

FOREWORD

Special Section on Multi-dimensional Mobile Information Networks

Wireless communication is truly indispensable for us in our daily life. It is reported that the number of subscribers of cellular phone in Japan is approaching 118 million as of the end of July this year, which corresponds to the penetration rate of 92%. With this situation, LTE (Long Term Evolution) system will be put into commercial use very soon to provide high speed signal transmission for ubiquitous multimedia services. Also we find R&D activities on 4th generation mobile communications. The major objective of wireless communication at the beginning is to obtain the wide coverage service area. After we successfully accomplished this, new systems with narrower coverage have been considered to provide attentive and attractive services to the end users. Furthermore, such new concepts as harmonization of communication and broadcast, medical ICT (Information and Communication Technology) have been brought up to provide useful, safe and secure systems. In relation to these matters, research on multi-dimensional mobile information networks is highly required.

Out of 15 submissions, the editorial committee has accepted three full papers and one letter for publication after carefully reviewed. Though the number of accepted papers is smaller than we expected, we believe we have high quality papers. The papers cover the topical areas such as transmission quality of UWB (Ultra Wide Band) system, PWM (Pulse Width Modulation) transmitter performance, power saving sensor network terminal, and topology control algorithm on ZigBee network.

Finally on behalf of special section editorial committee members I would like to extend sincere appreciation to all of the authors and reviewers who contributed to this section. Also I would like to thank all editorial committee staff members for their voluntary activities throughout the editorial process.

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Shigeaki Ogose, Guest Editor

Shigeaki Ogose (Member) received his B.E. and M.E. degrees from Hiroshima University, Hiroshima, Japan in 1975 and 1977. He also received the Ph.D. degree from Kyoto University, Kyoto, Japan in 1986. He joined Nippon Telegraph and Telephone Public Corporation (NTT) in 1979. Since then he engaged in the research and development on mobile radio communications. Major activities include research on transmitter diversity technique, Real Zero Single Side Band (RZSSB), GMSK, CDMA, and development on high speed paging system, Personal Handy phone System (PHS). He was delegated to the ITU-R TG8/1 meetings for IMT-2000/FPLMTS standardization. He is currently a professor of Kagawa University, Takamatsu Japan. He has co-authored some books including Wireless Communications in 21st century (IEEE/Wiley InterScience). He is a senior member of the IEEE and a member of IEJE.

