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## FOREWORD

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

The 5th generation (5G) cellular communication systems are now in service. In the 5G standardization, key enabling technologies such as massive MIMO, beamforming, and access technology are specified. Meanwhile, new technology concepts for the next generation mobile communications including 5G evolution and beyond 5G (B5G) have been investigated intensively in many research entities.

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 5G evolution and B5G.

For this special section, a total of 15 papers were accepted after going through a rigorous and fair peer-review process. These accepted papers present cutting-edge research results in the field of 5G evolution 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 evolution 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.

#### Special Section Editorial Committee

##### Guest Editors:

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#### Tomoaki Ohtsuki, Guest Editor-in-Chief

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**Tomoaki Ohtsuki** (*Fellow*) received the B.E., M.E., and Ph.D. degrees in Electrical Engineering from Keio University, Yokohama, Japan in 1990, 1992, and 1994, respectively. He is now a Professor at Keio University. He is engaged in research on wireless communications, optical communications, signal processing, and information theory. Dr. Ohtsuki is a recipient of the 1997 Inoue Research Award for Young Scientist, the 1997 Hiroshi Ando Memorial Young Engineering Award, Ericsson Young Scientist Award 2000, 2002 Funai Information and Science Award for Young Scientist, IEEE the 1st Asia-Pacific Young Researcher Award 2001, the 5th International Communication Foundation (ICF) Research Award, 2011 IEEE SPCE Outstanding Service Award, the 27<sup>th</sup> TELECOM System Technology Award, ETRI Journal's 2012 Best Reviewer Award, and 9th International Conference on Communications and Networking in China 2014 (CHINACOM'14) Best Paper Award. He has published more than 200 journal papers and 410 international conference papers. He served as a Chair of IEEE Communications Society, Signal Processing for Communications and Electronics Technical Committee. He served as a technical editor of the IEEE Wireless Communications Magazine and an editor of Elsevier Physical Communications. He is now serving an Area Editor of the IEEE Transactions on Vehicular Technology and an editor of the IEEE Communications Surveys and Tutorials. He has served as general-co chair, symposium co-chair, and TPC co-chair of many conferences, including IEEE GLOBECOM 2008, SPC, IEEE ICC 2011, CTS, IEEE GLOBECOM 2012, SPC, IEEE ICC 2020, SPC, IEEE APWCS, IEEE SPAWC, and IEEE VTC. He gave tutorials and keynote speech at many international conferences including IEEE VTC, IEEE PIMRC, IEEE WCNC, and so on. He was Vice President and President of the Communications Society of the IEICE. He is a senior member and a distinguished lecturer of the IEEE, a fellow of the IEICE, and a member of the Engineering Academy of Japan.

