

6 GHz Unlicensed (Part 15)

Advancing Wi-Fi and Other Air Interfaces in Common Use



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WITHOUT
BOUNDARIES

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Advances in 6 GHz (Part 15) Unlicensed Moving Towards a New Available Band that is Truly Available

- **Standard Power Devices** – Requires use of an AFC System(s) for operations.
- **FCC Approving AFC Systems Operators for Full Operation** – (Pending, Presently Conditional)
- **6 GHz Standard Power Devices in FCC Compliance Test and Certification** (Approval Pending per FCC)
- **Band Opening to the Public:** Completion of Public Trials with AFC System Operators (Done) and Public Notice(s) by the FCC.



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6 GHz Band – A Mix of Shared Uses – Licensed and Unlicensed

- **6 GHz Point-to-Point Backhaul (Licensed):** An incumbent in the band. In use.
- **6 GHz Low Power Indoor (LPI) Unlicensed:** 1200 MHz of available spectrum. Authorized by the FCC as “Open for Use” - the ecosystem has begun operations.
- **6 GHz Standard Power Outdoor Unlicensed (Coming Soon):** 850 MHz of available spectrum: Band opening Pending FCC Approval.
- **Very Low Power (VLP):** VLP has been approved by FCC R&O, but operational regulations and standards have not been approved. Pending FCC approval and rules. In question are a) geofencing to protect incumbents; b) use of AFC Systems; c) geolocation.



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6 GHz is Extensible from 5 GHz and Provides Access to Wide-Channel Sizes and Selections

- AFC Systems to protect incumbent uses.
- Large channel sizes (up to 320 MHz).
- Advanced air interfaces with the future in mind.
- Midband access and connections.
- Economies of scale.

Some 6 GHz Part 15 SPO References

- Part15 Rules for 6 GHz Standard Power Outdoors:
https://apps.fcc.gov/kdb/GetAttachment.html?id=4iuZjuFgWiNypCLVpSN3cQ%3D%3D&desc=987594%20D01%20U-NII%206GHz%20General%20Requirements%20v01r03&tracking_number=277034
- <https://6ghz.wirelessinnovation.org> WinnForum 6 GHz AFC Standards – See also Wi-Fi Alliance
- 5.925-7.125 (6 GHz Band) – SPO: 5.925-6.425 and 6.525-6.875 GHz