

## — Special Section on 5G Radio Access Networks – Part I: Radio Access Technologies and System Design —

IEICE Transactions on Communications announces that it will publish a special section entitled “Special Section on 5G Radio Access Networks – Part I: Radio Access Technologies and System Design” in the **August 2015 issue**.

As the fourth generation mobile communications system (4G), the Long Term Evolution (LTE) is being rolled out worldwide and preparations for LTE-Advanced deployment are being underway. Meanwhile, the fifth generation mobile communications system (5G) has been attracting more and more attention, with many organizations being established toward the identification of system requirements, novel system concepts and potential technologies for 2020 and beyond. Examples of 5G related activities include the establishment of “Future IMT Vision” study group by ITU-R WP5D, METIS project in Europe, IMT-2020 in China, 5G Forum in Korea and “2020 and Beyond Adhoc (20B AH)” by ARIB Japan. From radio access perspective, 5G is generally perceived as the combination of LTE-Advanced evolution in addition to novel radio access technology (RAT) as an enabler of more advanced capabilities such as the support of new scenarios and frequency bands. In order to further promote 5G related research and development activities, a special section on technologies for further LTE-Advanced evolution and novel radio access technologies, radio interface and system concept designs for 5G is being planned (scheduled to appear in the August 2015 issue).

### 1. Scope

Special section aims at timely dissemination of research in the following areas. Possible topics include, but are not limited to:

- 5G system concept
- Radio interface design
- New waveform design
- Massive MIMO techniques
- Small cell technologies
- Advanced modulation and coding schemes
- Advanced multiple access technologies
- Advanced interference coordination and mitigation techniques
- Advanced MIMO technologies
- Capacity/coverage split system design
- Energy-efficient radio access technologies
- Technologies for higher frequency bands
- Technologies for massive connectivity
- Technologies for small packet transmission
- Technologies for ultra-low latency
- Device to Device (D2D) communications
- Wireless backhauling and advanced relay

### 2. Submission Instructions

The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guidelines in the “Information for Authors.” The latest version is available at the web site, [http://www.ieice.org/eng/shiori/mokuji\\_cs.html](http://www.ieice.org/eng/shiori/mokuji_cs.html). The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept papers only by electronic submission. Submit a manuscript and electronic source files (LaTeX/Word files, figures, authors’ photos and biographies) via the IEICE Web site [https://review.ieice.org/regist/regist\\_baseinfo\\_e.aspx](https://review.ieice.org/regist/regist_baseinfo_e.aspx) by **8th December 2014 (JST)**. Authors should choose the “5G Radio Access Networks – Part I: Radio Access Technologies and System Design” as a “Journal/Section” on the online screen. Do not choose [Regular EB].

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### 3. Special Section Editorial Committee

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