FOREWORD

Special Section on Peer to Peer Networking Technology

Recently, a variety of communication forms based on application-level networking are generated, like overlay network, IP broadcast network, file sharing platform, and content distribution platform. In particular, innovative distributed protocols, middleware services and applications that must be implemented at its endpoints have been emerged such as Peer to Peer (P2P) where end users flexibly change the status as clients or servers, and Grid which are implemented using the large scale resources of institutional computer centers. Based on these technical trends, the Technical Committee on Network Systems of the IEICE Communication Society organized a special section on Peer to Peer Networking Technology to promote the architecture, elemental technology, and applications as for the state of the art P2P networking system that enables to become an infrastructure technology for the future network.

We received 23 paper submissions and 2 letter submissions from 4 Asian countries including Japan, and the USA in response to the Call for Papers for this special section. Through careful reviews and the diligent editorial committee discussions, 6 papers and 1 letter have been selected for publication. In addition, the editorial committee has arranged one invited paper on a remedy for network operators against increasing P2P traffic by A. Nakao, K. Sasaki, and S. Yamamoto.

All the members of the editorial committee would like to express their sincere appreciation to all the authors and reviewers for their contributions that made this special section a great success.

Members of the Editorial Committee:
Guest Editor-in-Chief: Kou Miyake (NTT)
Guest Editor: Miki Yamamoto (Kansai Univ.), Hideki Tode(Osaka Prefecture Univ.)
Guest Associate Editors: Takuya Asaka (Kyoto Univ.), Hiroyuki Ibe (Toshiba Corp.), Ichiro Inoue (NTT), Satoshi Kamei (NTT), Shoji Kasahara (Kyoto Univ.), Jiro Katto (Waseda Univ.), Takumi Miyoshi (Shibaura Institute of Technology), Akihiro Nakao (Tokyo Univ.), Hideaki Tani (NEC Corp.), Naoki Wakamiya (Osaka Univ.)

Kou Miyake, Guest Editor-in-Chief

Kou Miyake *(Member)* received B.S. and M.S. degrees in mathematics in 1978 and 1980, and a Dr.Eng. degree on network performance analysis in 1991 from Tohoku University, Sendai, Japan, respectively. Since joining the NTT Electrical Communication Laboratories in 1980, he has been active in network design and traffic engineering for satellite communications networks, packet-switched networks, and broadband communication networks. From 1998 to 2002, he had responsibility for the research and development of the Next Generation Network architecture and system engineering in NTT R&D Labs. From 2003 to 2007, he was the president of NTT Data Intelli-link Corporation, providing cutting-edge technologies to the telecommunication market. Currently, he is the director for NTT Service Integration Laboratories. He had been an active participant in ITU-T Study Group 13 since 1990 as an expert on B-ISDN and ATM systems. Since 2000 to 2002, he was a board member of Multi-service switching Forum (MSF). He is a member of IEEE Senior member. He was awarded the Young Engineer Award from the IEICE in 1987.