

Remarks for Special Issue on Telecom Carrier Solutions for New Value Creation

Around the world, there are currently about 7.5 billion mobile service subscribers – a number more than double the global population of 3 billion Internet users, and the pursuit of social and economic activities by all these users is supported by a wide array of communications services.

Moreover, network traffic is increasing at a speed that significantly outstrips the user population growth rate. For example, mobile network traffic is forecast to increase to 10 times the current level over the next 5 years. In recent years, not only people but also a variety of devices including wearable technology, industrial equipment as well as automobiles and many types of sensors are using communications. We are just beginning to see the new value that will be provided by the advent of Machine to Machine (M2M) and Internet of Things (IoT). It is predicted that these and other devices that use communications services will total 1 trillion by the year 2025.

Together with the diversification of the services that will be provided to and accompany this increase in subscribers and devices, there will be growing demand for swifter service deployment. Moreover, the linking of the vast number of devices to the network will make possible the creation of

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new value in the form of Big Data.

The realization of the diverse value demanded by these users and the empowerment of further service development necessitates the continued advance and expansion of telecom networks.

In order to support this ever-growing volume of traffic, the increases in the speed and capacity of core networks, backhaul and wireless access networks are necessary, and this requires ceaseless technological development. With the aim of realizing the efficient use of our world's limited resources and orchestrating a society that coexists with our planet, NEC is tackling the issue of increased resource consumption that will be a consequence of increased network speed and bandwidth. From both fresh perspectives and the standpoint of a company with a wealth of network-related experience, we will provide solutions that will give birth to new value and more efficient utilization of networks while maintaining communications comfort and convenience for users.

Also in order to respond to service diversification and their accelerated deployment, networks need to be more flexible. NEC focused its attention on this issue and led the world in pioneering Software-Defined Networking (SDN)/Network Functions

Virtualization (NFV) technologies. Today NEC's SDN/NFV technologies are not only realizing carrier-grade networks, but also enabling our provision of integrated solutions that encompass the integrated control of virtualized services and resources and pave the way for greater network flexibility.

In this special issue on Telecom Carrier Solutions for New Value Creation, we would like to provide the reader with a glimpse into how NEC technologies and solutions are not only responding to the many challenges facing telecom carriers, but also providing new value. Through our global endeavors to advance social infrastructure, solve the issues faced by our customers and support their sustainable growth, NEC is orchestrating the "creation of an information society that is friendly to humans and the earth" and embodies the social values of safety, security, efficiency and equality.

It would give us the greatest pleasure if you find the information in this special issue helpful in your pursuits. On behalf of everyone at NEC, I would also like to express our deepest gratitude for your encouragement of our endeavors, and our hopes for your continued support in the future.

Information about the NEC Technical Journal

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NEC Solutions for the Telecom Industry - Ready for a New Chapter of Change -

SDN/NFV solutions to offer new values for network systems

Technology Systems for SDN/NFV Solutions
MANO Technology Supports Implementation of Intelligent Network Operations Management
Development of User Plane Control for vEPC
NEC's vMVNO-GW Provides High-Value-Added Businesses for MVNOs
Virtualized IMS Solutions for Telecom Carriers
IoT Network Implemented with NFV
Transport SDN Solution for Telecom Carriers
NEC's Traffic Management Solution (TMS) Can Help Increase the Profits of Communication Service Providers (CSPs)
NEC's Traffic Management Solution (TMS) Component Technologies

Transport systems to cope with the rapidly increasing traffic

OpenFlow Ethernet Fabric for Large-Scale Data Centers
Development of 10G-EPON to Better Handle Increased Traffic
High-Capacity Backbone Networks and Multilayer Integrated Transport Systems
Development of the Digital Coherent Optical Transmission Technology
Large-Capacity Optical Transmission Technology Supporting Optical Submarine Cable Systems

Solutions to achieve highly advanced wireless transport networks

Network Optimization Project for Telecom Carriers in Russia
Proposed iPASOLINK Large-Capacity Wireless Transmission System for a Saudi Arabian Mobile Telecom Carrier
Development of a Phase Noise Compensation Method for a Super Multi-Level Modulation System that achieves the World's Highest Frequency Usage Efficiency
High-Capacity BDE Supports the Advancement of Mobile Communications

ICT solutions for telecom carriers

Procedures Employed for Supporting Enhancement of NEC's Cloud System Competitiveness and OSS Model-Building SI Technology
Conversation Analysis Solutions for Telecom Operators
Approach to the Development of Continuous Carrier Systems
Big Data Analysis Platform Supporting Telecom Carrier Operations

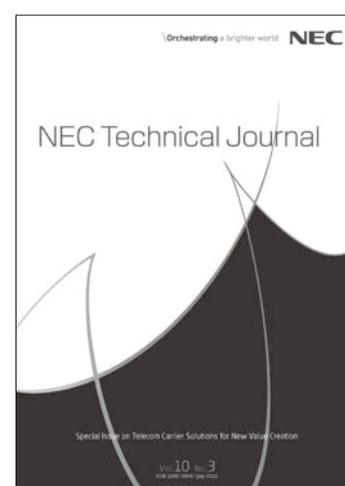
General Paper

Fortress: Secure De-duplicated Multi-Cloud Storage

NEC Information

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2015 C&C Prize Ceremony



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