

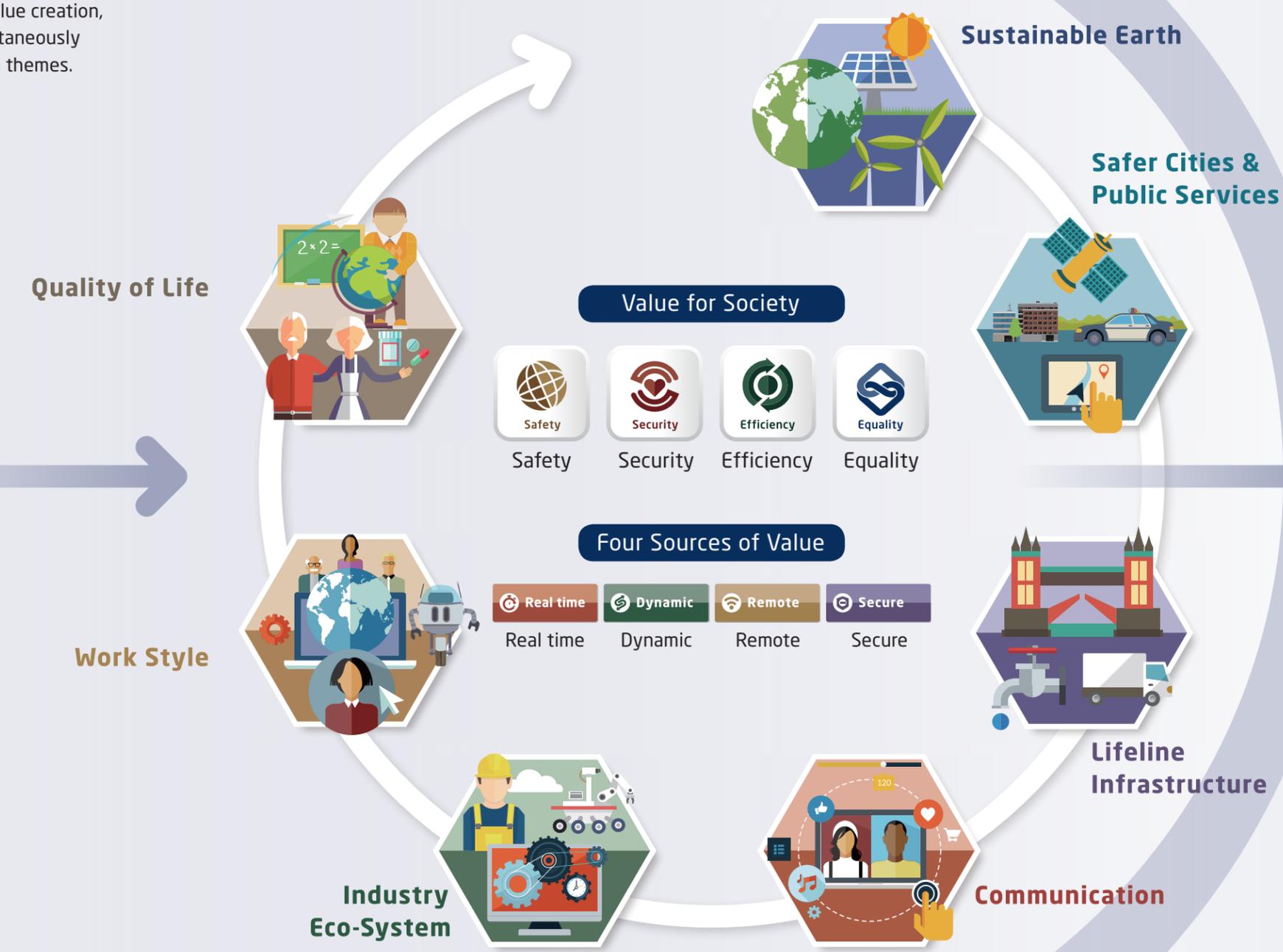
# The Social Value That the NEC Group Aims to Create

Building upon our corporate brand statement "Orchestrating a brighter world," NEC is committed as a social value innovator to providing value that leverages the power of ICT. In setting our direction for this, we first analyzed worldwide economic, social, and technological trends, narrowing them down to six megatrends. Viewed from the long-term perspective, these are the issues that will likely confront countries, companies, communities and people for the next 20 or 30 years. Based on these megatrends, we established seven themes for social value creation, taking advantage of our strengths in ICT. To maintain our own sustainable development while simultaneously achieving a sustainable society, NEC is committed to providing social value centered on these seven themes.

