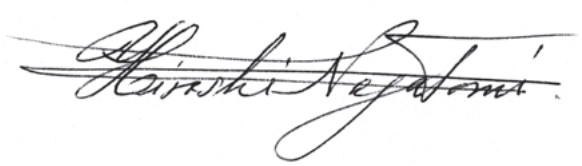
Preface
Special Issue on LTE



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Fujitsu has announced "Creation of a Human Centric Intelligent Society" as its medium- and long-term vision. Our aim is to migrate from a world centered on computing and efficient data processing for business applications to a human-centric society that uses information and communications technology (ICT) to assist people in living an enriched and secured life. In this society, the mobile network will be increasingly important in connecting people, things, and information, anytime and anywhere and in providing people with a variety of attractive services based on new value from accumulated information.

Fujitsu has played a leading role in the development of mobile-network infrastructure systems and mobile terminals starting from the research and development stage. Fujitsu has devoted itself to the implementation of today's 3rd-generation mobile phone services and their subsequent enhancement. The mobile communications system has evolved from an analog-based 1st-generation system and digital-based 2nd-generation system to a 3rd-generation mobile phone system providing a broad range of features handling image and video, data communications, smartphone functions, and social media information.

In December 2010, NTT DOCOMO launched a Long Term Evolution (LTE) service called "Xi" (Crossy)[note)] as a next-generation mobile communications system. The LTE system is positioned as a pre-4th-generation system and is called the "3.9-generation system." With a maximum data rate of 100 Mb/s or higher in the downlink and a faster terminal connection, LTE provides a dramatic improvement

note) "Xi" (Crossy) and its logo are trademarks or registered trademarks of NTT DOCOMO.

in performance compared to the current 3rd-generation mobile communications system. It will also provide a smooth migration to the 4th-generation system featuring a maximum data rate of 1 Gb/s in a mobile environment due to the deployment of common technology.

This special issue on LTE covers the following topics:

- Radio access technology toward a human-centric society
- Technologies making up an LTE network infrastructure system
- ExpressCard terminal and associated device technologies
- Radio engineering technology for installing base stations and related field trials
- Self-organizing network (SON) and inter-cell interference coordination (ICIC) technologies for improving network performance.

Fujitsu's contributions to LTE standardization activities are also described in this issue. LTE technologies also integrate Fujitsu's energy-saving and equipment-downsizing technologies for achieving an environmentally friendly ecosystem and high-reliability technologies essential for a social infrastructure.

Higher transmission rates in the mobile network should drive the creation of new human-centric services and applications bringing about a revolution in mobile communications. Looking forward, Fujitsu will continue to develop advanced technologies to enhance the mobile network while contributing to the development of next-generation mobile systems and the provision of diverse and compelling mobile services.

To all our readers, we hope you find the articles in this special issue informative and useful.