FOREWORD

Special Section on Technology Trials and Proof-of-Concept Activities for 5G and Beyond

Technology trials and proof-of-concept activities are undergoing for the 5th generation mobile communication systems (5G). In the 5G standardization, key enabling technologies such as massive MIMO, beamforming, access technology and a new frame design are to be specified. Meanwhile, the research and development of those key technologies and their technology trials are being carried out in many research entities. On the other hand, new technology concepts for beyond 5G (B5G) have been also investigated.

From above points of view, the IEICE Technical Committee on Radio Communication Systems planned this special section with the aim of providing the opportunity to present the latest trials and trial results for 5G and the proof-of-concept activities for B5G.

For this special section, a total of 17 papers were accepted after going through a rigorous and fair peerreview process. These accepted papers present cutting-edge research results in the field of 5G and B5G. Moreover, two invited papers are solicited to cover latest research trends in this field. We are very pleased that this Special Section has been able to capture a wide and balanced range of fundamental and practical research topics for 5G and B5G.

The guest editor-in-chief of this special section would like to first thank the authors for their contributions. I would like to sincerely thank all the reviewers and the editorial committee members for their careful review and their feedback to authors.

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Hidekazu Murata, Guest Editor-in-Chief

Hidekazu Murata (Senior Member) received the B.E., M.E., and Ph.D. degrees in electronic engineering from Kyoto University, Kyoto, Japan, in 1991, 1993, and 2000, respectively. In 1993, he joined the Faculty of Engineering, Kyoto University. From 2002 to 2006, he served an Associate Professor of Tokyo Institute of Technology. He has been at Kyoto University since October 2006 and is currently an Associate Professor at Department of Communications and Computer Engineering, Graduate School of Informatics. His major research interests include signal processing and its hardware implementation, particularly, its application to cooperative wireless networks. He received the Young Researcher's Award from the IEICE of Japan in 1997, the Ericsson Young Scientist Award in 2000, and the Young Scientists' Prize of the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology in 2006, and the Paper Award of the IEICE in 2011 and 2013, and IEEE ICC Best Paper Award in 2014. He is a member of the IEEE and ITE.

