

LTE for UMTS – OFDMA and SC-FDMA Based Radio Access

Holma, Harri and Antti Toskala. *LTE for UMTS – OFDMA and SC-FDMA Based Radio Access*
Hoboken, New Jersey: Wiley Publishers, 2009, 433 pp. \$120.00 (Hardbound).

From the editors of the highly successful WCDMA for UMTS, this new book gives a complete and up-to-date overview of Long Term Evolution (LTE) in a systematic and clear manner. It starts with an in-depth explanation of the background and standardization process before moving on to examine the system architecture evolution (SAE). The basics of air interface modulation choices are introduced and key subjects such as 3GPP LTE physical layer and protocol solutions are described. Mobility aspects and radio resource management together with radio and end-to-end performance are assessed. The voice solution and voice capacity in LTE are also illustrated. Finally, the main differences between LTE TDD and FDD modes are examined and HSPA evolution in 3GPP Releases 7 and 8 is described.

LTE for UMTS is one of the first books to provide a comprehensive guide to the standards and technologies of LTE.

Key features of the book include:

- Covers all the key aspects of LTE in a systematic manner
- Presents full description of 3GPP Release 8 LTE
- Examines the expected performance of LTE
- Written by experts actively involved in the 3GPP standards and product development

Harri Holma, Nokia Siemens Networks, Finland
Antti Toskala, Nokia Siemens Networks, Finland