

The IEICE Transactions on Communications announces that it will publish a special section entitled “Special Section on Network Virtualization and Network Softwarization for Diverse 5G Services” in March 2019.

ICT (Information and Communication Technologies) have become an indispensable social infrastructure for our everyday life and industry activities by making ICT systems be flexible, scalable, efficient and sustainable. Recently, extensive efforts are being made towards 5G mobile services, including research projects, proof-of-concept demonstrations, field trials, standardization and consortium activities, and so forth. Such industry efforts, with complemented by academic insights, have materialized the necessity of network virtualization and softwarization as key concepts and guiding principles.

Advanced technologies for network virtualization and softwarization are expected to provide flexibility to satisfy a wide variety of customer demands, scalability to expand in accordance with the increase of demands, efficiency in resource usage even under scarce and heterogeneous environment, and sustainability to involve new functionalities and technologies in an incremental manner for service continuity. They imperatively require such techniques to construct virtual networks providing diverse services on a substrate infrastructure consisting of network resources, computational resources and storage resources. In addition, focusing on end-to-end service offering, it is essential to study and develop such techniques to virtualize wireless access networks with their integration to other virtualization techniques.

We thus call for publications (scheduled to appear in the March 2019 issue) for promoting discussion and development of network virtualization and softwarization for diverse 5G services, especially on architectural examination, resource management and control approaches, wireless access virtualization, SDN/NFV applications, and so forth.

1. Scope

This special section aims at timely dissemination of research in these areas. Possible topics include, but are not limited to :

- Network virtualization for diverse 5G services
- Network softwarization and open-source software
- Network management and control in network virtualization
- Wireless access virtualization and its related wireless communication technologies
- Edge computing for 5G services
- Application of Software defined networking and Network function virtualization
- Innovative applications based on network virtualization
- Security for network virtualization and secure services
- Testbeds for above technologies and experimental results

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, http://www.ieice.org/eng/shiori/mokuji_cs.html. The period 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 only papers by electronic submission. Submit a manuscript and electronic source files (LaTeX/Word files, figures, authors’ photos and biography) via the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx by April 12th, 2018 (JST). Authors should choose the Network Virtualization and Network Softwarization for Diverse 5G Services as a “Journal/Section” on the online screen. Do not choose [Regular-EB] .

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3. Special Section Editorial Committee

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