## 6 Megatrends (Material Issues)

- 01** Chain of resource and environmental issues  
 The consumption of water and food due to population growth and urbanization will impact the other resources and the environment.
- 02** Growth in emerging countries and their new challenges  
 Rapid economic growth in emerging countries will cause new issues, such as environmental concerns and resource shortages, even as their power grows.
- 03** Search for mature society models  
 In advanced countries, low birthrates, aging of populations, and the deterioration of facilities will encourage reform of the current legal and social systems.
- 04** Increase in power and influence of individual  
 Advancement of the Internet will raise concerns over cyber-attacks, etc., while increasing the influence of individuals on the global stage.
- 05** Deconcentration of power  
 As emerging countries and individuals have more influence, the world will decentralize and form a new power balance.
- 06** Diversified threats and needs for safety and security  
 Big changes in the world will generate various threats to both the real world and cyberspace, and increase demand for safety and security.

## The Seven Themes for Social Value Creation



Business Model: The Social Value That the NEC Group Aims to Create

# Orchestrating a brighter world

## Value for Society

What is the social value that NEC provides? We strive hard to be a social value innovator who pursues the improvement of the fundamental issues facing society, its customers, and enriches human lives. These factors led us to conclude that there are four types of social value the NEC Group should continue to provide: safety, security, efficiency, and equality.



**Safety**

Ensuring broad range of safety for all from individual to country



**Security**

Serving society and the Earth



**Efficiency**

Realizing sustainable growth



**Equality**

Closing the social divide and eliminating inequality



## Four Sources of Value

Backed by our ICT assets and our advanced ability to integrate these assets, the following four capabilities represent our sources of value: happening in real-time, being dynamic, being remote, and being secure.



**Real time**

Delivered by technologies such as cloud infrastructure and supercomputers. Utilizing computing capabilities that surpass previous abilities, we create value that transcends the constraints of time.



**Dynamic**

Delivered by software technologies, such as big-data analysis, and image analysis, as well as through system-integration (SI) abilities. It allows us to flexibly create value in response to any kind of change.



**Remote**

Delivered by technologies such as mobile-communication infrastructure, submarine cables, and software-defined networking (SDN). Bringing advanced networks into fruition, even in remote locations, allows us to provide value that transcends the constraints of distance.



**Secure**

In advancing the creation of social value through ICT, it is essential to maintain safety both in cyberspace and the real world. While ensuring the safety of value creation, we guarantee the expansion of the value we provide.

# One-to-Many

## Tackling the fundamental issues of our customers and society

To maximize the social value that NEC provides, the company needs to change. Historically, we built our presence within a culture of responding comprehensively to the requirements of each customer. In other words, it was a one-to-one business model.

Moving forward, we need to tackle more social issues in the global market and to keep making greater contributions. We also need to create our own value for our customers' customers. In addition to a one-to-one business model, it is essential that we strengthen our one-to-many business model. This framework is based on developing business models through understanding of our customers' requirements, taking advantage of our past experience in successfully creating various kinds of value and also by working together with our customers in creating new value for society as a whole. In addition, we will consider the external environment when elaborating on NEC's unique business model for our customers and society.

The efforts of all our employees will lead us to establishing a one-to-many culture. Through this transformation, we aim to both continue providing greater value to society and to become a true business partner, irreplaceable to our customers.

# Working in Concert with Stakeholders to Find Solutions to Social Issues

Through dialog and cooperation with our various stakeholders, NEC is working to better understand the fundamental issues facing our customers and society. We aim to build a better relationship of trust by doing so. NEC will continue to create and provide new value by working toward finding solutions to social issues together with our stakeholders.



