FOREWORD

Special Section on Network Resource Control and Management for IoT Services and Applications

With the spread of Internet of Things (IoT) services and applications, the amount of traffic transmitted in several kinds of networks increases significantly and the traffic pattern also becomes more diversified than ever. For accommodating and processing such traffic, which is different from the existing traffic, it is indispensable to utilize an appropriate network resource control and management in several kinds of environments such as wireless access networks, wireless core networks, substrate networks, and cloud. Such new technologies must satisfy the requirements such that a huge number of IoT devices should be operated at low cost and with high efficiency, a huge amount of data should be processed at high speed and with high efficiency, and IoT services and applications should be developed in a safe and secure manner.

In order to further promote the above-mentioned researches for IoT services and applications, the Technical Committee on Network Systems (NS) of the IEICE has organized the "Special Section on Network Resource Control and Management for IoT Services and Applications". In response to a call for papers, 17 papers were received. Through peer review processes, finally, 7 papers were accepted for the publication. In addition, we have invited two papers on the latest researches on mobile edge computing empowering IoT and resource management architecture of metro aggregation network for IoT Traffic, both of which are expected to be key enablers of future IoT systems from resource control and management perspectives. The editorial committee believes that this special section will provide useful information and promote innovation in the field of IoT and its applications.

On behalf of the editorial committee, finally, I would like to express my sincere appreciation to all of the authors, the reviewers, and the IEICE publishing office who supported this special section.

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Hideki Tode (*Senior Member*)   received the B. E., M. E., and Ph. D degrees in communications engineering from Osaka University in 1988, 1990, and 1997, respectively. He joined the Department of Communications Engineering, Osaka University as assistant professor from a doctoral course student on Dec. 1, 1991. In 1998 and 1999, he engaged as a lecturer and associate professor in the Department of Information Systems Engineering. In 2002, He belonged to the Department of Information Networking, Graduate School of Information Science and Technology, Osaka University. From 2008, he is a professor in the Department of Computer Science and Intelligent Systems, Graduate School of Engineering, Osaka Prefecture University. From 2016 to present, he is a chair of IEICE technical committee on network systems (NS). His current research interests include QoS-aware network controls, future optical/wireless network design, and contents distribution/ retrieval technologies. Dr. Tode is a member of IEEE.