Wireless Innovation Forum Announces Comments on FCC Notice of Proposed Rulemaking and Order on Enabling Innovative Small Cell Use in the 3.5GHz Band

For Immediate Release


The NPRM proposes to create a new Citizens Broadband Service in the 3550-3650 MHz band (3.5 GHz Band) currently utilized for military and satellite operations, which will promote two major advances that enable more efficient use of radio spectrum: small cells and spectrum sharing.

“This NPRM represents an important step towards enhancing capacity for wireless broadband services and increasing spectrum usage efficiency through the shared use of spectrum and network densification,” said Keith Nolan, Chief Regulatory Officer for the Forum and Research Fellow with the Telecommunications Research Centre (CTVR) in Dublin. “The combination of these approaches will pave the way for products and services with potentially high economic and societal value to connected communities.”

In a document approved by the Forum’s membership 19 February 2013, the group states support of the use of small cells, in particular the deployment of small cells in the 3.5GHz band to offer significantly enhanced capacity and more effective use of spectrum. The official comment states: “The use of smaller cells also increases the frequency reuse ability and therefore the density of small cells and number of geographically separated services. The combination of these two factors increases capacity available to users. The adoption of a small cell approach would also facilitate the broader deployment of self-optimizing networks.”

The document also includes support of spectrum sharing, with the belief that spectrum sensing technologies may also play a role in augmenting networked database systems to manage shared spectrum access, to better enable cooperative, opportunistic access. As such, the Forum recommends that advances in these technologies not be discounted in future planning.

The Forum believes that the technical and service characteristics for small cell deployments in the 3.5GHz band have the potential to significantly reduce or eliminate the need for the geographic exclusion zones identified in the Fast Assessment and in the Ten Year Plan and Timetables published by the NTIA in October 2010, also mentioned in the FCC’s NPRM.

The Forum’s recommendations have been supported by the work of the Forum, its members and its partners over the past several years including work by the Forum’s Cognitive Radio Work Group on quantifying the benefits of cognitive radio technologies including spectrum sharing (http://groups.winnforum.org/d/do/3839). Spectrum sharing was explored in the use cases developed by the Forum’s Public Safety Special Interest Group for cognitive radio (http://groups.winnforum.org/d/do/2325 and http://groups.winnforum.org/d/do/1565). The report by the Public Safety Special Interest Group identified advanced radio technologies as key to realizing innovative partnerships that would allow public safety to benefit from more efficient spectrum utilization (http://groups.winnforum.org/d/do/1579). These latter reports acknowledge spectrum sharing as an important component of future public safety communications capabilities, given the unique incident-based spectrum and capacity requirements of the public safety community.

A copy of the full response can be found here: http://groups.winnforum.org/d/do/6495.

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About the Wireless Innovation Forum
Established in 1996, The Wireless Innovation Forum (SDR Forum Version 2.0) is a non-profit mutual benefit corporation dedicated to driving technology innovation in commercial, civil, and defense communications worldwide. Members bring a broad base of experience in Software Defined Radio (SDR), Cognitive Radio (CR) and Dynamic Spectrum Access (DSA) technologies in diverse
markets and at all levels of the wireless value chain to address emerging wireless communications requirements. To learn more about The Wireless Innovation Forum, its meetings and membership benefits, visit www.WirelessInnovation.org.

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