



Office of the Mayor

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June 24, 2016

Mr. Dino Flore
Mr. Satoshi Nagata
3GPP

Re: Long Term Evolution Operation in Unlicensed Spectrum Must Not Interfere with Wi-Fi

Dear Mr. Flore and Mr. Nagata,

I write to you on behalf of City of Madison to express our deep concerns regarding the potential harm 3GPP Long Term Evolution (LTE) unlicensed technologies will have on broadband access by impairing existing Wi-Fi investments our city and her residents currently rely on.

City of Madison remains committed to advancing broadband Internet access via Wi-Fi for our residents and visitors. I have read the letter sent to you by Ms. Maya Wiley on behalf of New York City, and I wholeheartedly agree with the concerns raised. As Ms. Wiley indicated in her letter, "any threat to Wi-Fi is a threat to the very fabric of the city." **Our residents depend on existing Wi-Fi networks as a key way to email, stream music and movies, make voice and video calls, access city services, pay utility and property tax bills, apply for jobs, book restaurant reservations and perform hundreds of other activities vital to our local economy.**

The City of Madison has, and will continue to aggressively invest in Wi-Fi as a means of providing affordable Internet access to all our residents, including in schools, libraries and public spaces. These important projects for our communities include:

- Madison Metropolitan School District (MMSD) manages approximately 150 Wi-Fi access points across 50 buildings to serve 27,000 students every school day. These projects have already seen MMSD investments of over \$3 million.
- Madison Public Library system provides Wi-Fi connectivity to patrons at all eight branches, supporting 10,000 sessions on average every month. These services cost more than \$250,000.
- Madison Fire Department and Madison Police Department have 21 locations that use Wi-Fi to transfer video data, mapping information, and to provide device management. This is mission critical information that allows our first responders to provide service to nearly 250,000 residents. These systems cost \$750,000.

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- As part of our efforts to bridge the digital divide 24 cultural and community centers with wireless access points at each facility which provide free Wi-Fi services to the citizens of Madison.

I am not only concerned about the negative impact that unlicensed LTE technologies could have on the City of Madison's public investments, but also the harm to our residents, who have made significant private investments in multiple devices that rely on Wi-Fi in their homes and businesses. Nationwide surveys show that, on average, seven in ten U.S. households have Wi-Fi Internet connections, including thousands in our city. On average, these households have nearly a dozen Wi-Fi enabled devices each!

While I am not a wireless expert, I understand the two industry organizations most intimately involved in the development and improvement of Wi-Fi, IEEE and Wi-Fi Alliance, have submitted letters to you outlining specific concerns regarding how your unlicensed LTE technology decisions could impact Wi-Fi. I ask that 3GPP work closely and carefully with the Wi-Fi Alliance and IEEE to address those concerns as you move forward in your standardization work.

Finally, I believe that it is imperative that any version of LTE operating in the unlicensed frequency bands, including the License Assisted Access (LAA) standard under development in 3GPP, be specifically designed to operate without creating harm or disrupting existing Wi-Fi devices. I concur with New York City that any substantial loss of coverage area for a Wi-Fi hotspot could diminish the broadband access of our residents and business firms, while also degrading the value of millions of dollars of public and private investment. Additionally, any reduction in Wi-Fi performance that could undermine real-time services like innovative voice and video applications, should not be tolerated.

If there is a chance unlicensed LTE could harm the investments made by the City and our residents, I urge you to fix the technology before attempting to deploy it here. Failure to protect existing Wi-Fi networks would impose great harm and undermine the free and open nature of sharing the public airwaves that has contributed so richly to our residents' quality of life thus far.

Thank you for your thoughtful consideration. I look forward to your response and feedback as I continue to track the progress of this vitally important issue.

Sincerely,



Paul Soglin
Mayor
City of Madison

cc: Messrs. Julius Knapp, Edward Smith, Jonathan Wilkins, Federal Communications Commission
Mr. Joern Krause, 3GPP TSG RAN Secretary
Ms. Susanna Kooistra, 3GPP Liaison Coordinator
Mr. Edgar Figueroa, Wi-Fi Alliance
Mr. Paul Nikolich, Chair IEEE 802 LAN/MAN Standards Committee
Ms. Maya Wiley, Counsel to the Mayor of New York City