uses with the needs of national security and public safety, the United States (U.S.) must develop new capabilities to more efficiently and effectively share and utilize existing electromagnetic spectrum resources. Industry and U.S. Government Agencies, including the Federal Communications Commission (FCC), are increasingly relying on the technical analysis from equipment testing and measurements using sound engineering capabilities.

NIST and NTIA of the U.S. Department of Commerce (DOC), established the Center for Advanced Communications (CAC) in Boulder, Colorado to address, among other challenges, the increasing need for spectrum sharing testing and evaluation capabilities to meet national needs. NIST, NTIA, the Department of Defense, and various federal agencies are establishing a capability to facilitate rapid access to engineering and testing capabilities to address emerging spectrum-related testing needs that is referred to herein as “NASCTN.”
3. NASCTN's Mission

NASCTN's mission is to provide, through its MEMBERS, robust test processes and validated measurement data necessary to develop, evaluate and deploy spectrum sharing technologies that can increase access to the spectrum by both Federal agencies and non-federal spectrum users.

4. NASCTN Membership

In addition to the existing MEMBERS, other federal agencies, academic, and industry stakeholders may join NASCTN and become a MEMBER by executing this Charter with NIST and NTIA.

The guiding principles for NASCTN MEMBERS are to:

a. Provide a good faith effort to facilitate and coordinate work with federal, academic, and industry spectrum users to rapidly and cooperatively facilitate spectrum sharing and co-existence studies;

b. Work as a partnership to address the interests and equities of all spectrum stakeholders in a fair, equitable, and non-preferential manner; and

c. Through sharing of technical resources, with consideration for cost, provide liaison and support to coordinate and leverage existing national capabilities supporting government, academic, and industry testing and evaluation known to improve and expedite spectrum sharing and co-existence.

5. NASCTN's Functions

NASCTN, through its MEMBERS, will provide the following functions:

a. Creating a trusted capability for federal, academic, and industry spectrum users to facilitate spectrum sharing studies; optimize access to engineering and testing capabilities; and engage federal, academic, and industry spectrum users in active collaboration;

b. Performing outreach and engagement activities within their respective communities to identify spectrum-related testing and evaluation needs and to disseminate information about the availability and access requirements of engineering and testing capabilities;

c. Protecting controlled information (e.g., proprietary, classified, commercially sensitive) against unauthorized uses and disclosures pursuant to applicable statutes, regulations, and agreements while facilitating sharing of MEMBERS' controlled information when appropriate;

d. Facilitating access to available spectrum test data, analyses, and reports that can be made available to federal, academic, and industry spectrum users to assist in testing, technology assessments, and other research; and

e. Facilitating coordination, rapid access, and engagement of MEMBERS' engineering and testing capabilities.
6. Organization, Roles and Responsibilities

**NASCTN Organizational Structure**

**CAC**

CAC was established to provide a trusted, unbiased, world-class resource for addressing the complex challenges of advanced communications. The NASCTN-related responsibilities of the CAC include:

- Ensuring the validity and integrity of NASCTN measurements and tests
- Establishing the processes to maintain the fairness, transparency, and integrity of NASCTN
- Controlling the use of the term NASCTN to ensure that scientific merit, fairness, transparency and integrity are maintained
- Receiving, screening, and approving any NASCTN projects
- Reviewing, approving, and disseminating findings resulting from a NASCTN project
- Appointing a NASCTN Program Manager
- Convening an annual meeting of the NASCTN Charter signatories, or their designated representatives, to review the terms of the Charter and participate in a review of NASCTN
- Convening subcommittee meetings to discuss proprietary, classified, sensitive information as appropriate

**NASCTN Program Manager**

The responsibilities of the NASCTN Program Manager include:

- Managing NASCTN projects approved by the CAC
- Providing outreach material to MEMBERS to promote engagement activities that help identify spectrum-related issues and to identify organizations, both Federal and non-Federal, that have relevant engineering and testing capabilities that could be added to NASCTN test network
- Consulting with the MEMBERS on the efficient and effective operation of NASTCN
- Consulting with the MEMBERS on ways to improve NASCTN processes
- Convening NASCTN Member Committee meetings
NASCTN Member Committee

Each MEMBER may designate a representative to the NASCTN Member Committee, which serves as forum for discussing current spectrum-sharing issues, coordinating efforts to resolve these issues, identifying prospective NASCTN projects, and discussing additional MEMBER engineering and testing capabilities that may be needed to support future NASCTN projects. The representative serves as the point-of-contact to NASCTN for their organization, and is responsible to disseminating information regarding NASCTN projects to interested stakeholders within the representative’s organization.

In coordination with the MEMBERS, the NASCTN Program Manager will convene a meeting of the Member Committee a minimum of every quarter. The NASCTN Program Manager will develop meeting agendas and provide meeting minutes.

NASCTN Members

The responsibilities of the NASCTN MEMBERS include:

a. Making available, in accordance with their organization’s rules policies and regulations, engineering capabilities and test facilities with typical consideration for cost. MEMBERS will help expedite access to resources by establishing streamlined processes, pre-coordinating sharing agreements, and establishing fee-for-service policies and procedures for other MEMBERS. MEMBERS retain the right to refuse specific proposals that impact their technical resources.

b. Coordinating their efforts to identify, develop and test spectrum sharing ideas, concepts and technology to support the goal of advancing more efficient and effective spectrum sharing.

c. Making available information related to spectrum sharing, considering requirements for the protection of intellectual property, national security, and other organizational controls. The MEMBERS will also ensure they comply with the information handling requirements of the originating MEMBERS. To the maximum extent possible, allow the publication of NASCTN test results.

d. Ensuring all spectrum sharing efforts are identified to other interested MEMBERS.

e. Working with other MEMBERS to resolve disagreements. If agreement cannot be reached, MEMBERS may use their own approach but will refrain from referencing NASCTN in documentation.

NIST

NIST hosts the NASCTN capability at the DOC’s Laboratories in Boulder, Colorado. NIST will provide, when available, office space for MEMBERS’ staff and Subject Matter Experts (SME) as their primary NASCTN liaison office location, through a separate memorandum of understanding with a MEMBER as appropriate.
7. Funding

NASCTN is not an interagency organization and will not receive interagency funding in accordance with government-wide prohibitions established in applicable appropriations acts, most recently at section 708 of the Financial Services and General Government Appropriations Act, 2014 (Pub. Law 113-76, Div. E). Each MEMBER is responsible for its own costs associated with its membership in NASCTN. Funding for MEMBERS participating in a project will be determined on a project-by-project basis and by separate, appropriate agreements.

8. Term, Renewal, Modifications, and Termination

This Charter will be in effect for one year periods. The Charter will be reviewed each year and revised if necessary, with the revised Charter accepted upon mutual written agreement of the MEMBERS.

A MEMBER reserves the right to withdraw from NASCTN at any time, but shall provide the NASCTN Member Committee and NASCTN Program Manager written notice no later than thirty (30) days before the effective date of MEMBER’s participation termination.

By signing below, each party’s representative is affirming his or her authorization to bind that Party to the terms and conditions of this Charter.
For the National Telecommunications and Information Administration (NTIA):

Lawrence E. Strickling  
Assistant Secretary of Commerce for  
Communications and Information  

Date: 8/5/16

For the National Institute of Standards and Technology (NIST):

Willie E. May, Ph.D.  
Director and Under Secretary  
of Commerce for Standards and Technology  

Date: 8/12/16

For the Department of Defense Chief Information Officer (DoD CIO):

Mr. Terry Halvorsen  
Department of Defense Chief Information Officer  

Date: 22 June 2016