FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 14, 2024

The Honorable Mike Gallagher
U.S. House of Representatives
1211 Longworth House Office Building
Washington, DC 20515

Dear Representative Gallagher:

Thank you for letter regarding allegations that U.S. mobile wireless devices are receiving and processing unauthorized Global Navigation Satellite Systems (GNSS) signals in violation of the Federal Communications Commission's rules. I share your concern for the safety and resiliency of our communications systems, and under my tenure at the agency we have addressed a broad range of equipment and manufacturing issues designed to safeguard our essential communications infrastructure and protect related national security interests.[1]

The Commission is aware of concerns raised by individuals that some mobile wireless devices or other devices operating in the United States may receive and process signals from GNSS constellations that are not authorized to operate in this country. The Commission has

[1] *See, e.g.*, *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Third Report and Order, 36 FCC Rcd 11958 (2021) (adopting rules to implement the Reimbursement Program to remove from the U.S. communications infrastructure, and replace, certain communications equipment and services that had been determined to pose an unacceptable risk to national security or the security or safety of U.S. persons); *Protecting Against National Security Threats to the Communications Supply Chain through the Equipment Authorization Program*; *Protecting Against National Security Threats to the Communications Supply Chain through the Competitive Bidding Program*, ET Docket No. 21-232 and EA Docket No. 21-233, Report and Order and Further Notice of Proposed Rulemaking, 37 FCC Rcd 13493 (2022) (revising the Commission's equipment authorization program to prohibit authorization of any communications equipment identified on the Commission's Covered List based on determinations pursuant to the Secure and Trusted Communications Networks Act of 2019 that such equipment poses an unacceptable risk to national security of the United States or the safety and security of United States persons); *In the Matter of Cybersecurity Labeling for Internet of Things*, PS Docket No. 23-239, Report and Order, (FCC 24-26), (rel. Mar. 15, 2024) (adopting new voluntary IoT Labeling Program to strengthen the nation's cybersecurity posture by providing consumers with an FCC IoT label (a U.S. government certification mark referred to as the Cyber Trust Mark) for products that meet certain minimum cybersecurity standards). In addition, later this month the Commission will consider adoption of a Notice of Proposed Rulemaking proposing and seeking comment on steps the Commission should take to promote the integrity and security of Telecommunications Certification Bodies (TCBs) and test labs, to which the Commission has delegated certain important roles in implementing our equipment authorization program, by ensuring that they are not adversely influenced through direct or indirect ownership by entities identified on the Covered List, and potentially on certain other lists, as raising national security concerns). *See Promoting the Integrity and Security of Telecommunications Certification Bodies, Measurement Facilities, and the Equipment Authorization Program*, ET Docket No 24-136, FCC-CIRC2405-01 (public draft), https://docs.fcc.gov/public/attachments/DOC-402325A1.pdf..

launched an inquiry into the matter. When we have received responses to our inquiries, the agency staff will conduct a complete and thorough investigation.

While Commission procedures do not allow for commenting on ongoing investigations and require us to treat information pertaining to targets of any investigation as non-public and confidential, I can share with you information about the agency's rules and authorities regarding GNSS constellations.

The Communications Act of 1934, as amended, provides the Commission with broad authority to regulate non-Federal communications. National security is cited in the very first sentence of this law, which directs the Commission to regulate communications for, among other things, the purpose of national defense and to promote public safety.[2] The agency has long used this authority to promulgate rules and regulations, including those related to GNSS. More specifically, pursuant to this law, the Commission has exercised authority over GNSS receiving devices in both Part 25 and Part 15 of its rules. The former governs satellite-based transmissions and the later governs unintentional radiators such as GNSS receivers.[3]

Rule 25.102 requires Commission authorization to use or operate space or earth stations. Specifically, Section 25.102 states that "no person shall use or operate…signals by space or earth stations except under…authorization granted by the [Commission]."[4] For this reason, any GNSS provider, including foreign countries, must seek agency approval before a person in the United States is permitted to operate with that foreign GNSS provider's network. Part 25 rules also require licensing of non-Federal receive-only equipment operating with foreign satellite systems, including receive-only earth stations operating with non-United States licensed radionavigation-satellite service satellites unless that radionavigation-satellite system is authorized by the Commission operate in this country.[5]

As global systems, GNSS signals are generally ubiquitous in our skies, but mobile wireless devices receiving and processing these signals in the United States may be doing so in a manner at odds with our rules. While some individuals have shared concerns with the agency regarding this situation, we presently lack a detailed record regarding the extent to which mobile wireless devices might be receiving and processing unauthorized signals and what security threats, if any, may result. That is why, as noted above, the Commission's Enforcement Bureau is investigating the extent to which devices are in compliance with agency rules and what vulnerabilities, if any, may exist in the way they receive and process GNSS signals.

As you note, Galileo is the sole non-United States GNSS constellation that has sought Commission approval for operation. This authorization was granted in 2018. While I cannot speculate as to why no other non-United States GNSS constellation has sought comparable Commission approval, I want to be clear that we have a transparent process in place for any foreign administration to do so. When such a request by a foreign government is made, it is first

[2] 47 U.S.C. § 151
[3] *See* 47 CFR §§ 25.115(b)(9), 25.137; 47 CFR § 15.5.
[4] 47 CFR § 25.102(a).
[5] 47 CFR § 25.115(b)(9).

examined by the National Telecommunications and Information Administration (NTIA). NTIA, in consultation with other relevant Executive Branch agencies, considers whether:

(1) granting the waiver is in the public interest;

(2) the system complies with international space debris mitigation guidelines;

(3) grant of the waiver is consistent with United States international trade and other treaty obligations;

(4) the waiver request is limited to receive-only radionavigation-satellite service (RNSS) (which includes positioning) and standard time and frequency satellite services; and

(5) operation of the RNSS signals offered by the foreign RNSS system are found to be compatible with United States government systems operating in the specified RNSS frequency bands.

If NTIA determines the request meets these criteria, NTIA may recommend that the Commission grant a waiver of its licensing requirements for receive-only equipment processing certain signals offered by the foreign satellite system. Upon receiving NTIA's recommendation, the Commission conducts its own review and analysis of the waiver request to determine if the signals offered by the foreign system are compatible with non-federal or commercial United States-licensed systems, which includes seeking public comment on the matter.

Generally, the more GNSS signals a device receives, the greater the accuracy in determining position. Deployment and activation of the full constellation of next generation United States GPS satellites would place additional United States GNSS satellites in orbit to broadcast higher power, larger bandwidth signals, including on the L5 signal. This deployment is important because an increase in signals would support the ability of GPS-enabled handsets and other devices to determine positioning, navigation, and timing with greater accuracy and resilience.

I appreciate your interest in this matter and welcome further discussion of the agency's authority over GNSS systems and devices that utilize their signals, including any legislative efforts you or your colleagues may wish to advance. Please let me know if I can be of any further assistance.

Sincerely,

Jessica Rosenworcel