

September 11, 2018

**VIA ELECTRONIC FILING**

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

**Encina Communications Corporation Comments  
Pursuant to the Spectrum Pipeline Act of 2015 Regarding GN Docket No. 17-183,  
Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz**

Dear Ms. Dortch:

Pursuant to the Spectrum Pipeline Act, the Commission is required to submit a report to Congress no later than November 2, 2018, "*... an analysis of proposals to promote and identify additional spectrum bands that can be shared between incumbent uses and new licensed and unlicensed services under such rules and identification of at least 1 gigahertz between 6 GHz and 57 GHz for such use.*"

On August 31, 2018, Encina Communications Corporation ("ECC") made a filing<sup>1</sup> in which we proposed that by adding one new rule and two minor rule changes, mobile and unlicensed Wi-Fi devices can, with "geo-fencing", be deployed in the 5.925 GHz to 6.425 GHz band without causing harmful interference to existing licensees and without blocking new applicant paths, thereby making up to 500 MHz of spectrum available for mobile and Wi-Fi unlicensed operation.

Moreover, these proposed changes would also make it possible to operate mobile and Wi-Fi unlicensed clients in other Common Carrier bands such as 3.7 GHz - 4.2 GHz and 10.7 GHz - 11.7 GHz. By allowing mobile and Wi-Fi unlicensed clients to operate in these three bands, it would make up to 2 GHz of new bandwidth available nationwide for mobile and Wi-Fi unlicensed operation -- twice the 1 GHz of spectrum required of proposals to be reported to Congress by November 2<sup>nd</sup>.

Therefore, with only one new Part 101 rule and two Part 101 rule changes, increases in spectrum efficiency will make safe expanded flexible use (FS, FSS, mobile and Wi-Fi) possible in multiple mid-band frequencies with channel bandwidths up to 160 MHz. This, together with approval of the proposed deployment regulation changes for small wireless facilities (at the September 26<sup>th</sup> open meeting) will enable the Commission to take giant steps toward making 5G mobile and "clean air" unlicensed Wi-Fi a reality. This will finally allow industry to bring 21<sup>st</sup> century broadband fixed, nomadic and mobile services to rural, suburban and urban consumers, and open the door for the US to lead the world in 5G.

1. Encina Communications Corporation filing re Docket 17-183, August 31, 2018

Respectfully submitted.

Michael Mulcay, Chairman & CTO  
Encina Communications Corporation  
6701 Democracy Boulevard, Suite 300  
Bethesda, MD 201817

Courtesy copies to:

Ajit Pai, Chairman, [ajit.pai@fcc.gov](mailto:ajit.pai@fcc.gov)  
Michael O'Rielly, Commissioner, [mike.orielly@fcc.gov](mailto:mike.orielly@fcc.gov)  
Brendan Carr, Commissioner, [brenden.carr@fcc.gov](mailto:brenden.carr@fcc.gov)  
Jessica Rosenworcel, Commissioner, [jessica.rosenworcel@fcc.gov](mailto:jessica.rosenworcel@fcc.gov)  
Rachael Bender, Wireless Advisor to Chairman Pai, [rachael.bender@fcc.gov](mailto:rachael.bender@fcc.gov)  
Erin McGrath, Wireless Advisor to Commissioner O'Rielly, [erin.mcgrath@fcc.gov](mailto:erin.mcgrath@fcc.gov)  
Will Adams, Wireless Advisor to Commissioner Carr, [will.adams@fcc.gov](mailto:will.adams@fcc.gov)  
Umair Javed, Wireless Advisor to Commissioner Rosenworcel, [umair.javed@fcc.gov](mailto:umair.javed@fcc.gov)  
Julius P. Knapp, Chief OET, [julius.knapp@fcc.gov](mailto:julius.knapp@fcc.gov)  
Donald Stockdale, Chief WTB, [donald.stockdale@fcc.gov](mailto:donald.stockdale@fcc.gov)