

## —Special Section on Future Directions of Research and Development on Communication Quality—

The IEICE Transactions on Communications announces that it will publish a special section entitled “Special Section on Future Directions of Research and Development on Communication Quality” in the July 2021 issue.

The technical committee on Communication Quality of IEICE Communication Society has reached 30th anniversary from the foundation as a type 2 workshop. This technical committee has focused on research and development on design, management, control, and evaluation of network technologies/systems/services, the quality of network applications, user-perceived quality, user needs, and their standardization process. Considering the recent development of 5th generation cellular networks, virtualization technologies, Internet of Things technologies, and the progress of machine learning/artificial intelligence, communication quality has more and more diversified aspects in the future information networks. Therefore, the research and development activities on communication quality becomes significantly important.

This Special Section focuses on broad topic of research and development of communication quality, including optimization, control, and design technologies, in order to explore their future directions of the research and development of communication quality. Note that paper submission is NOT limited from researchers related to the technical committee on Communication Quality of IEICE Communication Society.

### 1. Scope

Areas of interest of this issue are closely related to Communication Quality. Research targets are placed but are not limited to the following list of areas :

- Optimization, Control and Design of QoE/QoS  
Game Theory, Data Mining, Personalization and Environmental Adaptation of Service, Network Control Considering QoE, Communication Behavior Model and Behavior Modification, Resource Allocation Optimization for Social Infrastructure, QoE and Business Model, User Engagement, Subjective/Objective Evaluation, QoE Estimation Model, Psychological Assessment, Biological Information Measurement, Realistic/Ultra-Realistic, Usability, Crowdsourcing, Quality Visualization
- Optimization, Control and Design of Network Services  
IoT/M2M, Cloud/Fog Computing, DTN/Challenged Network, V2V/V2X, Voice/Audio/Visual/Haptic Media, Web Service, Interactive System, Social Network Service, Network Performance Indicator (KPI), Quality Measure and Standardization, Traffic Measurement/Planning/Control/Management, Network Tomography, Cross-Layer Control, Green/Energy Saving Technology, Fairness, Reliability/Safety
- A Optimization, Control and Design of Wireless Communication Quality  
Communication Quality of Mobile Communication, Communication Quality of Wireless LAN, Communication Quality of Sensor Network, Communication/Access Method, Wireless Resource Allocation, Optimization Control, Signal Processing, Efficiency of Frequency/Energy Usage

### 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 guideline in the “Information for Authors”. The latest version is available at the web site, [https://www.ieice.org/eng/shiori/mokuji\\_cs.html](https://www.ieice.org/eng/shiori/mokuji_cs.html) (IEICE Transactions on Communications). 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 (TeX/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 August 28, 2020 (Japan Time). Authors should choose the Future Directions of Research and Development on Communication Quality as a “Journal/Section” on the online screen. Do not choose [Regular EB] .

#### Contact points :

Go Hasegawa

Tohoku University

Tel : +81 22 217 5415, Email : [cq\\_ac-eb-cq30-kanji@mail.ieice.org](mailto:cq_ac-eb-cq30-kanji@mail.ieice.org)

### 3. Special Section Editorial Committee

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