

The Biden-Harris Administration Releases National Spectrum Strategy

Article By:

Brian D. Weimer

Douglas A. "Drew" Svor

Jodi Goldberg

Emily Dalessio

On November 13, 2023, the Biden-Harris Administration issued a [National Spectrum Strategy](#) (the Strategy) and [Presidential Memorandum](#) on the modernization of U.S. spectrum policy. The Strategy, developed by the National Telecommunications and Information Administration (NTIA) in close coordination with the Federal Communications Commission (FCC) and other Executive Branch agencies, seeks to “guide decisions about how to allocate limited spectrum resources and ensure these decisions are made through a rigorous, transparent process.” The Strategy represents the Administration’s attempt to chart a “whole-of-Nation” approach to achieve national spectrum policy objectives.

The Strategy adopts and describes four pillars with several corresponding strategic objectives for “immediate and sustained attention and effort,” which in turn will help the U.S. Government “address spectrum challenges facing the Nation, including charting a path to satisfy current and future spectrum access requirements.”

The Secretary of Commerce, through NTIA, will now move to the next step of developing an implementation plan for the Strategy's four pillars described below:

Pillar One: A Spectrum Pipeline to Ensure U.S. Leadership in Advanced and Emerging Technologies

This first pillar seeks to ensure sufficient availability of spectrum resources for federal missions and private sector innovation over the long-term. To that end, the Strategy identifies five spectrum bands—totaling 2,786 megahertz of spectrum—for in-depth study to determine whether the target spectrum may be repurposed for expanded or more efficient governmental or non-governmental uses. In addition to spectrum bands already under consideration by the FCC for potential repurposing, the Strategy further identified:

- 3100-3450 MHz – for potential sharing between the Department of Defense and non-Federal users;
- 5030-5091 MHz – for limited deployment of unmanned aerial vehicles;
- 7125-8400 MHz – for potential wireless broadband use on a licensed or unlicensed basis;
- 18.1-18.6 GHz – for expanded Federal and non-Federal satellite operations, consistent with the U.S.'s WRC-23 position, including for space-to-space links; and
- 37.0-37.6 GHz – for potential co-equal, shared use between Federal and non-Federal users.

The Strategy takes care to note that making this spectrum available for study “does not prejudge the outcome” and that all, part, or none of the spectrum may ultimately be repurposed.

Pillar Two: Collaborative Long-Term Planning to Support the

Nation's Evolving Spectrum Needs

Under the second pillar, the Strategy seeks to develop a framework that fosters collaboration between Federal and non-Federal stakeholders to expand opportunities for spectrum access and harmonious coexistence across all sectors, as guided by the best available science and data. This collaborative process will help the United States determine key elements necessary to evaluate spectrum allocations that can meet the nation's spectrum needs and maintain its position as a global technology leader. To that end, the U.S. Government will implement an open-ended solicitation process for users to articulate future spectrum needs and ensure that such needs can be considered as part of the long-term planning process.

Pillar Three: Unprecedented Spectrum Innovation, Access, and Management Through Technology Development

The third pillar commits the U.S. Government to “set measurable goals for advancing the state of technology for spectrum access, with an emphasis on dynamic forms of sharing.” The Strategy requires that Federal spectrum users incorporate spectrum efficiency requirements early in their acquisition of spectrum-utilizing systems and implement advanced technologies and operational techniques to maximize coexistence with other users. Non-Federal users are encouraged to “strive to incorporate” spectrum efficiency requirements, where possible, into their acquisition of spectrum-based systems. Federal and non-Federal users are also encouraged to explore new technologies, including artificial intelligence and machine learning, as potential tools for more efficient spectrum sharing.

To further improve the nation's collective understanding of the

electromagnetic spectrum, the White House Office of Science and Technology Policy, in coordination with other Federal agencies, is tasked with developing a National Spectrum Research and Development Plan (R&D Plan) to identify key areas for spectrum research and development. The R&D Plan will consider recommendations developed through the collaborative framework implemented under the second pillar.

The Strategy also commits NTIA to establish a national testbed for spectrum sharing for the purpose of evaluating the nation's most pressing spectrum access challenges from a "band agnostic" and technology neutral position to devise solutions across a range of possible bands. The testbed is intended to act as a demonstration platform, and help advance spectrum access technologies within the next 12 to 18 months.

Pillar Four: Expanded Spectrum Expertise and Elevated National Awareness

The final pillar recognizes a diverse, broad-based workforce as "essential to foster innovation and to keep up with technological advancements, meet the growing demand for spectrum access, navigate our complex policy landscape, and maintain the Nation's continued economic growth." As part of its commitment to a whole-of-government approach, the U.S. Government will develop and periodically update a National Spectrum Workforce Plan, that will help ensure there is a well-trained workforce to fill critical spectrum-related jobs across industries.

What does the Strategy mean for industry stakeholders?

The Strategy highlights the Administration's emphasis on spectrum as essential for the continued technological leadership of the

United States. However, more work must be done before the U.S. Government can implement the objectives articulated in this framework. The Strategy designates NTIA, in collaboration with the FCC and other Federal agencies, to prepare and publish within 120 days an Implementation Plan for the achievement of each strategic objective and outline the estimated amount of time required to do so.

To facilitate the development of the Implementation Plan, NTIA is seeking public input on the implementation of the Strategy.

Comments are due January 2, 2024.

Copyright © 2024, Sheppard Mullin Richter & Hampton LLP.

National Law Review, Volumess XIII, Number 335

Source URL: <https://natlawreview.com/article/biden-harris-administration-releases-national-spectrum-strategy>