FOREWORD

Special Section on New Paradigm on Content Distribution and Sharing

The widespread reach of broadband wired/wireless access networks has resulted in a rich variety of multimedia services, including high-quality audio and video content. Advanced information distribution and sharing technologies, such as content distribution networks (CDNs), peer-to-peer (P2P) technology, grid computing, and cloud computing, have emerged and been used widely for these services. These technologies, however, have been evolving in different ways, with the advent of new networks: for example, future Internet, next generation networks (NGNs), IP multimedia subsystems (IMS), and wireless ad-hoc/sensor and mesh networks. This special session was planned to discuss a new paradigm on content distribution and sharing to deal with these situations.

The Call for Papers attracted 29 submissions: 17 papers and 12 letters from China, France, Japan, Korea, and Spain. After careful review and much discussion, the editorial committee selected 5 papers (including two invited papers) and 3 letters. The selected papers and letters cover a variety of topics, including content-based networking, OpenFlow-based video delivery, P2P-based video streaming, content sharing for IPTV services, and location-free content distribution. The editorial committee hopes that this special section will help the readers share new knowledge and ideas and encourage R&D activities in this field.

As the guest editor-in-chief, I would like to express my sincere appreciation to all authors for their contributions and to all the reviewers and members of the editorial committee for their great effort in the review process.

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Shigeo Urushidani, Guest Editor-in-Chief

Shigeo Urushidani (*Member*) is a professor and director at the Research Center for Academic Networks of the National Institute of Informatics (NII). He received B.E. and M.E. degrees from Kobe University in 1983 and 1985, respectively, and received a Ph.D. from the University of Tokyo in 2002. He worked for NTT from 1985 to 2006, where he was engaged in the research, development, and deployment of high-performance network service systems, including ATM, AIN, high-speed IP/MPLS, and GMPLS-based optical systems. He moved to NII in 2006 and is currently involved in the design and implementation of the Japanese academic backbone network, called SINET. His current research interests include network architecture and system architecture for ultra-high-speed green networks and high-performance content delivery networks. He received the Best Paper Award in 1988, the Young Investigators Award in 1990, and the Communications Society Best Tutorial Paper Award in 2009 from IEICE. He is a member of IEEE.