

# Exhibit A

(Ex Parte April 17, 2019 – ET NPRM 18-295)

## **Safe and Simple Operation of Unlicensed Devices in the U-NII 5 and U-NII 7 Bands**

*Encina Communications Corp.*

# The Two Imperatives of this Proceeding

## First Imperative: Protect Existing Licensees

Throughout this proceeding there has been complete agreement that Licensed Stations be protected from Harmful Interference<sup>1</sup> and that Licensed Services Operating in the Band Continue to Thrive.

## Second Imperative: Expeditiously Proceed to a Report and Order

Many filers<sup>2</sup> have requested that the Commission expeditiously proceed to a Report and Order to Propel the US to a leadership role in 5G.

1. FCC NPRM ET Docket 18-295 para. 1; Verizon ex parte filing June 8, 2018 GN Docket No. 17-183; Harris, Wiltshire & Grannis, ex parte filing June 2, 2018 para 2; Ericsson ex parte filing January 30, 2018 GN Docket No. 17-183 para 3.
2. Apple, Broadcom, Cisco Systems, Inc., Facebook, Inc., Google LLC, Hewlett Packard Enterprises, Intel Corp, Marvell Semiconductor, Microsoft Corp., Qualcomm Inc., and Ruckus Networks, NPRM 18-295 Comments filing February 15, 2019 Introduction and Summary; Ericsson NPRM 18-295 Comments filing February 15, 2019 Introduction and Summary;

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## Editor's Corner—U.S. needs to fix its midband problem, stat

by **Monica Allevan** | Apr 15, 2019 11:05am



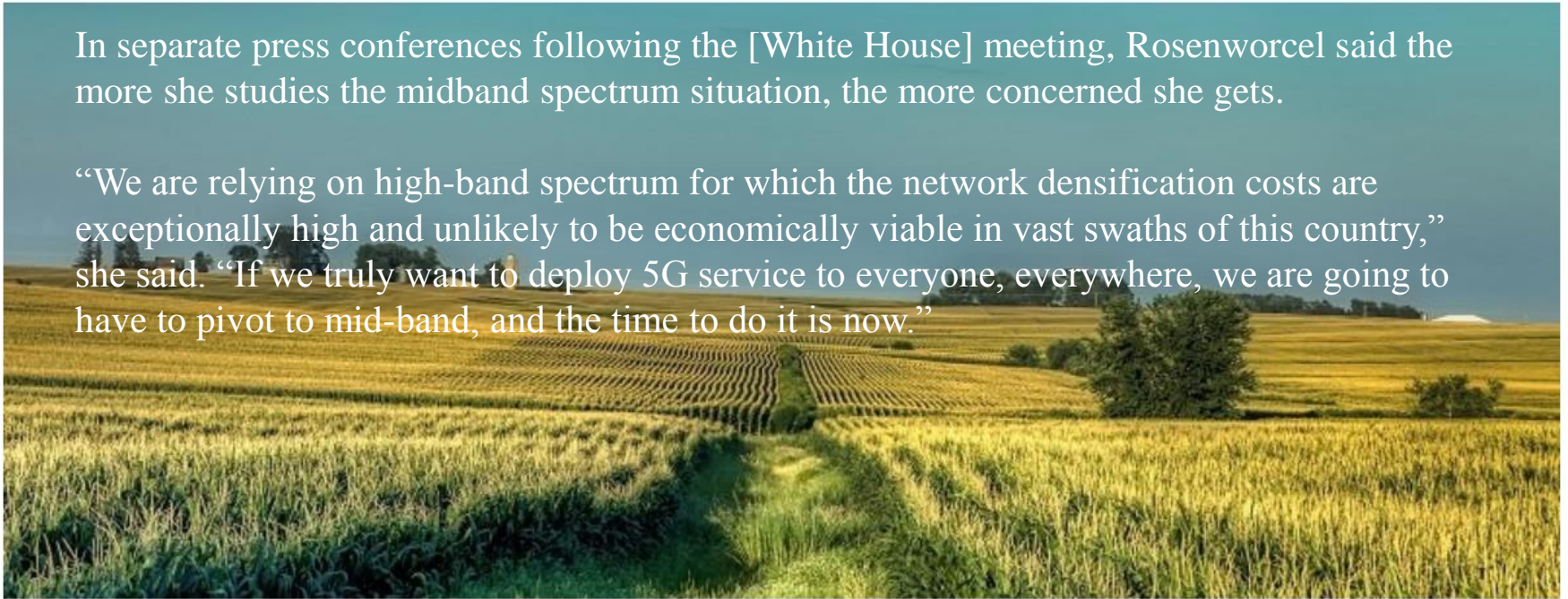
*If the U.S. is to serve everyone with 5G, it needs to find appropriate midband spectrum to do so. (Pixabay)*

## Editor's Corner—U.S. needs to fix its midband problem, stat

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In separate press conferences following the [White House] meeting, Rosenworcel said the more she studies the midband spectrum situation, the more concerned she gets.

