

mmWave Coalition

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Chair of mmW Coalition Steering Group

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mmWave Coalition

- Frequencies above 95 GHz are underdeveloped in the U.S. because of a lack of an adequate regulatory framework for their use.
- The mmWave Coalition is a group of companies advocating for the FCC to:
 - Open large contiguous blocks of spectrum from 95-275GHz to enable commercialization fixed and mobile systems above 95GHz
 - Provide flexible rules for experimentation
 - Provide greater regulatory certainty for obtaining authority for terahertz spectroscopy
- The Coalition already had a win with FCC adopting its first set of rules on March 15, 2019, but there is still more work to do.
- We also serve as a forum for technical discussions on > 95GHz frequency range.

More info @ <https://mmwavecoalition.org/>

How to join the mmW Coalition

- An MoU to sign.
- The Coalition has contracted Goldberg, Godles, Wiener & Wright LLP (“G2W2”) for “housekeeping” and technical consultant Dr. Michael Marcus for the work.
- Annual Contribution is \$5k for a large company (annual revenues of 250 million USD or more), \$100 for an Academic Institution and \$1.5k for others. There is an MoU to sign which has more details. Each member can nominate one person to act as its “Principal” representing it on the Steering Committee (currently chaired by Nokia).
- Join the Coalition now to make yourself heard and influence the on-going FCC’s above 95GHz rules to create new business opportunities for your company or academic institution.

FCC's first Spectrum Horizons Report and Order (March 2019)

- Create a new category of experimental licenses for the 95 GHz to 3 THz range (a Spectrum Horizons License).
 - These licenses would offer increased flexibility compared to conventional experimental licenses by providing for longer license terms, license transferability, and the ability to sell equipment during the experimental term.
- Make 21.2 gigahertz of spectrum available for unlicensed use.
 - Unlicensed spectrum would span several band segments (116-123 GHz, 174.8-182 GHz, 185-190 GHz, and 244-246 GHz).
 - Rules for unlicensed use would be based on those currently in place for unlicensed use of the 57-71 GHz band.

Unlicensed Band in Draft R&O	Bandwidth (GHz)
116-123 GHz	7
174.8-182 GHz	7.2
185-190 GHz	5
244-246 GHz	2

Next steps in the mmW Coalition's advocacy work

The following should be addressed:

1. licensed spectrum for fixed and mobile use;
2. contiguous spectrum blocks of 20 GHz or more;
3. greater regulatory certainty for obtaining authority for terahertz spectroscopy;
4. coordination with NTIA to strike a better balance to protect passive services above 95 GHz while still allowing for other uses and capital investments that will bring about new services and applications in the spectrum;
5. RF safety rules above 100 GHz.