

GSM

Architecture, Protocols and Services

3RD EDITION

JÖRG EBERSPÄCHER, *Technische Universität München, Germany*

HANS-JÖRG VÖGEL, *BMW Group Research & Technology, Germany*

CHRISTIAN BETTSTETTER, *University of Klagenfurt, Austria*

CHRISTIAN HARTMANN, *Technische Universität München, Germany*

With around 3 billion subscribers, GSM is the world's most commonly used technology for wireless communication. Providing an overview of the innovations that have fuelled this phenomenon, *GSM: Architecture, Protocols and Services, Third Edition* offers a clear introduction to the field of cellular systems. Special emphasis is placed on system architecture and protocol aspects, and topics range from addressing concepts through mobility management to network management.

This third edition contains around 25% new and reworked material and has been thoroughly updated to encompass recent advances and future trends. It serves as both an introductory textbook for graduate students as well as a reference resource for telecommunications engineers and researchers.

This edition:

- **Presents capacity enhancement methods like sectorization, the application of adaptive antennas for Spatial Filtering for Interference Reduction (SFIR) and Space Division Multiple Access (SDMA)**
- **Provides a detailed introduction to GPRS, HSCSD, and EDGE for packet-switched services and higher data rates**
- **Features updated coverage on the vastly expanded range of GSM services, including an examination of Multimedia Messaging Service (MMS)**
- **Adopts a highly graphical approach with numerous illustrations**