## Working with Our Customers to Resolve Issues Together

The opinions of customers that we receive as a result of our day-to-day business activities are a valuable source of information when it comes to improving those business activities and generating ideas for new solutions. And to help spur innovation, we have established a co-creation workshop space at NEC that is being used to collaborate with customers and partners to help clarify the issues facing our customers and society. Then, we can better come up with ideas about how to address those issues.

## Aiming to Resolve Social Issues as a Member of Local Communities

When it comes to resolving social issues, engaging in dialog with local governments, NPOs, and other organizations that are familiar with regional issues is imperative. In this fiscal year, we were able to deepen collaborative ties with local governments by signing a reconstruction cooperation agreement with Minamisanriku town in Miyagi Prefecture. This was an extension of the Great East Japan Earthquake reconstruction volunteer activities of the NEC Group's "TOMONI" Project. We also co-hosted the Tokyo Sign Language College in cooperation with the Tokyo Metropolitan Government and Tokyo Metropolitan University, a public-university corporation. At NEC, we will continue to work toward resolving social issues by focusing on the three themes of "Welfare & Diversity," "the Environment," and "Education, Culture, & Sports." We will do this while promoting social contribution programs, such as our employee community volunteer program: the NEC Make-a-Difference Drive.



Signing Ceremony for the Reconstruction Cooperation Agreement, November 2015 (Left: General Manager of NEC Tohoku Branch Division, Right: Minamisanriku Mayor)

## Improving Corporate Value via Dialogs with Shareholders and Investors

Our shareholders and investors provide valuable feedback that can lead to improvements in management, such as the ability to make rapid responses to changes in the external environment. At NEC, the Investor Relations Office, a department within the Corporate Strategy Division, focuses primarily on investor relations activities with the assistance of the president and CFO. These activities include meetings with shareholders, quarterly financial result briefings, and business briefings. The ideas gained through these dialogs are communicated to senior management and reported regularly to the Board of Directors. Moving forward, NEC will continue to actively engage in IR activities to make our dialogs with shareholders and investors even more fruitful.



## Engaging in Responsible Corporate Activities with Suppliers

The need to work with suppliers to ensure responsible procurement is a common issue worldwide. Even the 2015 G7 Summit Leaders' Declaration included a reference to "Responsible Supply Chains." At NEC, we established the NEC Group Procurement Policy based on ISO26000 guidance on social responsibility to address six priority risk categories related to procurement. They are human rights, labor, fair trade, the environment, information security, and supply responsibility. So, for example, we use our CSR-PMR\* on-site assessment of human rights and occupational safety and health as a program unique to NEC. It has been conducted with suppliers since fiscal 2013. Rather than a simple one-sided audit, the program relies on engaging in mutual dialogs with suppliers.

\*PMR = Process Management Review

## Organizational Revitalization via Dialogs with Employees

The opinions of our employees serve as an essential gauge to indicate whether we are fostering an organizational culture that they are happy to be a part of. At NEC, we conduct a "One NEC Survey" annually to identify the factors that motivate employees as well as those that need improvement. For the fiscal 2016 Japan survey, responses were obtained from 64,825 employees, making the response rate about 83%. More than 70% of the respondents expressed positive opinions about their degree of trust in their co-workers, their desire to contribute to customers, and their loyalty to NEC. However, only 40% to 50% of the employees had positive opinions about career opportunities, evaluation systems, and work processes. NEC also holds regular labor-management council meetings in Japan and overseas to brief labor unions on management policies and hear the opinions of employees directly.



## The Social Sector: Dialogs with CSR Review Forum-Japan

At NEC, annual reports and CSR reports are used to engage in dialogs with NPOs as a part of our CSR management. This includes dialogs that are based on ISO26000. They have been going on since 2011 with CSR Review Forum-Japan, an NPO that was jointly established by labor groups, consumer groups, and NGO/NPOs with the goal of building a sustainable society.

