



July 20, 2021

The Honorable Eddie Bernice Johnson  
Chairwoman  
Committee on Science, Space and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, D.C. 20515

The Honorable Frank Lucas  
Ranking Member  
Committee on Science, Space and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, D.C. 20515

Dear Chairwoman Johnson and Ranking Member Lucas:

The GPS Innovation Alliance (GPSIA) is pleased to submit this letter in support of today's hearing entitled, "Spectrum Needs for Observations in Earth and Space Sciences."

As the gold standard for positioning, navigation, and timing (PNT) services, GPS is vital to our national and economic security and relied upon by a myriad of industries, including aviation, agriculture, automotive, construction, electricity, finance, public safety, and transportation. These applications have come to depend on GPS because of its ability to provide a high degree of accuracy and resiliency.

To preserve and advance GPS, it is critical that the Federal Communications Commission (FCC), which maintains responsibility for licensing the commercial spectrum, operate in close coordination with the expert federal agencies whose missions and responsibilities include management, operation, and reliance upon GPS. Through a truly shared decision-making process, no single agency would have exclusive authority over spectrum matters where both commercial and federal users are involved. The enclosed letter to the White House National Economic Council, dated February 16, 2021, outlines our recommendations for improving the federal spectrum decision-making processes.

We appreciate the opportunity to share our perspective and stand ready to work with your Committee in support of policies that protect vital satellite-based services including GPS.

Sincerely,

A handwritten signature in black ink that reads "David Grossman".

J. David Grossman  
Executive Director  
GPS Innovation Alliance

Attachment



February 16, 2021

Mr. Brian Deese  
Director, National Economic Council  
The White House  
1600 Pennsylvania Avenue, NW  
Washington, D.C. 20500

Dear Mr. Deese:

The Global Positioning System (GPS) will continue to play a key role as the Biden Administration seeks to bring wireless broadband to all Americans and strengthen the country's economy so that businesses and individuals can thrive in a post-pandemic world. GPS is an American innovation, fueling \$300 billion in economic benefits every year. With an estimated 900 million GPS receivers, GPS has become a fundamental technology across nearly every sector of the U.S. economy, including agriculture, transportation, construction, electricity, and finance. In many of these industries, the use of GPS has produced substantial environmental benefits, such as reduced carbon emissions, increased water efficiency, and waste reduction. GPS is also a critical tool used by our military and first responders.

That is why strong and unified leadership by the U.S. government is needed to preserve and advance GPS – leadership that recognizes the inherently unique functional and technical attributes of GPS. As a satellite-based navigation system, GPS operates in a manner that is distinctly different from terrestrial-based communications services. Given the fundamental differences in power and function between the two, it is paramount that policy formulation draw upon the expertise of the U.S. Space Force and Department of Transportation (DoT), the U.S. government's lead military and civilian agencies, respectively, for the criticality of GPS to their missions and operations. These agencies' views must continue to be a core element in any federal actions that may affect GPS.

Today, these and other federal agencies that support the GPS program, coordinate their spectrum management requirements and positions through the National Telecommunications and Information Administration (NTIA), while the Federal Communications Commission (FCC) maintains responsibility for licensing the commercial spectrum. Each has a necessary and important role to play in spectrum policy. Unfortunately, though, activities leading up to the adoption of the FCC's April 2020 *Order*, authorizing the deployment of a nationwide terrestrial wireless network by Ligado Networks, LLC (Ligado), demonstrate that the current coordination process needs reform.<sup>1</sup> For example, in the Ligado case, despite the stated objections of

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<sup>1</sup> Consistent with the terms of their litigation settlements with Ligado, Garmin International, Inc. ("Garmin") and Deere & Company ("Deere") do not affirmatively endorse or oppose the deployment of Ligado's proposed communications network. GPSIA is not authorized, and does not purport to speak for Garmin or Deere with respect to this letter's discussion of the Commission's April 2020 decision in the *Ligado Order*.

13 federal agencies and departments, the FCC proceeded independently, ignoring expert federal agencies whose missions and responsibilities include management, operation, and reliance upon GPS.

Inter-agency disputes involving spectrum, though, are not unique to GPS. In recent years, the FCC has found itself at odds with NTIA and other federal agencies on spectrum allocated for intelligent transportation systems (5.9 GHz) and with spectrum located near satellites used for weather forecasting (24 GHz). While GPSIA takes no position on the substance of these matters, they reflect a continued pattern by which shared decision-making is replaced by the FCC acting with exclusive authority as the final arbiter. These decisions have enormous implications for our nation's economy, including GDP growth and job creation, as well as national defense and should, therefore, be made in collaboration with the federal agencies responsible for managing and/or using these incumbent systems and services.

As Members of Congress on a bipartisan basis have observed, we must consider ways to enhance this process for the benefit of all spectrum users. GPSIA agrees and suggests the following several ways that the existing expertise needed to preserve and advance GPS operations and benefits can best be incorporated into the federal spectrum decision-making processes:

- Updating the 2003 Memorandum of Understanding (MOU) between the FCC and NTIA. The current version of this document was signed nearly 20 years ago, at a time when spectrum was highly stovepiped for federal and non-federal users; thus, disputes were neither as frequent nor complex. An update of the MOU must reflect this changed and still evolving landscape, with an emphasis on establishing a formal process for resolving Executive Branch and FCC disputes, such as occurred in the FCC's Ligado proceeding. If necessary, Congress could consider codifying this aspect of the MOU in statute, ensuring that shared decision-making authority between the two agencies is fully embraced.
- To ensure the FCC has in-house expertise relating to GPS and other technologies that use spectrum, GPSIA recommends that the Commission's Office of Engineering & Technology maintain a detailee from one of the federal agencies responsible for managing the GPS program. This would ensure that when the FCC's technical communications experts must address positioning, navigation, and timing (PNT) issues involving GPS, they have the benefit of relevant expertise.
- Each FCC Commissioner would also benefit from having his or her own technical advisor. A practice that was discontinued years ago and proposed once again in bipartisan legislation more than a decade ago, it would ensure that, as Commissioners tackle increasingly complex technical matters, they have the benefit of an electrical engineer or computer scientist on their staff.
- Finally, we would encourage a focus on Executive Branch preparations and leadership for the ITU World Radiocommunication Conference in 2023, to ensure

that the Administration views are appropriately developed and executed in the ITU and regional bodies that participate in the WRC. Ensuring that the Administration's priorities are advanced requires a whole of government approach, with appropriate level engagement, funding and staffing at the Department of State and the NTIA.

GPSIA and its members stand ready to be a resource to the NEC and others in the Administration seeking to more efficiently allocate spectrum, while protecting critical incumbent systems and services. We thank you for your attention to these issues and for your leadership in advancing economic growth and job creation through spectrum policy.

Sincerely,

A handwritten signature in black ink that reads "David Grossman". The signature is written in a cursive, slightly slanted style.

J. David Grossman  
Executive Director  
GPS Innovation Alliance

cc: Hon. Evelyn Remaley  
Hon. Jessica Rosenworcel  
Hon. Brendan Carr  
Hon. Geoffrey Starks  
Hon. Nathan Simington