April 25th, 2011 (Mon) - What's All This LTE Stuff About? by Dwight Borses

6:00 PM Social
6:30 PM Dinner
7:00 PM Presentation
Location:
Doubletree Club Hotel - Orange County Airport
7 Hutton Centre Drive
Santa Ana, CA 92707-5794

RSVP at: http://042511occsieee.eventbrite.com

Abstract:

LTE, Long Term Evolution, a fourth generation (4G) wireless technology, is the next major step in mobile radio communications from the third generation partnership project (3GPP). Its internet protocol (IP) based flat architecture eliminates circuit switched approaches for voice communications, offers high uplink and downlink data rates, low latency, high spectral efficiency, wide spectrum flexibility, and advanced antenna implementation.

Continuing his series of occasional programs on wireless technology presented over the last several years to the local IEEE community, the speaker will discuss why and how the 3GPP's Long Term Evolution technology came about, and will look under the hood at the underlying technology including the system architecture evolution (SAE), network reference models, modulation schemes, supported multimedia services, and user and control plane protocol stacks. As a practical matter, there will be a look at service providers offering the technology, where it is available, and what level of performance can be expected.

Biography:

Dwight Borses holds a BS and MS in Engineering from UCI, is a retired California professional engineer in control systems, and long-term senior member of IEEE who has held officer positions at chapter, section, and council levels in Orange County and Los Angeles. He has been a featured speaker over the years at various local IEEE chapters throughout the Southland, has been a guest lecturer at the University of California at Irvine and California State University at Los Angles, Long Beach, and Northridge, and taught a series of classes for wireless technology certification at Cal State Fullerton. Dwight has extensive experience in design, test, and applications in analog, digital, and microprocessor circuitry in such diverse systems as manned spacecraft, supermarket point-of-sales systems, intelligent multi-loop process control, data acquisition, and triplicated emergency shutdown systems, and cable and wireless based terminals and handsets. He most recently retired from National Semiconductor where he worked closely with Nokia, Qualcomm, Motorola, and Kyocera on CDMA based handset development and supported numerous other customers throughout Southern California.