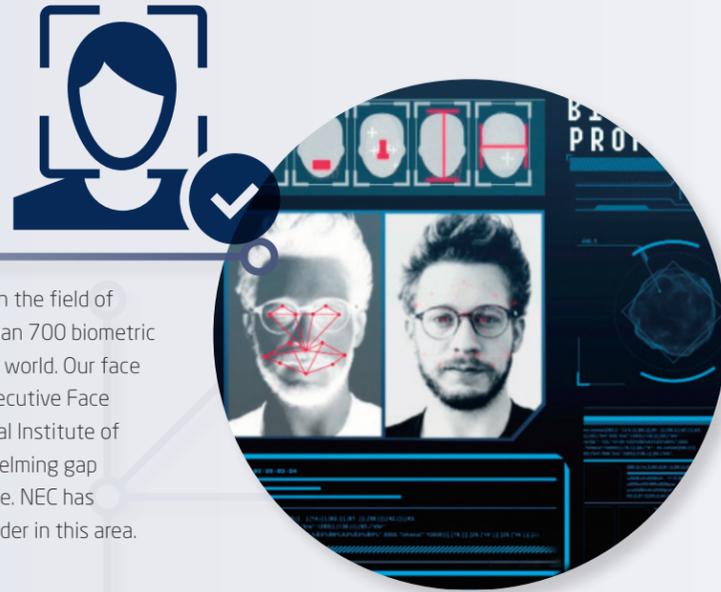
A dialog was held in 2016 that covered our new Mid-term Management Plan, issues with partnerships in creating solutions for society, privacy issues when promoting business using ICT, and CSR procurement.



# NEC's Distinctive ICT Underpinning Social Value Creation

ICT connects numerous physical things in the real world and allows us to visualize them in the cyber world. By analyzing how these physical things are linked, we can better understand and predict the true needs of our stakeholders and help create new value for our customers and society. Artificial intelligence (AI) helps us visualize these physical things and analyze data. And controls and guidance help us turn the results of that analysis into services and solutions. Here are a few of NEC's powerful ICT assets that help us in our quest to create new value.

## The World's No.1 Face Recognition Technology



With over 40 years of continued R&D, NEC is a pioneer in the field of biometric authentication. We have implemented more than 700 biometric authentication systems in over 70 countries around the world. Our face recognition AI technology took first place at three consecutive Face Recognition Vendor Tests conducted by the U.S. National Institute of Standards and Technology (NIST). There was an overwhelming gap between us and all other participating vendors each time. NEC has therefore established itself as the undeniable global leader in this area.

## The World's First AI Technology to Support Big Data Analysis



Our "Invariant Analysis Technology" automatically models correlations between large amounts of sensor data to enable the early detection of anomalies that would otherwise be unnoticeable. The technology is being used for factory prediction monitoring and diagnostic systems. And our "Heterogeneous Mixture Learning Technology" uncovers multiple relationships hidden in Big Data to automatically discover and predict useful patterns and regularities. This enables prediction and decision making in a way that makes reasons known in dynamically changing environments. It was previously problematic with machine learning technologies.

## SDN Architecture: More Flexible and Efficient Networks



Traditional networks are complex, requiring a high level of specialized knowledge to modify or troubleshoot them. However, with the development of cloud solutions and server virtualization, networks are now expected to be more flexible and efficient. SDN uses software to achieve centralized management of a network, resulting in a network that is not only easier to modify than traditional ones, but also more flexible and efficient. NEC proactively led the standardization of SDN from early on. And, in 2011, NEC was one of the first companies in the world to release SDN products. Now, over 600 systems around the world rely on NEC's SDN technology\*.

\* As of May 2016

## Cyber Security Technology with Support from Agencies Worldwide and a Proven Track Record



NEC provides safe and secure ICT environments based on its "security-by-design" concept that requires strong security from the planning and design phases. We are also developing advanced technologies to help protect against increasingly sophisticated cyberattacks, including AI-driven measures against unknown attacks. Moreover, the cooperative ties we have forged with INTERPOL and other agencies have allowed NEC to collect and analyze threat intelligence from around the world to help strengthen cyber security globally.