November 25, 2015

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: Notice of Oral *Ex Parte* Presentation
Amendment of Parts 15, 73 and 74 of the Commission's Rules to Provide for the Preservation of One Vacant Channel in the UHF Television Band for Use by White Space Devices and Wireless Microphones, MB Docket No. 15-146
Expanding the Economic and Innovation Opportunities of Spectrum through Incentive Auctions, GN Docket No. 12-268
OET and Wireless Telecommunications Bureau Seek Information on Current Trends in LTE-U and LAA Technology, ET Docket No. 15-105
Revision of Part 15 to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band, ET Docket No. 13-49

Dear Ms. Dortch:

Michael Calabrese of New America's Open Technology Institute (OTI) met with Erin McGrath, wireless counsel to Commissioner Mike O'Rielly, on November 23, 2015 concerning the above-referenced proceedings.

With respect to the vacant channel NPRM, the OTI representative expressed strong support for the pending proposal to designate a "second vacant channel" in the remaining TV band for unlicensed use after the repack in those markets where it becomes necessary to place a TV station in the Duplex Gap. OTI emphasized that the availability of at least three unlicensed channels in every market nationwide is the minimum needed to spur and sustain such innovations. Leading chip makers have stated repeatedly that access to a minimum of three unlicensed channels in every market is necessary to justify the investment needed to integrate the IEEE 802.11af standard for TVWS into Wi-Fi chips for smartphones, tablets and other mobile devices. Consumers will greatly benefit from the greater penetration and range of this added connectivity – a public interest benefit that would be sacrificed *nationwide* if a second vacant channel is not reserved in those very few markets where a TV station occupies the duplex gap rather than a channel slot in the ongoing TV band.

Calabrese clarified that neither OTI nor any unlicensed advocate to his knowledge has argued that a full-power, primary broadcast station licensee should be denied a channel placement for the purpose of preserving vacant channels for unlicensed use post-auction. The reality is that there would be at most a few markets where a *secondary* broadcaster that is not auction eligible, such as a LPTV or translator station, could be left without a channel assignment. In that case the OTI representative asserted that the public interest in spurring a nationwide market for incorporating the IEEE 802.11af standard for low-band connectivity into Wi-Fi chipsets would far outweigh any opportunity loss for a few LPTV stations considering that the audience for over-the-air broadcasting continues to shrink into the single digits and that most LPTV licenses and construction permits are held by speculators who are unlikely to make the investment in a digital transition or in broadcast content that will serve their community in any meaningful way.

The OTI representative also raised the issue of Wi-Fi blocking, LTE-U and the scope of Section 333. He expressed general agreement with the Commission's recent Notice of Apparent Liability for Forfeiture (NALF) in the matter of M.C. Dean, Inc., and noted that further clarification of Section 333's scope could be helpful. OTI strongly concurs with the Commission's clarification in the NALF that Section 333 prohibits the intentional blocking, disruption or degradation of personal Wi-Fi hotspots. Calabrese noted that a robust and context-dependent application of Section 333 is an important backstop against the potentially disruptive and anti-competitive introduction of license-anchored LTE technologies into the unlicensed bands, as has been proposed by companies participating in the LTE-U Forum.

Calabrese noted that OTI and other consumer advocacy groups have raised concerns about the potential anti-competitive and anti-consumer impacts of non-standardized LTE-U in joint comments filed last June in response to the Commission's Public Notice in Docket No. 15-105.[1] OTI's comments stated that mobile carriers have both the ability and strong incentives to use LTE-U to deter or disrupt mobile market entry by "Wi-Fi First" providers, such as wireline ISPs, as well as to charge consumers for the use of unlicensed spectrum. LTE-U is designed to give individual carriers the option to adjust their access points to impose just enough latency on neighboring Wi-Fi users to frustrate consumer use of real-time applications, such as video calling, live music streaming and VoIP. Moreover, mobile carriers deploying LTE-U and LAA will entirely avoid the ill-effects of any resulting poor coexistence on unlicensed bands, since they can shift their users and traffic at will to their exclusive, licensed spectrum.

Accordingly, OTI has urged the Commission not to move forward with the certification of any LTE-U equipment until transparent and collaborative testing among the parties can establish that the technology will not unduly disrupt the Wi-Fi ecosystem so critical to making today's mobile

[1] *See* Reply Comments of OTI, Public Knowledge, Free Press and Common Cause, *OET and Wireless Telecommunications Bureau Seek Information on Current Trends in LTE-U and LAA Technology*, ET Docket No. 15-105 (June 26, 2015).

broadband data use both available and affordable for most consumers, as well as for schools and other institutions.

Finally, concerning the ongoing 5 GHz proceeding, the OTI representative mentioned that he will soon publish a paper focused on the 5.9 GHz ITS band that generally supports the proposal to segment the band by reserving the upper 30 megahertz of the band exclusively for vehicle-to-vehicle safety signaling, while allowing 802.11ac Wi-Fi and other low-power unlicensed devices to remainder of the band with non-safety ITS applications.

Respectfully submitted,

/s/

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cc: Erin McGrath