

1. Telecommunication Products : G/TBT/N/USA/1727/Rev.1/Add.3 dated 11 January 2024

Notifying Member	United States of America
Type of Notification	Addendum to Regular Notification
Economic relevance	Very High “ USD 2543.39 Mn ”
Technical Relevance	Technical-New

Proposal in brief

- a. The U.S. Federal Communications Commission (Commission or FCC) has published the final rules to adopt rules to permit the very low power (VLP) devices to operate with up to 5dBm/MHz effective isotropic radiated power (EIRP) power spectral density (PSD) and 14 dBm EIRP across the U-NII-5 (5.925-6.425 MHz) and U-NII (6.525 -6.875 MHz) portions of the 6 GHz band.
- b. VLP devices are poised to facilitate novel and innovative applications, offering opportunities to augment emerging uses. These applications span diverse domains, including but not limited to augmented reality/virtual reality, in-car connectivity, wearable on-body devices, healthcare monitoring, short-range mobile hotspots, high-accuracy location, and navigation, as well as automation.
- c. The maximum power spectral density must not exceed -5 dBm e.i.r.p in any 1-megahertz band and the maximum e.i.r.p must not exceed 14 dBm.
- d. The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure.
- e. The rules the Commission is adopting are designed to support innovation to bring exciting new applications to market while protecting the important licensed services that operate in the 6 GHz band from harmful interference.
- f. Operational restrictions of VLP devices in 5.925 – 7.125 GHz band includes:
 - a. Usage in oil platforms
 - b. Land vehicles e.g., cars, trains.
 - c. Boats
 - d. Aircrafts (excluding large aircrafts flying above 10,000 feet)
 - e. For control of or communications with unmanned aircraft systems.
 - f. All U-NII transmitters except they employ a contention-based protocol.
 - g. Not allowed to mount on outdoor structures, such as building or poles.
 - h. Shall employ a transmit power control (TPC) mechanism.
- g. The Commission is constraining the allocation of frequency bands due to a predominant emphasis within the technical record on the potential for interference to fixed microwave links, which currently constitute the predominant uses of the specified portions of the 6 GHz band.

Analysis

- a. The Commission intends to propose the expansion of Very Low Power (VLP) device operations to encompass the U-NII-6 and U-NII-8 segments of the frequency band, specifically designed to support mobile operations.
- c. The conclusive regulation will come into effect on March 8, 2024.

