Today we are confronting a broad diversity of social issues. According to The 2012 Revision of the World Population Prospects released by the United Nations in June 2013, the global population is predicted to exceed 9 billion by 2050. At the same time, the continuing advance of urbanization and the increasing concentration of people in cities are expected to have a huge impact on energy and resources. Forecasts indicate that the demand for energy will be 1.8 times current levels; greenhouse gases will increase by 50%; food demand will swell by 70%; and the demand for water will rise by 60%.

In addition, the world is already facing urgent issues such as the devastating effects of natural disasters, the widening gap between regions, and the aging infrastructure in the developed countries. Moreover, against a background of the shifting balance of power on the global stage, we are witnessing an increasing frequency of struggles and territorial disputes over limited and dwindling natural resources, and while ICT continues to evolve and bring exciting new advances, it faces a variety of threats from cyber attacks to cyber crime.

These are global-scale issues that know no borders. Their solution requires an amalgamation of technologies to create a brighter world where “people everywhere can lead better lives.”

Those technologies cover a broad variety of fields from
video surveillance and sensor technologies for monitoring critical infrastructure such as railways, highways, bridges, factories and power stations, and for the early detection of the signs of potential disaster, to the network technology that collects and transmits these data from cameras and sensors, and the data analysis technology that provides valuable information for preventative maintenance of critical facilities and protecting people from disaster.

The sophisticated integration of these technologies can be credited for Japan’s reputation for public safety and a society where people can pursue life with confidence and peace of mind - a standard that stands out even on the global stage. Safety and on-time performance of rail travel, traffic accident prevention and traffic congestion mitigation, infrastructure security, fire and disaster prevention to safeguard the lives of citizens, and crime prevention - all benefit from these technologies.

These were not an overnight achievement, but the sum of ceaseless efforts by our predecessors. Since the founding of NEC in 1899, along with the growth of the Japanese economy, we have poured our efforts into the development of new technologies that have benefited a broad range of customers. Today we are more confident than ever that our capability to provide solutions that represent the cumulative development and innovative integration of diverse technologies will be indispensable in solving serious global-scale issues.

By continuing to create and provide new solutions, NEC provides countries around the world with the values of “safety,” “security,” “efficiency” and “equality,” fulfilling our role as a social value innovator committed to paving the way for the creation of a sustainable society.

This Special Issue on “Solutions for Society - NEC initiatives to create a safer and more secure society” will introduce the reader to how NEC is contributing to overcoming global issues through solutions based on the unique technologies possessed by our company and our creation of social value, and provide concrete examples of the application of our technologies.

In June 2014, NEC unveiled its new brand message, “Orchestrating a brighter world,” initiating the global promotion of its Solutions for Society. This powerful message embodies NEC’s commitment to fully exploiting our cutting-edge technologies and know-how for the creation of the new value in concert with people around the world, and through these efforts, to creating a brighter, more affluent lifestyle, society and future for all.

We hope that this special issue will provide you with a deeper understanding of NEC’s Solutions for Society, and look forward to your continued support and encouragement of our endeavors.
Thank you for reading the paper.
If you are interested in the NEC Technical Journal, you can also read other papers on our website.

**Vol.9 No.1  Special Issue on Solutions for Society - Creating a Safer and More Secure Society**

- Remarks for Special Issue on Solutions for Society - Creating a Safer and More Secure Society
- NEC’s Vision for Public Solutions
- NEC’s Public Safety Initiative

**For a life of efficiency and equality**
- New Services Realized with the “My Number” System
- “NEC Stadium Solutions” Played a Critical Role in Construction of the World Cup
- Deployment of Eye-Catching, Visually Appealing Flight Information Systems
- NEC SDN Solutions Accelerate New Service Implementations for Railway Stations
- Cloud-Based Interpreting Service Using a Videoconference Telephone Compatible with Multiple Devices
- Easy-to-Use, Smartphone-Oriented Internet Banking, featuring Color Universal Design
- The World’s Best Face Recognition System to Achieve Safety and Security in Our Society
- Product Line-up for Face Recognition Solutions and its Social Applications

**For a safer and more secure life**
- Healthcare challenge with ICT (Information and Communication Technologies)
- Information Governance
- Building a Safer City in Singapore
- Securing the Future in Tigre
- New Congestion Estimation System Based On the “Crowd Behavior Analysis Technology”
- Speech/Acoustic Analysis Technology - Its Application in Support of Public Solutions
- High-Sensitivity Camera for Round-the-Clock Surveillance
- Imaging Solutions for Search & Rescue Operations
- Emergency Mobile Radio Network based on Software-Defined Radio

**For the security and safety of critical infrastructure**
- Centralized Information Control System Supporting Safe and Stable Shinkansen Transportation
- Smart Water Management Technology with Intelligent Sensing and ICT for the Integrated Water Systems
- A Water Leak Detection Service Based on Sensors and ICT Solutions
- Harbor Monitoring Network System for Detecting Suspicious Objects Approaching Critical Facilities in Coastal Areas
- Failure Sign Monitoring System for Large-scale Plants Applying System Invariant Analysis Technology (SIAT)
- Infrared Camera Image Processing Technology and Examples of Applications
- Cyber Security Factory - Our Commitment to Help Developing More Effective Methods of Coping with Today’s Increasingly Sophisticated Cyber Threat

**Advanced technologies for a Safer and More Secure Society**
- Technologies for Improving the Speed and Accuracy of Fingerprint Identification Systems in Support of Public Bodies
- Compression Technologies Supporting Next Generation Broadcasting Services - Ultra-HD Digital Video Compression Technology and Real Time HEVC Compression Unit Corresponding to 4K HD Images

**NEC Information**

**NEWS**
- NEC Starts Operation of Satellite Integration Center
- Development of Water Purification System Type2 Reverse Osmosis (WPS RO2) for Japan Ground Self-Defense Force