“We are relying on high-band spectrum for which the network densification costs are exceptionally high and unlikely to be economically viable in vast swaths of this country,” she said. “If we truly want to deploy 5G service to everyone, everywhere, we are going to have to pivot to mid-band, and the time to do it is now.”



*If the U.S. is to serve everyone with 5G, it needs to find appropriate midband spectrum to do so. (Pixabay)*



## Editor's Corner—U.S. needs to fix its midband problem, stat

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Commissioner Geoffrey Starks, attended [CTIA's 5G Summit](#) earlier this month, where a number of the senior industry leadership folks in attendance emphasized that midband is “where we need to start to focus even more. We’ve long known that a mix of low-, mid- and high-band is what is needed here,” and midband is clearly an area where the FCC needs to step it up, he told reporters.



*If the U.S. is to serve everyone with 5G, it needs to find appropriate midband spectrum to do so. (Pixabay)*

# Growing Consensus in This Proceeding

ECC agrees with the filings of UTC, EEI, APPA, NRECA, API and AWWA<sup>1</sup> et al that  
Prior Coordination be completed before Unlicensed Devices are Deployed.

1. Reply Comments filing of UTC, EEI, APPA, NRECA, API, AWWA, ET 18-295, GN 17-183 March 18, 2019.

# Licensed Stations Are Protected

Because the Prior Coordination includes the LRS and its associated Safe Area, and the Prior Coordination Notice is subject to peer review by every licensed station operator within 125 miles (250 miles on the main beam) around the LRS, this should satisfy concerns regarding harmful interference of unlicensed devices into licensed stations.

# Simple AFC Protocol

Because Prior Coordination includes the LRS and its associated Safe Area, all that is required of the AFC is to confirm that the unlicensed Access Point (AP) is within the Safe Area.

- In a public network -- where a consumer can deploy an AP anywhere within the Safe Area -- the AFC only need authenticate the device and determine its location (latitude, longitude and height) are within the Safe Area.
- In a case where the Licensee deploys Unlicensed Wi-Fi Hot Spots, Small Cells, etc., the Licensee knows where to safely locate unlicensed devices. Therefore, unlicensed devices only need to be authenticated.



# Win–Win Scenario

1. By prior coordinating a Safe Area within an Exclusion Zone, pursuant to the recommendations and requirements of TSB 10F and Rule 101.103, the interference concerns of Fixed Service (FS) operators are alleviated.
2. The Requirements of RLAN stakeholders can be Satisfied because:
  - i. Safe Areas can cover Urban, Suburban and Rural communities, covering more than 95% of the population.
  - ii. Safe Areas are Only Prior Coordinated Once.
  - iii. When a Safe Area is Prior Coordinated<sup>1</sup>, Unlicensed Devices can be deployed Without Any Regulatory Delay and with Certainty that Spectrum is Available.

1. Prior coordination of a Safe Area is only expected to take between 30 and 60 days.

# Conclusion

With ECC's proposed minor modifications<sup>1</sup> to NPRM 18-295, both of the proceeding's imperatives can be met:

- Protect Existing Licensees
- Expediently Proceed to a Report and Order

1. See Appendix 1 and ECC's reply comments filing ET NPRM 18-295, March 14, 2019

# Appendix 1

## Proposed minor modification to NPRM 18-295

NPRM 18-295 paragraph 23: “The proposed framework for U-NII-5 and U-NII-7 prohibits unlicensed devices from operating co-channel with any fixed link within that link’s defined exclusion zone *unless the unlicensed device is operated with the permission of the fixed link’s operator.*” [added text in italics]

**Also add:** *"The Prior Coordination Notice (PCN) must show the area around the station where unlicensed devices can be safely used. Specifically, it must show that the interfering signal level arriving at any licensed station, within 125 miles (250 miles on the main beam), from an unlicensed device ( $I_{ud}$ ) that is deployed around a Licensed (Reference) Station (LRS) will be less than the interfering signal level from the LRS ( $I_{LRS}$ ), i.e., ( $I_{ud} < I_{LRS}$ ), or less than the maximum allowed interference level ( $I_{ud} < I_{max}$ ), typically -101 dBm."*