

October 5, 2018

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**EX PARTE FILING OF ENCINA COMMUNICATIONS CORPORATION
RE NOTICE OF PROPOSED RULE MAKING
ET DOCKET 18-295 UNLICENSED USE OF THE 6 GHz BAND AND
EXPANDING FLEXIBLE USE IN MID-BAND SPECTRUM
GN DOCKET NUMBER 17-183**

Dear Ms. Dortch:

On October 4, 2018, Michael Mulcay and Frank Bucceri of Encina Communications Corp. (ECC) met with Julius Knapp, Chief, Office of Engineering & Technology (OET) and his staff -- Nicholas Oros and Becky Schwartz -- as well as Donald Stockdale, Chief, Wireless Telecommunications Bureau. And in separate meetings we met with Rachael Bender, Wireless Advisor to Chairman Pai; and Umair Javed, Wireless Advisor to Commissioner Rosenworcel.

We discussed the October 2, 2018 release of NPRM ET Docket 18-295 and the benefits of expanding the proposed rulemaking to include adding one new Part 101 rule and modifying Rules 101.115 and 101.143.

ECC's initial opinion is that the U-NII based proposition in the NPRM is unproven in the 6 GHz band, and will therefore require extensive testing to prove that it can be safely deployed, so it could be years before it is approved.

As time is of the essence in which to safely make 6 GHz spectrum available to unlicensed 5G mobile and Wi-Fi devices, ECC believes it is in the public interest for the Commission to consider expanding the NPRM to incorporate a second feature -- a Simple, Proven and Safe way of making the entire 5.925 GHz – 6.425 GHz band available for unlicensed 5G mobile and nomadic Wi-Fi devices -- to give industry the opportunity for commenting on the ability to use one or both features.

Simple -- There is only one new Part 101 rule and only minor changes to Rules 101.115 and 101.143.

Proven -- It has been demonstrated over several decades that the prior coordination procedures of Rule 101.103 for new stations in Part 101 frequency bands ensure that the new station will not cause harmful interference into existing radio systems.

Safe -- Prior coordinating a base station and unlicensed devices within a geo-fenced area around the base station under Rule 101.103 ensures that the unlicensed devices (in a 4 square mile area around a station) will not cause harmful interference in the 5.925 GHz – 6.425 GHz band.

ECC's feature consists of only 1 new Rule plus 2 Rule changes. (*See Appendix 1 – Proposed Rule Addition/Changes.*)

In addition, we discussed that licensing and prior coordination fees & paperwork are incurred by the ISP -- not the end user -- and are an extremely small portion of the ISP's monthly costs (SG&A, fixed asset depreciation, etc.). This will therefore have no impact on the “free” use of Wi-Fi in coffee shops, airports, hotels, homes, etc. (though carriers can be expected to charge for higher speed, new apps and enhanced features).

Also covered: There is presently a debate¹ between the Fixed Wireless Communications Coalition (FWCC) and the Wi-Fi Alliance (WFA) as to whether uncontrolled indoor RLAN operation poses serious interference risks. Whatever the outcome, this expanded NPRM can accommodate it.

CONCLUSION

The benefits adding one new Part 101 rule and modifying Rules 101.115 and 101.143 to the NPRM gives industry the opportunity to comment on the U-NII automatic frequency control option (which could be approved in months to years), or a simple, proven and safe prior coordination & licensing option (which could be approved in weeks to months), or a combination of both.

Respectfully submitted.

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Courtesy copies to:

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¹ see FWCC filing re docket 17-183 of Oct. 2, 2018.

Appendix 1 – Proposed Rule Addition/Changes

§101. _ _ _

(a) **Fixed Stations** that support unlicensed client devices must comply with all the applicable parts of Rule 101, and in addition must:

- (1) Limit the EIRP to a maximum of 50 dBm.
- (2) Transmit its operating protocol (3GPP, 802.11 or proprietary).
- (3) Transmit its latitude, longitude and elevation AMSL.
- (4) Transmit the maximum distance (2 kilometers or less) that the client devices can be from the base station.

(b) **Unlicensed client devices** must:

- (1) Have a maximum EIRP of 27 dBm.
- (2) Listen before talk.
- (3) Only transmit after it identifies a fixed licensed station with which it has the capability to communicate, and its distance from the fixed station and altitude are compliant with the requirements given by the licensed station.

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.”*

(b) through (g) are unchanged.

Rule 101.143

(a) Unchanged.

(b) *For paths shorter than those specified in paragraph (a) of this section, the EIRP shall not exceed ~~the~~ value derived from the following equation: 50 dBm.*

[balance deleted]

(c) Deleted (related to equation in (b) above, no longer applicable).