

IEEE Seminar: Free spectrum – Unlicensed options for service providers

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And Ryerson Communications Lab
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Abstract: The use of unlicensed bands by operators has been looming for quite some time with no clear approaches prevalent across the globe. Wi-Fi technologies have been thought of as the only way for operators to use unlicensed band due to its popularity in devices. Recently, many companies have evinced interested in standardizing LTE-technologies in the unlicensed bands as this can solve the teething problems with respect to using Wi-Fi based technologies. The reaction from the Wi-Fi camp has been a challenge as it views LTE-unlicensed solutions as disruption to their business. The carrier community prefers LTE-unlicensed solutions as it gives them better control over operations in unlicensed band apart from better performance. In this course, we shall introduce the various unlicensed options available to carriers and others. Topics to be covered

- Why unlicensed bands for service providers
- Wi-Fi, its evolution and its role including Wi-Fi calling
- LTE in unlicensed bands – motivation
- LTE-U; key points
- 3GPP LAA; key approaches and status
- 3GPP LWA; LTE-Wi-Fi aggregation
- Qualcomm MuLTEfire

Speaker Bio: Srikanth obtained his B.E., degree from College of Engineering, Anna University, Chennai, and MASc and PhD degrees from University of Victoria, British Columbia, Canada. He worked as a scientist at the KBC Research Foundation/AU-KBC Research Centre, in Chennai, India and most of his work is focused on OFDM based technologies. From 2004-2007 he was awarded a Young Scientist Fellowship by the Government of India to work on technologies related to upgrades on 802.11 and 802.16 standards. He has closely monitored the progress of the 802.11 and 802.16 standards and is familiar with the various proposals which were submitted for consideration for the 802.11n extension. He is currently the chief knowledge officer of nanocell networks and is also a consultant to Airtight Networks while being a visiting faculty at MIT, Chennai. He is a co-investigator of a research project funded by Govt. of India with faculty from IIT, Chennai and IIT, Mumbai

Srikanth began his career as a research associate at the University of Victoria, British Columbia, Canada working in the area of DSL and CDMA Systems. After this Ph. D., he joined Harris Corporation and worked on baseband algorithms for various wireless standards including IS-136 and IS-95 systems. He has consulted on various areas of OFDM systems and has also been involved in the setting up of a test lab for 802.11. He has 3 US patents issued in the area of WLANs, OFDM, and OFDMA systems. Srikanth trains global teams of corporates on the latest WLAN, cellular standards, and IOT. He has also been involved in the IEEE WCET course book preparation.