



OUR OUTREACH

Requests for Spectrum Sharing Measurements

NASCTN welcomes industry and government requests for Spectrum Sharing Projects that require accurate, reliable, and unbiased measurements and analysis performed by a trusted testing agent. Accepted projects impact U.S. spectrum-sharing goals, and can provide validated data in potentially contentious environments. (Use of NASCTN's unique capabilities employs a standard cost reimbursable model).

Stakeholder Engagement

NASCTN relies on a national network of Federal, academic, and commercial test facilities. Charter members are [NIST](#), [DoD CIO](#), [NTIA](#), [NOAA](#), [NASA](#), and [NSF](#), who contribute expertise and facilities to support tests and comprise the Steering Committee. Extensive public outreach is conducted throughout the test plan development and execution to ensure key issues are identified and the broadest dissemination of data. Other outreach activities identify future spectrum-related issues that would benefit from accurate and trusted test and modeling data.



Project Outcomes and Impact

Since NASCTN was founded in 2015, it has:

- Implemented 5 key spectrum sharing projects that brought together Commercial and Federal agencies
- Provided critical data to the DoD SST&D program for early entry of commercial wireless systems into the AWS-3 auctioned frequency bands
- Been accepted as a neutral body and provided key data for LTE and GPS policy discussions
- Enabled DoD test ranges to invest in protective equipment and processes to mitigate impact from future cellular equipment deployments

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NIST's mission is to promote U.S. innovation by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

Printed in the USA 05/2019

<https://www.nist.gov/communications-technology-laboratory/nasctn>

THIS IS NASCTN

Hosted by NIST's
Communications
Technology
Laboratory
(CTL)



CTL: THE HOST OF NASCTN

NATIONAL ADVANCED SPECTRUM AND COMMUNICATIONS TEST NETWORK



NIST is the hosting agency for NASCTN, which was established by the Department of Commerce (NIST and NTIA) and the U.S. Department of Defense (DOD) in 2015 in order to organize a national network of Federal, academic, and commercial test facilities that would provide testing, modeling, and analysis necessary to develop and deploy spectrum-sharing technologies and inform future spectrum policy and regulations. Previous NASCTN projects include the award-winning study on the impact of LTE signals on GPS receivers (2017 DOC Gold Medal).



OUR MISSION

To provide, through our 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. Key functions include:

- Develop scientifically rigorous test plans and new methodologies with independent experts
- Access to key test facilities, and Commercial and Federal equipment and capabilities
- Provide validated data and models for use within the spectrum sharing community
- Operate as a Trusted Agent and protect proprietary, sensitive, & classified information



PROGRAMS

NASCTN Charter members each bring unique capabilities, which are utilized as needed to meet the needs of each specific test investigation. Charter members include **NIST, NTIA, DoD, NASA, NSF, and NOAA**. Core skills and resources include:

- Metrology
- Statistical Analysis
- Design of Experiment
- RF, Radar, and Telemetry expertise
- Anechoic Chambers
- Commercial LTE Network
- Propagation modeling and measurements
- RSMS Vehicles & Portable RF measurement systems
- Federal Radars and Ranges