

June 13, 2018 Ex Parte Meeting

Regarding FCC Docket Numbers GN 18-122 and 17-183

Expanding Flexible Use of Mid-Band Spectrum

Encina Communications Corp.

Critical Need For More Spectrum

There is a critical need for more spectrum for:

- ❖ Fixed Service (for 4G/5G backhaul and access)
- ❖ Mobile (4G and 5G)
- ❖ Nomadic (WiFi)

The Opportunity to Modernize the Rules

By modernizing Part 101 Rules to take advantage of today's fixed, mobile and nomadic equipment capabilities the Commission can increase the efficient and effective use of spectrum.

Benefits from Modernizing the Rules

- ❖ Minimize the blockage of new applicants
- ❖ Carrier-Grade broadband for rural subscribers
- ❖ Provide service in previously unserved locations
- ❖ Coexistence of Fixed, mobile and nomadic services on the same licensed frequency.
- ❖ Opens up newly available spectrum.

Proposed Rule Changes – 1 of 4

Minimum Path Length

Change: Rule 101.143 -- We recommend that for PtMP networks, the EIRP below the minimum path length specified in Rule 101.143 be changed from a formula to a maximum of 50 dBm.

Benefit: Makes it possible to operate at all distances below the minimum path length.

Proposed Rule Changes – 2 of 4

Sector Antennas

Change: Rule 101.115(a) – *~~“Unless otherwise authorized upon specific request by the applicant, each s~~ Stations authorized under the rules of this part must employ a directional antenna adjusted with the center of the major lobe of radiation in the horizontal plane directed toward the receiving station with which it communicates: provided, however, where a station communicates with more than one point, a multi- or omni-directional antenna ~~may be~~ is authorized ~~if necessary~~. New Periscope antenna systems will not, under ordinary circumstances, be authorized.”*

Benefits: Eliminates unnecessary delay after successful prior coordination, dramatically lowers monthly recurring antenna lease charges, blocks far fewer new applicants,

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Proposed Rule Changes – 3 of 4

Small Directional Antennas

Change: Rule 101.115(b), add the following footnote:

“Non-compliant antennas (antennas not meeting Category A specifications) are authorized on the condition that they must not cause harmful interference and must accept harmful interference pursuant to Rules 101.103 and 101.115(c). When Rule 101.115(c) requires the licensee of a station using a non-compliant antenna system to upgrade to a higher performance antenna, the licensee must comply with the requirement within thirty (30) days.”

Benefit: Makes it possible to provide licensed carrier-grade broadband services to underserved communities.

Proposed Rule Changes – 4 of 4

Safe Mobile & WiFi Operation in FS Spectrum

Change: New Rule (see following slide)

Benefit: Safe operation of nomadic and mobile devices in Part 101 bands without disrupting existing licensees.

Proposed Rule Changes – 4 of 4 (cont'd)

New Rule:

Unlicensed nomadic or mobile devices can be operated by a PtP licensee from either or both of the licensed Stations 1 and 2 provided:

- i. The unlicensed nomadic and mobile devices are only permitted to transmit after they are connected to a licensed station identifying itself as having the capability of communicating with unlicensed nomadic or mobile devices,*
- ii. The maximum antenna gain of the unlicensed device is limited to 6 dBi,*
- iii. The unlicensed device EIRP is limited to 36 dBm,*
- iv. The interference from any unlicensed device arriving at a licensed or new license applicant's station is less than the interference from the licensed Stations 1 or 2.*
- v. The unlicensed devices are secondary and therefore must accept all interference.*

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Conclusion

Spectrum is a finite and precious national resource and it cannot be manufactured.

With minor changes to the Rules, spectrum can be put to more productive use, and thereby help mitigate the spectrum crisis without disrupting existing fixed service licensees, fixed satellite service licensees or new applicants.