FOREWORD

Special Section on Communication Quality

The age is right around the corner where terminals using haptic devices and home information appliances can be connected to ubiquitous network across fixed and mobile telecommunications boundaries. Under these circumstances, users are expected to demand higher quality and reliability for voice, video, data communications, and other telecommunications services including media for the five senses. To meet such user expectations, it is important to build technologies for measuring, assessing, and managing the quality and reliability of telecommunications services.

This Special Section addresses the latest trend of communication quality technologies and challenges in further research and development. We had received 40 submissions, and more than half of those came from Asian countries excluding Japan. After careful reviews and the editorial committee discussions, 12 papers have been selected for publication. Those papers cover the central issues of assessment of user satisfaction, subjective and objective assessments of audio and video media quality, definition and modeling of application level QoS, measurement methodology for network quality such as IP, TCP and routing, QoS control mechanism and system. The invited paper which is written by T.Y. HUANG, K.T. CHEN, P. HUANG and C.L. LEI proposes a generalized quantifying methodology for user satisfaction and investigating traffic analysis of online game and VoIP application. The editorial committee hopes that these sophisticated papers will contribute to the further progress of Communication Quality research and future high quality network services.

Last, all members of the editorial committee, who volunteered from the Technical Committee on Communication Quality of the IEICE Communication Society, would like to express our sincere appreciation to all of the authors and reviewers for their contributions to make this special section a successful one.

Takeo Abe, Guest Editor-in-Chief

Takeo Abe *(Member)* received the B.E., M.E., and Dr. Eng. degrees in Applied Mathematics and Physics from Kyoto University, Kyoto, Japan, in 1978, 1980, and 1998, respectively. In 1980, he joined the Musashino Electrical Communication Laboratory of NTT Public Corporation (now NTT), where he was engaged in research on Communication Quality and Reliability, traffic management, and congestion control. Currently, he is a professor of healthcare informatics at Tokyo Healthcare University. Dr. Abe received the IEICE Young Engineer Award in 1988 and Communications Society: Outstanding Contributions Award in 2007. He is a member of IEEE, HIMSS, ORSJ.